UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark one)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2020
OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission file number: 001-11307-01

Freeport-McMoRan Inc.

(Exact name of registrant as specified in its charter)

Delaware	**74-2480931**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
333 North Central Avenue Phoenix Arizona	**85004-2189**
(Address of principal executive offices)	(Zip Code)

(602) 366-8100
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.10 per share	FCX	The New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act ☑ Yes ☐ No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. ☐ Yes ☑ No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☑ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). ☑ Yes ☐ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☑	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☑

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). ☐ Yes ☑ No

The aggregate market value of common stock held by non-affiliates of the registrant was $14.9 billion on June 30, 2020.

Common stock issued and outstanding was 1,458,480,446 shares on January 29, 2021.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's proxy statement for its 2021 annual meeting of stockholders are incorporated by reference into Part III of this report.

Freeport-McMoRan Inc.

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PART I

Items 1. and 2. Business and Properties.

All of our periodic reports filed with the United States (U.S.) Securities and Exchange Commission (SEC) pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, are available, free of charge, through our website, "fcx.com," including our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to those reports. These reports and amendments are available through our website as soon as reasonably practicable after we electronically file or furnish such material to the SEC. Our website is for information only and is not intended to incorporate any website information into this Form 10-K.

References to "we," "us" and "our" refer to Freeport-McMoRan Inc. (FCX) and its consolidated subsidiaries. References to "Notes" refer to the Notes to Consolidated Financial Statements included herein (refer to Item 8.), and references to "MD&A" refer to Management's Discussion and Analysis of Financial Condition and Results of Operations and Quantitative and Qualitative Disclosures About Market Risk included herein (refer to Items 7. and 7A.).

GENERAL

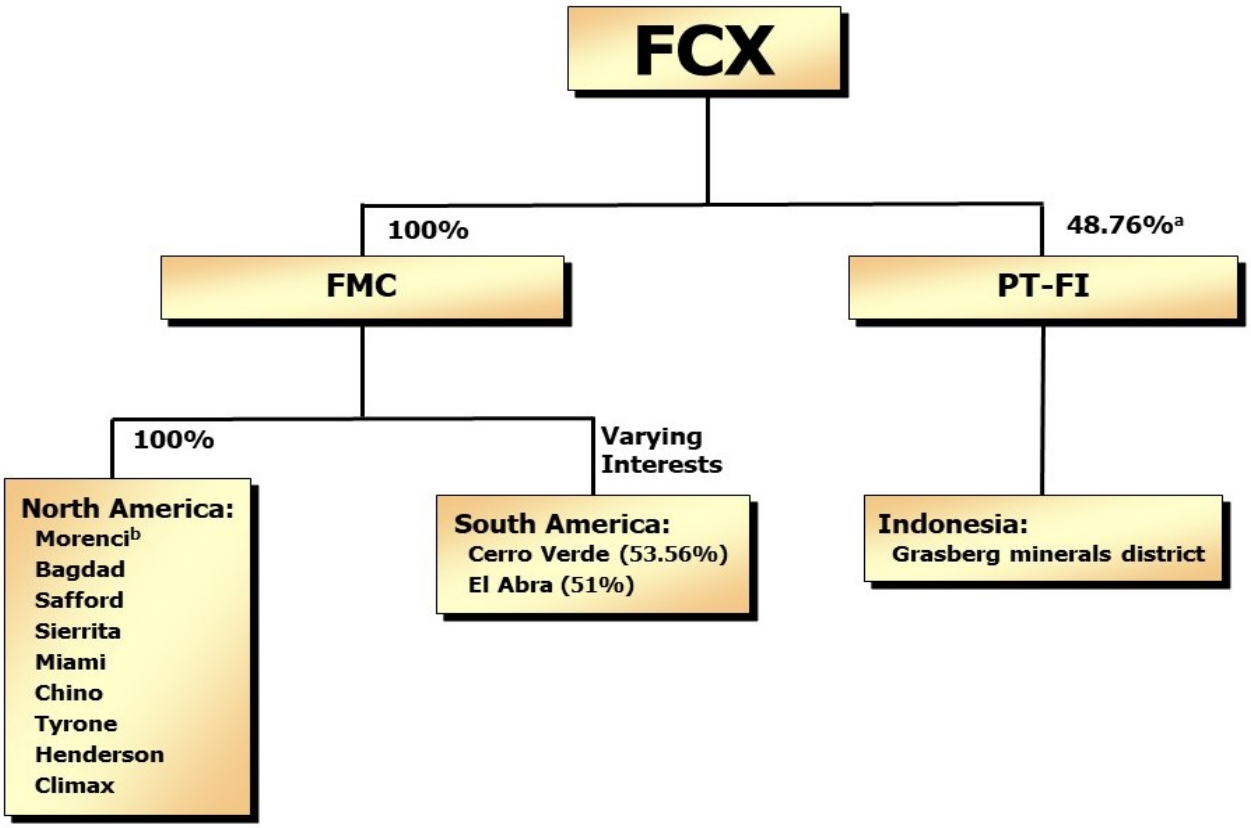
We are a leading international mining company with headquarters in Phoenix, Arizona. We operate large, long-lived, geographically diverse assets with significant proven and probable reserves of copper, gold and molybdenum. We are one of the world's largest publicly traded copper producers. Our portfolio of assets includes the Grasberg minerals district in Indonesia, one of the world's largest copper and gold deposits; and significant mining operations in North America and South America, including the large-scale Morenci minerals district in Arizona and the Cerro Verde operation in Peru.

We believe that we have a high-quality portfolio of long-lived copper assets positioned to generate long-term value. The ramp-up of underground mining at PT Freeport Indonesia (PT-FI) is advancing on schedule, production from the recently completed Lone Star copper leach project remains on track to produce over 200 million pounds of copper during the year 2021 and Cerro Verde has restored operations following a government-mandated shutdown in mid-March 2020 as part of efforts to contain the spread of COVID-19 in Peru. We are also pursuing other opportunities to enhance our mines' net present values, and we continue to advance studies for future development of our portfolio of resources, the timing of which will depend on market conditions. We plan to prioritize long-term development opportunities during 2021 while focusing on the continued execution of our strategic objectives of maintaining a strong balance sheet, increasing cash returns to shareholders and advancing opportunities for future growth.

Protecting the health of our workforce and communities where we operate is a top priority, and we continue to focus on safeguarding our business in an uncertain public health and economic environment. Our operating sites successfully executed our April 2020 revised operating plans implemented in response to the global COVID-19 pandemic and resulting negative impact on the global economy.

In connection with our financing activities in 2019 and 2020, we issued a total of $4.0 billion in new senior notes and used most of the net proceeds to purchase and redeem outstanding senior notes. As a result, we have extended our debt maturities and strengthened our financial flexibility. We have no senior note maturities until 2022 and at December 31, 2020, we had no amounts drawn under our $3.5 billion revolving credit facility, which matures in April 2024.

Following are our ownership interests at December 31, 2020, in operating mines through our consolidated subsidiaries, Freeport Minerals Corporation (FMC) and PT-FI:



a. Prior to December 21, 2018, we owned 90.64 percent of PT-FI and PT-FI had an unincorporated joint venture with Rio Tinto plc (Rio Tinto). Refer to Note 2 for further discussion of the PT-FI divestment transaction and Note 3 for discussion of the former joint venture with Rio Tinto (Rio Tinto Joint Venture).

b. FMC has a 72 percent undivided interest in Morenci via an unincorporated joint venture. Refer to Note 3 for further discussion.

At December 31, 2020, our estimated consolidated recoverable proven and probable mineral reserves totaled 113.2 billion pounds of copper, 28.9 million ounces of gold and 3.71 billion pounds of molybdenum. Following is the allocation of our estimated consolidated recoverable proven and probable mineral reserves at December 31, 2020, by geographic location (refer to “Mining Operations” for further discussion):

	Copper	Gold	Molybdenum
North America	42 %	2 %	81 % [a]
South America	29	—	19
Indonesia	29	98	—
	100 %	100 %	100 %

a. Our Henderson and Climax molybdenum mines contain 18 percent of our estimated consolidated recoverable proven and probable molybdenum reserves, and our North America copper mines contain 63 percent.

In North America, we operate seven copper mines - Morenci, Bagdad, Safford, 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.

Following is the allocation of our consolidated copper, gold and molybdenum production for the year 2020 by geographic location (refer to “Mining Operations” for further information):

	Copper	Gold	Molybdenum
North America	44 %	1 %	75 % [a]
South America	31	—	25
Indonesia	25	99	—
	100 %	100 %	100 %

a. Our Henderson and Climax molybdenum mines produced 32 percent of our consolidated molybdenum production, and our North America copper mines produced 43 percent.

The geographic locations of our operating mines are shown on the world map below.



COPPER, GOLD AND MOLYBDENUM

Following is a brief discussion of our primary natural resources – copper, gold and molybdenum. For further discussion of historical and current market prices of these commodities, refer to MD&A and Item 1A. “Risk Factors.”

Copper

Copper is an internationally traded commodity, and its prices are determined by the major metals exchanges – the London Metal Exchange (LME), Commodity Exchange Inc. (COMEX) and Shanghai Futures Exchange. Prices on these exchanges generally reflect the worldwide balance of copper supply and demand, and can be volatile and cyclical. During 2020, the LME copper settlement price averaged $2.80 per pound, ranging from a low of $2.09 per pound to a high of $3.61 per pound, and was $3.51 per pound at December 31, 2020.

In general, demand for copper reflects the rate of underlying world economic growth, particularly in industrial production and construction. According to Wood Mackenzie, a widely followed independent metals market consultant, copper’s end-use markets (and their estimated shares of total consumption) are construction (28 percent), electrical applications (28 percent), consumer products (21 percent), transportation (12 percent) and industrial machinery (11 percent). We believe copper will continue to be essential in these basic uses as well as contribute significantly to new technologies for clean energy, to advance communications and to enhance public health. Examples of areas we believe will require additional copper in the future include: (i) high efficiency motors, which consume up to 75 percent more copper than a standard motor; (ii) electric vehicles, which consume up to four times the amount of copper in terms of weight compared to vehicles of similar size with an internal combustion engine, and require copper-intensive charging station infrastructure to refuel; and (iii) renewable energy such as wind and solar, which consume four to five times the amount of copper compared to traditional fossil fuel generated power.

Gold
Gold is used for jewelry, coinage and bullion as well as various industrial and electronic applications. Gold can be readily sold on numerous markets throughout the world. Benchmark prices are generally based on London Bullion Market Association (London) quotations. During 2020, the London PM gold price averaged $1,770 per ounce, ranging from a low of $1,474 per ounce to a record high of $2,067 per ounce, and was $1,888 per ounce on December 30, 2020 (there was no London PM gold price quote on December 31, 2020).

Molybdenum
Molybdenum is a key alloying element in steel and the raw material for several chemical-grade products used in catalysts, lubrication, smoke suppression, corrosion inhibition and pigmentation. Molybdenum, as a high-purity metal, is also used in electronics such as flat-panel displays and in super alloys used in aerospace. Reference prices for molybdenum are available in several publications, including *Metals Week, CRU Report* and *Metal Bulletin*. During 2020, the weekly average price of molybdenum quoted by *Metals Week* averaged $8.69 per pound, ranging from a low of $7.01 per pound to a high of $10.79 per pound, and was $9.86 per pound at December 31, 2020.

PRODUCTS AND SALES

Our consolidated revenues for 2020 primarily included sales of copper (80 percent), gold (12 percent) and molybdenum (6 percent). Copper concentrate sales to PT Smelting (PT-FI's 25-percent-owned copper smelter and refinery in Gresik, Indonesia) totaled 12 percent of our consolidated revenues for the year ended December 31, 2020, 13 percent for the year ended December 31, 2019, and 12 percent for the year ended December 31, 2018, which is the only customer that accounted for 10 percent or more of our consolidated revenues during the three years ended December 31, 2020. Refer to Note 16 for a summary of our consolidated revenues and operating income (loss) by business segment and geographic area.

Copper Products
We are one of the world's leading producers of copper concentrate, cathode and continuous cast copper rod. During 2020, 51 percent of our mined copper was sold in concentrate, 28 percent as cathode and 21 percent as rod from our North America operations. The copper ore from our mines is generally processed either by smelting and refining or by solution extraction and electrowinning (SX/EW) as described below.

Copper Concentrate. We produce copper concentrate at six of our mines in which mined ore is crushed and treated to produce a copper concentrate with copper content of approximately 20 to 30 percent. In North America, copper concentrate is produced at the Morenci, Bagdad, Sierrita and Chino mines, and a significant portion is shipped to our Miami smelter in Arizona for further processing. Copper concentrate is also produced at the Cerro Verde mine in Peru and the Grasberg minerals district in Indonesia.

Copper Cathode. We produce copper cathode at our electrolytic refinery located in El Paso, Texas, and at nine of our mines.

SX/EW cathode is produced from the Morenci, Bagdad, Safford, Sierrita, Miami, Chino and Tyrone mines in North America, and from the Cerro Verde and El Abra mines in South America. For ore subject to the SX/EW process, the ore is placed on stockpiles and copper is extracted from the ore by dissolving it with a weak sulphuric acid solution. The copper content of the solution is increased in two additional SX stages, and then the copper-bearing solution undergoes an EW process to produce cathode that is, on average, 99.99 percent copper. Our copper cathode is used as the raw material input for copper rod, brass mill products and for other uses.

Copper cathode is also produced at Atlantic Copper (our wholly owned copper smelting and refining unit in Spain) and PT Smelting. Copper concentrate is smelted (*i.e.*, subjected to extreme heat) to produce copper anode, which weighs between 800 and 900 pounds and has an average copper content of 99.5 percent. The anode is further treated by electrolytic refining to produce copper cathode, which weighs between 100 and 350 pounds and has an average copper content of 99.99 percent. Refer to "Mining Operations - Smelting Facilities and Other Mining Properties" for further discussion of Atlantic Copper and PT Smelting.

Continuous Cast Copper Rod. We manufacture continuous cast copper rod at our facilities in El Paso, Texas and Miami, Arizona, primarily using copper cathode produced at our North America copper mines.

Copper Sales

North America. The majority of the copper produced at our North America copper mines and refined in our El Paso, Texas refinery is consumed at our rod plants to produce copper rod which is sold to wire and cable manufacturers. The remainder of our North America copper production is sold in the form of copper cathode or copper concentrate under U.S. dollar-denominated annual contracts. Cathode and rod contract prices are generally based on the prevailing COMEX monthly average settlement price for the month of shipment and include a premium. Generally, copper cathode is sold to rod, brass or tube fabricators. During 2020, 12 percent of our North America mines' copper concentrate sales volumes were shipped to Atlantic Copper for smelting and refining and sold as copper anode and copper cathode.

South America. Production from our South America mines is sold as copper concentrate or copper cathode under U.S. dollar-denominated, annual and multi-year contracts. During 2020, our South America mines sold approximately 76 percent of their copper production in concentrate and 24 percent as cathode.

Substantially all of our South America copper concentrate and cathode sales contracts provide final copper pricing in a specified future month (generally one to four months from the shipment date) primarily based on quoted LME monthly average settlement copper prices. Revenues from our South America concentrate sales are recorded net of royalties and treatment charges (*i.e.,* fees paid to smelters that are generally negotiated annually). In addition, because a portion of the metals contained in copper concentrate is unrecoverable from the smelting process, revenues from our South America concentrate sales are also recorded net of allowances for unrecoverable metals, which are a negotiated term of the contracts and vary by customer.

Indonesia. PT-FI sells its production in the form of copper concentrate, which contains significant quantities of gold and silver, primarily under U.S. dollar-denominated, long-term contracts. PT-FI also sells a small amount of copper concentrate in the spot market. Following is a summary of PT-FI's aggregate percentage of concentrate sales to unaffiliated third parties, PT Smelting and Atlantic Copper for the years ended December 31:

	2020	2019	2018
Third parties	48 %	34 %	60 %
PT Smelting	50	64	38
Atlantic Copper	2	2	2
	100 %	100 %	100 %

Substantially all of PT-FI's concentrate sales contracts provide final copper pricing in a specified future month (generally one to four months from the shipment date) primarily based on quoted LME monthly average settlement copper prices. Revenues from PT-FI's concentrate sales are recorded net of royalties, export duties, treatment charges and allowances for unrecoverable metals.

Refer to Item 1A. "Risk Factors" for discussion of Indonesia regulations regarding PT-FI's concentrate exports.

Gold Products and Sales

We produce gold almost exclusively from the Grasberg minerals district. The gold we produce is primarily sold as a component of our copper concentrate or in slimes, which are a product of the smelting and refining process. Gold generally is priced at the average London price for a specified month near the month of shipment. Revenues from gold sold as a component of our copper concentrate are recorded net of treatment and refining charges, royalties, export duties and allowances for unrecoverable metals. Revenues from gold sold in slimes are recorded net of refining charges.

Molybdenum Products and Sales

We are the world's largest producer of molybdenum and molybdenum-based chemicals. In addition to production from the Henderson and Climax molybdenum mines, we produce molybdenum concentrate at certain of the North America copper mines and the Cerro Verde copper mine in Peru. The majority of our molybdenum concentrate is processed in our own conversion facilities. Our molybdenum sales are primarily priced based on the average published *Metals Week* price for the month prior to the month of shipment.

GOVERNMENTAL REGULATIONS

Our operations are subject to a broad range of laws and regulations imposed by governments and regulatory bodies. These regulations touch all aspects of our operations, including how we extract, process and explore for minerals and how we conduct our business, including regulations governing matters such as environmental and reclamation matters, occupational health and safety, mining rights and human rights.

Environmental and Reclamation Matters

The cost of complying with environmental laws and regulations is fundamental to and a substantial cost of our business. We conduct our operations in a manner that aims to protect public health and the environment and we believe our operations are in compliance with applicable laws and regulations in all material respects. For information about environmental regulation, litigation and related costs, refer to Item 1A. “Risk Factors” and Notes 1 and 12.

Health and Safety

We prioritize the safety and health of our workforce. Management believes that safety and health considerations are integral to, and compatible with, all other functions in the organization and that proper safety and health management will enhance production and reduce costs. In the U.S., mine health and safety is governed by the U.S. Mine Safety and Health Administration. For information about health and safety, refer to “Human Capital” below and Item 4. “Mine Safety Disclosures.”

Mining Rights

We conduct our mining and exploration activities pursuant to concessions granted by, or under contracts with, the host government in the countries where we operate. These countries include, among others, the U.S., Peru, Chile and Indonesia. Mining rights include our license to operate and involve our payment of applicable taxes and royalties to the host governments. The concessions and contracts are subject to the political risks associated with the host countries. For information about mining rights, including governmental agreements, and licenses to operate, refer to “Mining Operations” below, Item 1A. “Risk Factors” and Notes 2, 11, 12 and 13.

Human Rights

We have adopted policies that govern our working relationships with the communities and governments where we operate and that are designed to guide our practices and programs in a manner that respects human rights and the culture of the local people impacted by our operations. For information about human rights, refer to “Community and Human Rights” below.

COMPETITION

The top 10 producers of copper comprise approximately 43 percent of total worldwide mined copper production. For the year 2020, we ranked fourth among those producers, with approximately five percent of estimated total worldwide mined copper production. Our competitive position is based on the size, quality and grade of our ore bodies and our ability to manage costs compared with other producers. We have a diverse portfolio of mining operations with varying ore grades and cost structures. Our costs are driven by the location, grade and nature of our ore bodies, and the level of input costs, including energy, labor and equipment. The metals markets are cyclical, and our ability to maintain our competitive position over the long term is based on our ability to acquire and develop quality deposits, hire and retain a skilled workforce, and to manage our costs.

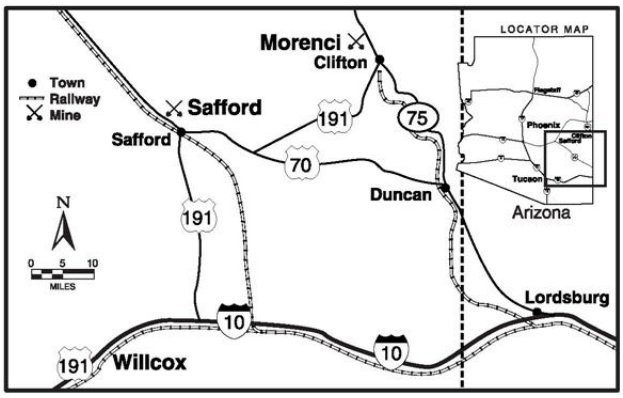
MINING OPERATIONS

Following are maps and descriptions of our mining operations in North America (including both copper and molybdenum operations), South America and Indonesia.

North America

In the U.S., most of the land occupied by our copper and molybdenum mines, concentrators, SX/EW facilities, smelter, refinery, rod mills, molybdenum roasters and processing facilities is owned by us or is located on unpatented mining claims owned by us. Certain portions of our Bagdad, Sierrita, Miami, Chino, Tyrone, Henderson and Climax operations are located on government-owned land and are operated under a Mine Plan of Operations or other use permit. We hold various federal and state permits or leases on government land for purposes incidental to mine operations.

Morenci



We own a 72 percent undivided interest in Morenci, with the remaining 28 percent owned by Sumitomo Metal Mining Arizona, Inc. (15 percent) and SMM Morenci, Inc. (13 percent). Each partner takes in kind its share of Morenci's production.

Morenci is an open-pit copper mining complex that has been in continuous operation since 1939 and previously was mined through underground workings. Morenci is located in Greenlee County, Arizona, approximately 50 miles northeast of Safford on U.S. Highway 191. The site is accessible by a paved highway and a railway spur.

The Morenci mine is a porphyry copper deposit that has oxide, secondary sulfide and primary sulfide mineralization. The predominant oxide copper mineral is chrysocolla. Chalcocite is the most important secondary copper sulfide mineral, with chalcopyrite as the dominant primary copper sulfide.

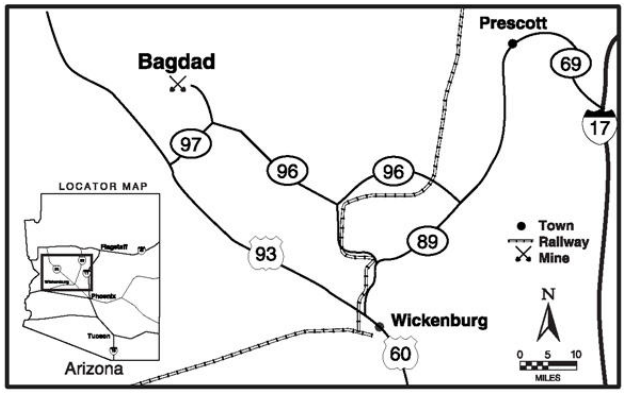
The Morenci operation consists of two concentrators capable of milling 132,000 metric tons of ore per day, which produce copper and molybdenum concentrate; a 68,000 metric ton-per-day, crushed-ore leach pad and stacking system; a low-grade run-of-mine (ROM) leaching system; four SX plants; and three EW tank houses that produce copper cathode. Total EW tank house capacity is approximately 900 million pounds of copper per year. Morenci's available mining fleet consists of one hundred and forty-one 236-metric ton haul trucks loaded by 13 shovels with bucket sizes ranging from 47 to 57 cubic meters, which are capable of moving an average of 815,000 metric tons of material per day. One of Morenci's concentrators, which has a milling capacity of approximately 50,000 metric tons of ore per day, is on care and maintenance and expected to resume operating in 2022.

Morenci's production, including our joint venture partner's share, totaled 1.0 billion pounds of copper in each of the last three years and 6 million pounds of molybdenum in 2020, 5 million pounds of molybdenum in 2019 and 9 million pounds of molybdenum in 2018.

Morenci is located in a desert environment with rainfall averaging 13 inches per year. The highest bench elevation is 2,000 meters above sea level and the ultimate pit bottom is expected to have an elevation of 840 meters above sea level. The Morenci operation encompasses approximately 61,300 acres, comprising 51,300 acres of fee lands and 10,000 acres of unpatented mining claims held on public mineral estate and numerous state or federal permits, easements and rights-of-way.

The Morenci operation's electrical power is primarily sourced from Tucson Electric Power Company, Arizona Public Service Company and the Luna Energy facility in Deming, New Mexico. Although we believe the Morenci operation has sufficient water sources to support current operations, we are a party to litigation that may impact our water right claims or rights to continued use of currently available water supplies, which could adversely affect our water supply for the Morenci operation. Refer to Item 1A. "Risk Factors" and Item 3. "Legal Proceedings" for further discussion.

Bagdad



Our wholly owned Bagdad mine is an open-pit copper and molybdenum mining complex located in Yavapai County in west-central Arizona. It is approximately 60 miles west of Prescott and 100 miles northwest of Phoenix. The property can be reached by Arizona Highway 96, which ends at the town of Bagdad. The closest railroad is at Hillside, Arizona, 24 miles southeast on Arizona Highway 96. The open-pit mining operation has been ongoing since 1945, and prior mining was conducted through underground workings.

The Bagdad mine is a porphyry copper deposit containing both sulfide and oxide mineralization. Chalcopyrite and molybdenite are the dominant primary sulfides and are the primary economic minerals in the mine. Chalcocite is the most common secondary copper sulfide mineral, and the predominant oxide copper minerals are chrysocolla, malachite and azurite.

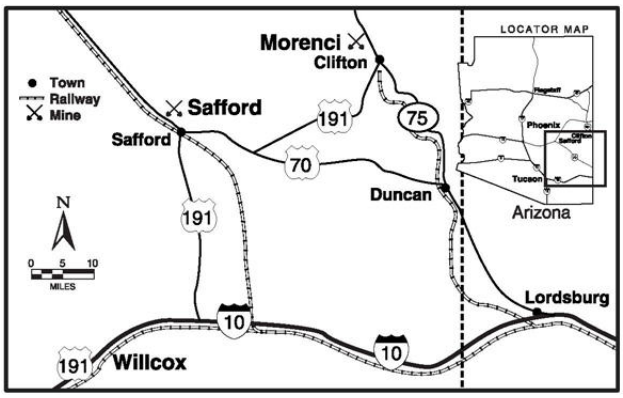
The Bagdad operation consists of an 83,500 metric ton-per-day concentrator that produces copper and molybdenum concentrate, a SX/EW plant that will produce approximately 6 million pounds per year of copper cathode from solution generated by low-grade stockpile leaching, and a pressure-leach plant to process molybdenum concentrate. The available mining fleet consists of thirty-two 235-metric ton haul trucks loaded by eight shovels with bucket sizes ranging from 30 to 48 cubic meters, which are capable of moving an average of 236,000 metric tons of material per day.

Bagdad’s production totaled 216 million pounds of copper and 11 million pounds of molybdenum in 2020, 218 million pounds of copper and 13 million pounds of molybdenum in 2019, and 199 million pounds of copper and 10 million pounds of molybdenum in 2018.

Bagdad is located in a desert environment with rainfall averaging 15 inches per year. The highest bench elevation is 1,200 meters above sea level and the ultimate pit bottom is expected to be 150 meters above sea level. The Bagdad operation encompasses approximately 33,100 acres, comprising 21,900 acres of fee lands and 11,200 acres of unpatented mining claims held on public mineral estate and numerous state or federal permits, easements and rights-of-ways.

Bagdad receives electrical power from Arizona Public Service Company. We believe the Bagdad operation has sufficient water sources to support current operations.

Safford, including Lone Star



Our wholly owned Safford mine has been in operation since 2007 and is an open-pit copper mining complex located in Graham County, Arizona, 8 miles north of the town of Safford and 170 miles east of Phoenix. The site is accessible by paved county road off U.S. Highway 70.

The Safford mine includes three copper deposits that have oxide mineralization overlaying primary copper sulfide mineralization. The predominant oxide copper minerals are chrysocolla and copper-bearing iron oxides with the predominant copper sulfide material being chalcopyrite. One of the Safford deposits includes the Lone Star copper leach project, which was completed in third-quarter 2020, and advances exposure to a significant sulfide resource. Total capital costs for the initial project, including mine equipment and pre-production stripping, approximated $820 million and benefits from the utilization of existing infrastructure at the Safford operation. Production from the Lone Star leachable ores continues to ramp-up on schedule and is expected to exceed 200 million pounds of copper for the year 2021. We expect to incorporate positive drilling and ongoing results in our future development plans.

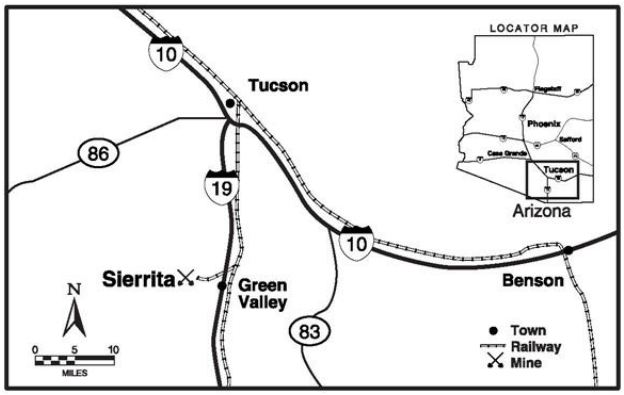
The property is a mine-for-leach project and produces copper cathode. The operation consists of three open pits, of which one (Lone Star) is currently being mined, feeding a crushing facility with a capacity of 103,000 metric tons per day. The crushed ore is delivered to leach pads by a series of overland and portable conveyors. Leach solutions feed a SX/EW facility with a capacity of 285 million pounds of copper per year. A sulfur burner plant is also in operation at Safford, providing a cost-effective source of sulphuric acid used in SX/EW operations. The available mining fleet consists of thirty-seven 235-metric ton haul trucks loaded by six shovels with bucket sizes ranging from 34 to 47 cubic meters, which are capable of moving an average of 358,000 metric tons of material per day.

Safford’s copper production totaled 161 million pounds in 2020, 110 million pounds in 2019 and 123 million pounds in 2018.

Safford is located in a desert environment with rainfall averaging 10 inches per year. The highest bench elevation is 1,783 meters above sea level and the ultimate pit bottom is expected to have an elevation of 823 meters above sea level. The Safford operation encompasses approximately 76,000 acres, comprising 37,200 acres of fee lands and 38,800 acres of unpatented claims held on public mineral estate.

The Safford operation’s electrical power is primarily sourced from Tucson Electric Power Company, Arizona Public Service Company and the Luna Energy facility. Although we believe the Safford operation has sufficient water sources to support current operations, we are a party to litigation that may impact our water right claims or rights to continued use of currently available water supplies, which could adversely affect our water supply for the Safford operation. Refer to Item 1A. “Risk Factors” and Item 3. “Legal Proceedings” for further discussion.

Sierrita



Our wholly owned Sierrita mine has been in operation since 1959 and is an open-pit copper and molybdenum mining complex located in Pima County, Arizona, approximately 20 miles southwest of Tucson and 7 miles west of the town of Green Valley and Interstate Highway 19. The site is accessible by a paved highway and by rail.

The Sierrita mine is a porphyry copper deposit that has oxide, secondary sulfide and primary sulfide mineralization. The predominant oxide copper minerals are malachite, azurite and chrysocolla. Chalcocite is the most important secondary copper sulfide mineral, and chalcopyrite and molybdenite are the dominant primary sulfides.

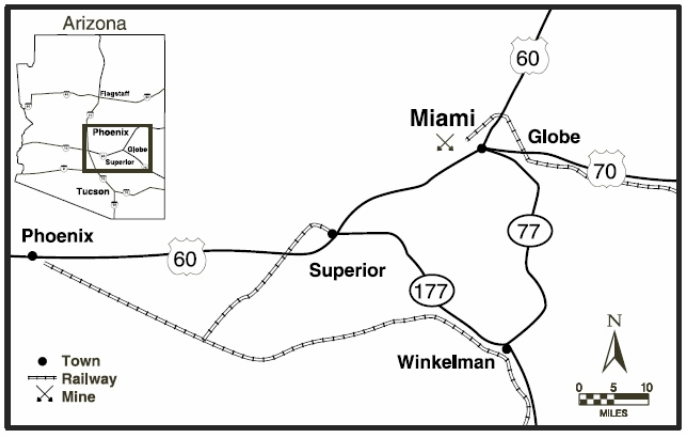
The Sierrita operation includes a 100,000 metric ton-per-day concentrator that produces copper and molybdenum concentrate. Sierrita also produces copper from a ROM oxide-leaching system. Cathode copper is plated at the Twin Buttes EW facility, which has a design capacity of approximately 50 million pounds of copper per year. The Sierrita operation also has molybdenum facilities consisting of a leaching circuit, two molybdenum roasters and a packaging facility. The molybdenum facilities process molybdenum concentrate produced by Sierrita, from our other mines and from third-party sources. The available mining fleet consists of twenty-two 235-metric ton haul trucks loaded by three shovels with bucket sizes ranging from 34 to 56 cubic meters, which are capable of moving an average of 175,000 metric tons of material per day.

Sierrita’s production totaled 178 million pounds of copper and 17 million pounds of molybdenum in 2020, 160 million pounds of copper and 16 million pounds of molybdenum in 2019, and 152 million pounds of copper and 16 million pounds of molybdenum in 2018.

Sierrita is located in a desert environment with rainfall averaging 14.5 inches per year. The highest bench elevation is 1,300 meters above sea level and the ultimate pit bottom is expected to be 410 meters above sea level. The Sierrita operation, including the adjacent Twin Buttes site, encompasses approximately 46,700 acres, comprising 38,300 acres of fee lands including split estate lands and 8,400 acres of unpatented mining claims held on public mineral estate.

Sierrita receives electrical power through long-term contracts with the Tucson Electric Power Company. Although we believe the Sierrita operation has sufficient water sources to support current operations, we are a party to litigation that may impact our water rights claims or rights to continued use of currently available water supplies, which could adversely affect our water supply for the Sierrita operation. Refer to Item 1A. “Risk Factors” and Item 3. “Legal Proceedings” for further discussion.

Miami



Our wholly owned Miami mine is an open-pit copper mining complex located in Gila County, Arizona, 90 miles east of Phoenix and 6 miles west of the city of Globe on U.S. Highway 60. The site is accessible by a paved highway and by rail.

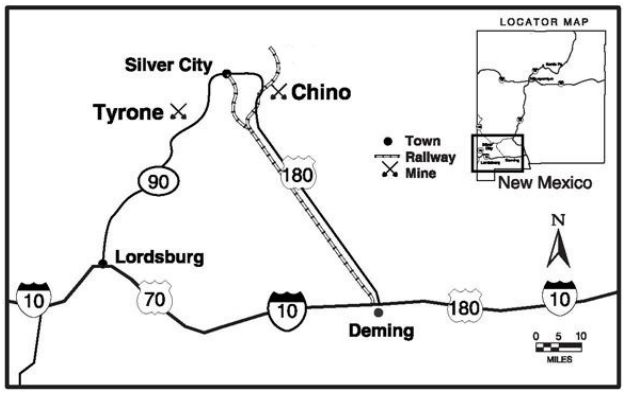
The Miami mine is a porphyry copper deposit that has leachable oxide and secondary sulfide mineralization. The predominant oxide copper minerals are chrysocolla, copper-bearing clays, malachite and azurite. Chalcocite and covellite are the most important secondary copper sulfide minerals.

Since about 1915, the Miami mining operation had processed copper ore using both flotation and leaching technologies. The design capacity of the SX/EW plant is 200 million pounds of copper per year. Miami is no longer mining ore, but currently produces copper through leaching material already placed on stockpiles, which is currently expected to continue through at least 2025. Miami's copper production totaled 17 million pounds in 2020, 15 million pounds in 2019 and 16 million pounds in 2018.

Miami is located in a desert environment with rainfall averaging 18 inches per year. The highest bench elevation is 1,390 meters above sea level and mining advanced the pit bottom to an elevation of 810 meters above sea level. Subsequent sloughing of material into the pit has filled it back to an elevation estimated to be 900 meters above sea level. The Miami operation encompasses approximately 14,400 acres, comprising 10,400 acres of fee lands and 4,000 acres of unpatented mining claims held on public mineral estate.

Miami receives electrical power through long-term contracts with the Salt River Project and natural gas through long-term contracts with El Paso Natural Gas as the transporter. We believe the Miami operation has sufficient water sources to support current operations.

Chino and Tyrone



Chino

Our wholly owned Chino mine is an open-pit copper mining complex located in Grant County, New Mexico, approximately 15 miles east of the town of Silver City off of State Highway 180. The mine is accessible by paved roads and by rail. Chino has been in operation since 1910.

The Chino mine is a porphyry copper deposit with adjacent copper skarn deposits. There is leachable oxide, secondary sulfide and millable primary sulfide mineralization. The predominant oxide copper mineral is chrysocolla. Chalcocite is the most important secondary copper sulfide mineral, and chalcopyrite and molybdenite the dominant primary sulfides.

The Chino operation consists of a 36,000 metric ton-per-day concentrator that produces copper concentrate, and a 150 million pound-per-year SX/EW plant that produces copper cathode from solution generated by ROM leaching. The available mining fleet consists of thirty-five 240-metric ton haul trucks loaded by four shovels with bucket sizes ranging from 31 to 48 cubic meters, which are capable of moving an average of 235,000 metric tons of material per day.

In April 2020, operations at Chino were suspended in connection with our revised operating plans in response to the COVID-19 pandemic. A review of options for restarting Chino operations was completed in the second half of 2020, and in January 2021, we restarted mining activities at the Chino mine at a reduced rate of approximately 100 million pounds of copper per year (approximately 50 percent capacity). Chino's copper production totaled 92 million pounds in 2020, 175 million pounds in 2019 and 173 million pounds in 2018.

Chino is located in a desert environment with rainfall averaging 16 inches per year. The highest bench elevation is 2,250 meters above sea level and the ultimate pit bottom is expected to be 1,460 meters above sea level. The Chino operation encompasses approximately 117,300 acres, comprising 103,900 acres of fee lands and 13,400 acres of unpatented mining claims held on public mineral estate.

Chino receives electrical power from the Luna Energy facility and from the open market. We believe the Chino operation has sufficient water resources to support current operations.

Tyrone
Our wholly owned Tyrone mine is an open-pit copper mining complex and has been in operation since 1967. It is located in Grant County, New Mexico, 10 miles south of Silver City, New Mexico, along State Highway 90. The site is accessible by paved road and by rail.

The Tyrone mine is a porphyry copper deposit. Mineralization is predominantly secondary sulfide consisting of chalcocite, with leachable oxide mineralization consisting of chrysocolla.

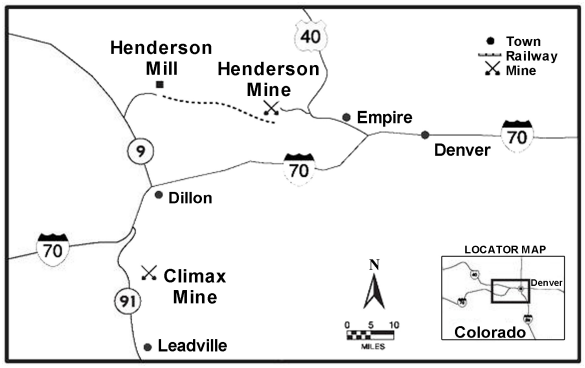
Copper processing facilities consist of a SX/EW operation with a maximum capacity of approximately 100 million pounds of copper cathode per year. The available mining fleet consists of seven 240-metric ton haul trucks loaded by one shovel with a bucket size of 47 cubic meters, which is capable of moving an average of 68,000 metric tons of material per day.

Tyrone's copper production totaled 45 million pounds in 2020, 48 million pounds in 2019 and 55 million pounds in 2018.

Tyrone is located in a desert environment with rainfall averaging 16 inches per year. The highest bench elevation is 2,070 meters above sea level and the ultimate pit bottom is expected to have an elevation of 1,475 meters above sea level. The Tyrone operation encompasses approximately 31,100 acres, comprising 19,700 acres of fee lands and 11,400 acres of unpatented mining claims held on public mineral estate.

Tyrone receives electrical power from the Luna Energy facility and from the open market. We believe the Tyrone operation has sufficient water resources to support current operations.

Henderson and Climax



Henderson

Our wholly owned Henderson molybdenum mine has been in operation since 1976 and is located 42 miles west of Denver, Colorado, off U.S. Highway 40. Nearby communities include the towns of Empire, Georgetown and Idaho Springs. The Henderson mill site is located 15 miles west of the mine and is accessible from Colorado State Highway 9. The Henderson mine and mill are connected by a 10-mile conveyor tunnel under the Continental Divide and an additional five-mile surface conveyor. The tunnel portal is located five miles east of the mill.

The Henderson mine is a porphyry molybdenum deposit, with molybdenite as the primary sulfide mineral.

The Henderson operation consists of a large block-cave underground mining complex feeding a concentrator with a current capacity of approximately 32,000 metric tons per day. Henderson has the capacity to produce approximately 16 million pounds of molybdenum per year. The majority of the molybdenum concentrate produced is shipped to our Fort Madison, Iowa, processing facility. The available underground mining equipment fleet consists of fifteen 9-metric ton load-haul-dump (LHD) units and seven 73-metric ton haul trucks, which deliver ore to a gyratory crusher feeding a series of three overland conveyors to the mill stockpiles.

Henderson's molybdenum production totaled 10 million pounds in 2020, 12 million pounds in 2019 and 14 million pounds in 2018.

The Henderson mine is located in a mountainous region with the main access shaft at 3,180 meters above sea level. The main production levels are currently at elevations of 2,200 and 2,350 meters above sea level. This region experiences significant snowfall during the winter months.

The Henderson mine and mill operations encompass approximately 16,700 acres, comprising 13,100 acres of fee lands, 3,600 acres of unpatented mining claims held on public mineral estate and a 50-acre easement with the U.S. Forest Service for the surface portion of the conveyor corridor.

Henderson operations receive electrical power through long-term contracts with Xcel Energy and natural gas through long-term contracts with Encore Energy (with Xcel Energy as the transporter). We believe the Henderson operation has sufficient water resources to support current operations.

Climax

Our wholly owned Climax mine is located 13 miles northeast of Leadville, Colorado, off Colorado State Highway 91 at the top of Fremont Pass. The mine is accessible by paved roads. The mine was placed on care and maintenance status by its previous owner in 1995 and, after being acquired by us, began commercial production in 2012.

The Climax ore body is a porphyry molybdenum deposit, with molybdenite as the primary sulfide mineral.

The Climax open-pit mine includes a 25,000 metric ton-per-day mill facility. Climax has the capacity to produce approximately 30 million pounds of molybdenum per year. The available mining fleet consists of eleven 177-metric ton haul trucks loaded by two hydraulic shovels with bucket sizes of 34 cubic meters, which are capable of moving an average of 90,000 metric tons of material per day.

In April 2020, due to the decline in market prices of molybdenum, we revised our near-term operating plans, which included a reduction in production of molybdenum by approximately 50 percent at Climax over the remainder of

2020. Climax expects to remain at reduced production levels of approximately half of the available capacity in 2021. Molybdenum production from Climax totaled 14 million pounds in 2020, 17 million pounds in 2019 and 21 million pounds in 2018.

The Climax mine is located in a mountainous region. The highest bench elevation is approximately 4,050 meters above sea level and the ultimate pit bottom is expected to have an elevation of approximately 3,100 meters above sea level. This region experiences significant snowfall during the winter months.

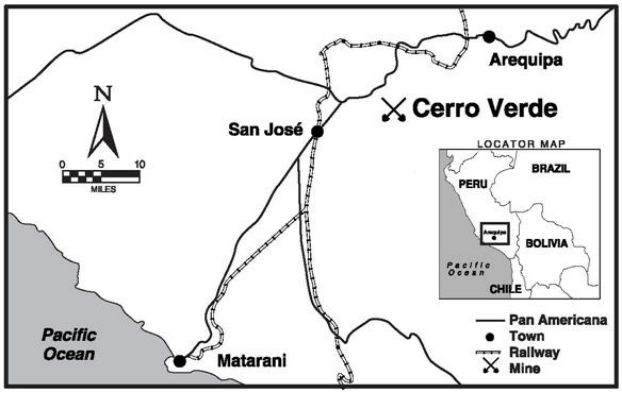
The Climax operation encompasses approximately 15,100 acres of fee lands.

Climax operations receive electrical power through long-term contracts with Xcel Energy and natural gas through long-term contracts with Encore Energy. We believe the Climax operation has sufficient water resources to support current operations.

South America

At our operations in South America, mine properties and facilities are controlled through mining claims or concessions under the general mining laws of the relevant country. The claims or concessions are owned or controlled by the operating companies in which we or our subsidiaries have a controlling ownership interest. Roads, power lines and aqueducts are controlled by easements.

Cerro Verde



We have a 53.56 percent ownership interest in Cerro Verde, with the remaining 46.44 percent held by SMM Cerro Verde Netherlands B.V. (21.0 percent), Compañia de Minas Buenaventura S.A.A. (19.58 percent) and other stockholders whose shares are publicly traded on the Lima Stock Exchange (5.86 percent).

Cerro Verde is an open-pit copper and molybdenum mining complex that has been in operation since 1976 and is located 20 miles southwest of Arequipa, Peru. The site is accessible by paved highway. Cerro Verde's copper cathode and concentrate production that is not sold locally is transported approximately 70 miles by truck and by rail to the Port of Matarani for shipment to international markets.

The Cerro Verde mine is a porphyry copper deposit that has oxide, secondary sulfide and primary sulfide mineralization. The predominant oxide copper minerals are brochantite, chrysocolla, malachite and copper "pitch." Chalcocite and covellite are the most important secondary copper sulfide minerals. Chalcopyrite and molybdenite are the dominant primary sulfides.

Cerro Verde's operation consists of an open-pit copper mine, two concentrating facilities capable of milling a total of 409,500 metric tons of ore per day, and SX/EW leaching facilities. Leach copper production is derived from a 39,000 metric ton-per-day crushed leach facility and a 100,000 metric ton-per-day ROM leach system. This SX/EW leaching operation has a capacity of approximately 200 million pounds of copper per year.

The available fleet consists of fifty 290-metric ton haul trucks and ninety-three 230-metric ton haul trucks (21 of which are currently on standby) loaded by thirteen electric shovels with bucket sizes ranging in size from 33 to 57 cubic meters and two hydraulic shovels with a bucket size of 21 cubic meters (both of which are currently on standby). This fleet is capable of moving an average of approximately 910,000 metric tons of material per day.

In mid-March 2020, the Peru government issued a Supreme Decree and declaration of a National Emergency in its efforts to contain the outbreak of COVID-19. To comply with the government requirements, we temporarily transitioned our Cerro Verde mine to care and maintenance status and adjusted operations to prioritize critical activities. A plan for Cerro Verde to restore operations was approved by the Peru government in second-quarter 2020 and strict health protocols have been implemented. This plan has allowed Cerro Verde to run both concentrators at their aggregate average design capacity of 360,000 metric ton-per-day in the second half of 2020.

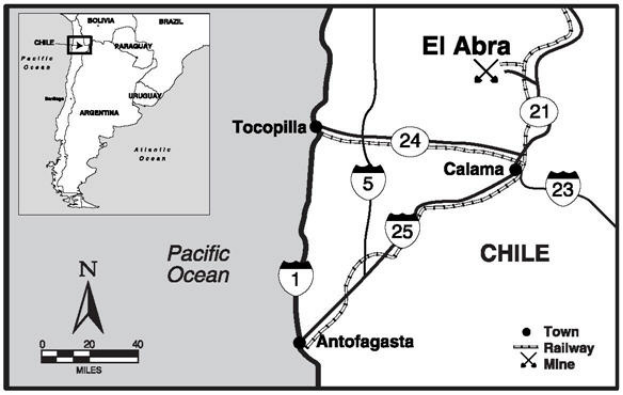
Cerro Verde's production totaled 0.8 billion pounds of copper and 19 million pounds of molybdenum in 2020, 1.0 billion pounds of copper and 29 million pounds of molybdenum in 2019, and 1.0 billion pounds of copper and 28 million pounds of molybdenum in 2018.

Cerro Verde is located in a desert environment with rainfall averaging 1.5 inches per year and is in an active seismic zone. The highest bench elevation is 2,750 meters above sea level and the ultimate pit bottom is expected to be 1,553 meters above sea level. The Peru general mining law and Cerro Verde's mining stability agreement grant the surface rights of mining concessions located on government land. Government land obtained after 1997 must be leased or purchased. Cerro Verde has a mining concession covering approximately 180,000 acres, including access to 14,600 acres granted through an easement from the Peru National Assets Office, plus 150 acres of owned property, and 1,151 acres of rights-of-way outside the mining concession area.

Cerro Verde receives electrical power, including hydro-generated power, under long-term contracts with Kallpa Generación SA, ElectroPeru and Engie Energia Peru S.A.

Water for our Cerro Verde processing operations comes from renewable sources through a series of storage reservoirs on the Rio Chili watershed that collect water primarily from seasonal precipitation and from wastewater collected from the city of Arequipa and treated at a wastewater treatment plant. We believe the Cerro Verde operation has sufficient water resources to support current operations. For further discussion of risks associated with the availability of water, see Item 1A. "Risk Factors."

El Abra



We own a 51 percent interest in El Abra, and the remaining 49 percent interest is held by the state-owned copper enterprise Corporación Nacional del Cobre de Chile.

El Abra is an open-pit copper mining complex that has been in operation since 1996 and is located 47 miles north of Calama in Chile's El Loa province, Region II. The site is accessible by paved highway and by rail.

The El Abra mine is a porphyry copper deposit that has sulfide and oxide mineralization. The predominant primary sulfide copper minerals are bornite and chalcopyrite. There is a minor amount of secondary sulfide mineralization as chalcocite. The oxide copper minerals are chrysocolla and pseudomalachite. There are lesser amounts of copper bearing clays and tenorite.

The El Abra operation consists of an open-pit copper mine and a SX/EW facility with a capacity of 500 million pounds of copper cathode per year from a 125,000 metric ton-per-day crushed leach circuit and a ROM leaching operation. The available fleet consists of twenty-three 242-metric ton haul trucks loaded by four shovels with buckets ranging in size from 29 to 41 cubic meters, which are capable of moving an average of 224,000 metric tons of material per day.

In April 2020, we revised our operating plans at El Abra to incorporate lower mining rates, operating costs and capital spending. We deferred the construction of a new leach pad at El Abra, from 2020 to future periods. We plan to increase operating rates during 2021 to pre-COVID-19 levels, subject to ongoing monitoring of public health conditions in Chile. Incremental copper production associated with increasing El Abra's stacking rates from 65,000 metric tons of ore per day to over 100,000 metric tons of ore per day, approximates 70 million pounds per year beginning in 2022.

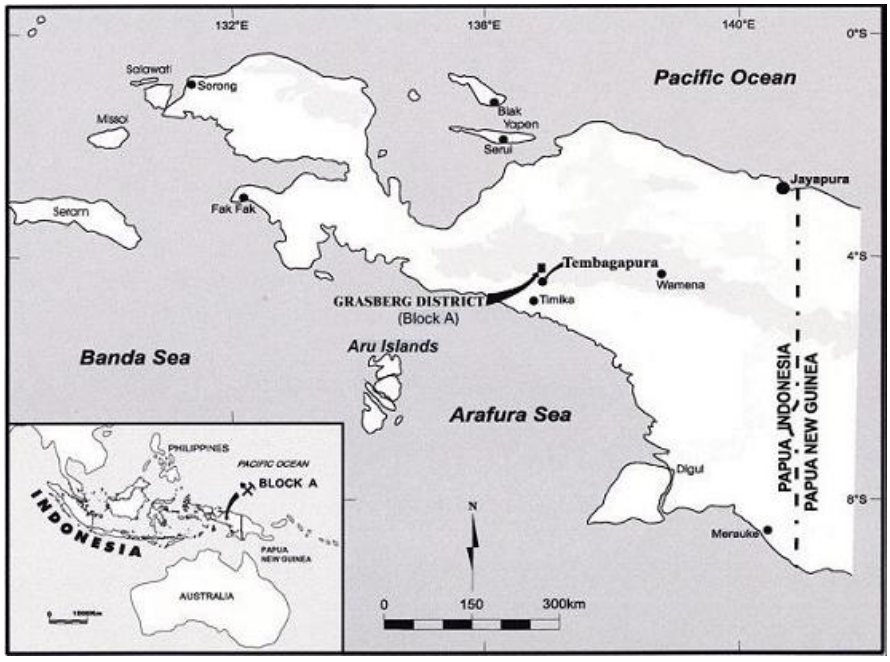
El Abra's copper production totaled 159 million pounds in 2020, 180 million pounds in 2019 and 200 million pounds in 2018.

We continue to evaluate a large-scale expansion at El Abra to process additional sulfide material and to achieve higher recoveries. El Abra's large sulfide resource could potentially support a major mill project similar to facilities constructed at Cerro Verde. Technical and economic studies continue to be evaluated to determine the optimal scope and timing for the project in parallel with extending the life of the current leaching operation.

El Abra is located in a desert environment with rainfall averaging less than one inch per year and is in an active seismic zone. The highest bench elevation is 4,195 meters above sea level and the ultimate pit bottom is expected to be 3,385 meters above sea level. El Abra controls a total of approximately 182,000 acres of mining claims covering the ore deposit, stockpiles, process plant, and water wellfield and pipeline. In addition, El Abra has land surface rights for the road between the processing plant and the mine, the water wellfield, power transmission lines and for the water pipeline from the Salar de Ascotán aquifer.

El Abra currently receives electrical power under a long-term contract with Engie Energia Chile S.A. Water for our El Abra processing operations comes from the continued pumping of groundwater from the Salar de Ascotán aquifer pursuant to regulatory approval. We believe El Abra has sufficient water rights and regulatory approvals to support current operations. For a discussion of risks associated with the availability of water, refer to Item 1A. "Risk Factors."

Indonesia



Ownership. PT-FI is a limited liability company organized under the laws of the Republic of Indonesia. On December 21, 2018, we completed the transaction with the Indonesia government regarding PT-FI's long-term mining rights and share ownership (refer to Note 2 for further discussion). Following the transaction, we have a 48.76 percent share ownership in PT-FI and the remaining 51.24 percent share ownership is collectively held by PT Indonesia Asahan Aluminum (Persero) (PT Inalum, also known as MIND ID), an Indonesia state-owned enterprise, and PT Indonesia Papua Metal Dan Mineral (formerly known as PT Indocopper Investama), which is expected to be owned by PT Inalum and the provincial/regional government in Papua, Indonesia. The arrangements related to the transaction also provide for us and the other pre-transaction PT-FI shareholders to retain the economics of the

revenue and cost sharing arrangements under the former Rio Tinto Joint Venture. As a result, our economic interest in PT-FI is expected to approximate 81 percent through 2022.

IUPK. Concurrent with closing the transaction, the Indonesia government granted PT-FI a new special mining license (IUPK) to replace its former Contract of Work (COW), enabling PT-FI to conduct operations in the Grasberg minerals district through 2041. Under the terms of the IUPK, PT-FI has been granted an extension of mining rights through 2031, with rights to extend mining rights through 2041, subject to PT-FI completing the construction of a new smelter in Indonesia within five years of closing the transaction and fulfilling its defined fiscal obligations to the Indonesia government. The IUPK, and related documentation, contains legal and fiscal terms and is legally enforceable through 2041. In addition, we, as a foreign investor, have rights to resolve investment disputes with the Indonesia government through international arbitration. Refer to Note 13 and Item 1A. “Risk Factors” for discussion of PT-FI’s IUPK and risks associated with our Indonesia mining operations.

In March 2020, PT-FI received a one-year extension of its export license through March 15, 2021. Export licenses are valid for one year periods, subject to review and approval by the Indonesia government every six months, depending on smelter construction progress.

Indonesia Smelter. As a result of COVID-19 mitigation measures, there have been disruptions to work and travel schedules of international contractors and restrictions on access to the proposed physical site of the new smelter in Gresik, Indonesia. PT-FI continues to discuss with the Indonesia government a deferred schedule for the new smelter project as well as other alternatives in light of the ongoing COVID-19 pandemic and volatile global economic conditions. Refer to MD&A, Note 12 and Item 1A. “Risk Factors” for additional discussion of the new smelter project.

Grasberg Minerals District. PT-FI operates in the remote highlands of the Sudirman Mountain Range in the province of Papua, Indonesia, which is on the western half of the island of New Guinea. Since 1967, we and our predecessors have been the only operator of exploration and mining activities in the approximately 24,600-acre operating area. The operating area is accessible by portsite facilities (Arafura Sea) and by the Timika airport. The project area includes a 70-mile main service road from portsite to the mill complex.

The Grasberg minerals district includes the following underground mines that are being operated; the Grasberg Block Cave, the Deep Mill Level Zone (DMLZ), Big Gossan and the Deep Ore Zone (DOZ). The ramp-up of underground production at the Grasberg minerals district in Indonesia continues to advance on schedule. During 2020, a total of 206 new drawbells were added at the Grasberg Block Cave and DMLZ underground mines, bringing cumulative open drawbells to over 370. Refer to Item 1A. “Risk Factors” for discussion of risks associated with development projects and underground mines.

Production from the Grasberg minerals district, including the former Rio Tinto Joint Venture share, totaled 0.8 billion pounds of copper and 0.8 million ounces of gold in 2020, 0.6 billion pounds of copper and 0.9 million ounces of gold in 2019, and 1.2 billion pounds of copper and 2.7 million ounces of gold in 2018.

Our principal source of power for all of our Indonesia operations is a coal-fired power plant that we built in 1998. Diesel generators supply peaking and backup electrical power generating capacity; however, beginning in 2022, higher efficiency bio-diesel fueled generators are expected to provide up to 40 percent of PT-FI’s power needs. A combination of naturally occurring mountain streams and water derived from our underground operations provides water for our operations. Our Indonesia operations are in an active seismic zone and experience average annual rainfall of approximately 200 inches.

Grasberg Block Cave

The Grasberg Block Cave ore body is the same ore body historically mined from the surface in the Grasberg open pit. Undercutting, drawbell construction and ore extraction activities in the Grasberg Block Cave underground mine continue to track expectations. Monitoring data on cave propagation in the Grasberg Block Cave underground mine is providing confidence in growing production rates over time. As existing drawpoints mature and additional drawpoints are added, cave expansion is expected to accelerate production rates to an average of over 98,000 metric tons of ore per day in 2022 and 127,000 metric tons of ore per day in 2023 from five production blocks spanning 335,000 square meters. As of December 31, 2020, the Grasberg Block Cave had 229 open drawbells.

Ore milled from the Grasberg Block Cave underground mine averaged 30,800 metric tons per day in 2020, 8,600 metric tons per day in 2019 and 4,000 metric tons per day in 2018. Production at the Grasberg Block Cave underground mine is expected to continue through 2041.

The Grasberg Block Cave fleet consists of approximately 510 pieces of mobile equipment. The primary mining equipment directly associated with production and development includes an available fleet of 70 LHD units and 33 haul trucks. Each production LHD unit typically carries approximately 11 metric tons of ore and transfer ore into 55 to 60 metric ton capacity haul trucks. The Grasberg Block Cave has a rail haulage system currently operating with 5 locomotives and 59 ore wagons that haul the ore to the first of the 3 planned gyratory crushers located underground via an automated rail system. Each ore wagon typically carries 30 metric tons.

DMLZ Underground Mine
The DMLZ ore body lies below the DOZ underground mine at the 2,590-meter elevation and represents the downward continuation of mineralization in the Ertsberg East Skarn system and neighboring Ertsberg porphyry.

The DMLZ has continued its ramp-up of production. Hydraulic fracturing operations have been effective in managing rock stresses and pre-conditioning the cave following mining-induced seismic activity experienced from time to time. Ongoing hydraulic fracturing operations combined with continued undercutting and drawbell openings in the two currently active production blocks are expected to expand the cave, supporting higher production rates that are expected to average approximately 74,000 metric tons of ore per day in 2022 and 72,000 metric tons of ore per day in 2023 from three production blocks. As of December 31, 2020, the DMLZ underground mine had 143 open drawbells.

Ore milled from the DMLZ underground mine averaged 28,600 metric tons of ore per day in 2020, 9,800 metric tons of ore per day in 2019 and 3,200 metric tons per day in 2018. Production at the DMLZ underground mine is expected to continue through 2041.

The DMLZ fleet consists of over 374 pieces of mobile equipment, which includes 44 LHD units and 29 haul trucks used in production and development activities.

Big Gossan Underground Mine
The Big Gossan ore body lies underground and adjacent to the current mill site. It is a tabular, near vertical ore body with approximate dimensions of 1,200 meters along strike and 800 meters down dip with varying thicknesses from 20 meters to 120 meters. The mine utilizes a blasthole stoping method with delayed paste backfill. Stopes of varying sizes are mined and the ore dropped down passes to a truck haulage level. Trucks are chute loaded and transport the ore to a jaw crusher. The crushed ore is then hoisted vertically via a two-skip production shaft to a level where it is loaded onto a conveyor belt. The belt carries the ore to one of the main underground conveyors where the ore is transferred and conveyed to the surface stockpiles for processing.

Ore milled from the Big Gossan underground mine averaged 7,000 metric tons per day in 2020, 6,100 metric tons per day in 2019 and 3,800 metric tons per day in 2018. Production at the Big Gossan underground mine is expected to continue through 2041.

The Big Gossan fleet consists of over 95 pieces of mobile equipment, which includes 12 LHD units and 9 haul trucks used in development and production activities.

DOZ Underground Mine
The DOZ ore body lies vertically below the now depleted Intermediate Ore Zone. PT-FI began production from the DOZ ore body in 1989 using open-stope mining methods, but suspended production in 1991 in favor of production from the Grasberg open pit. Production resumed in 2000 using the block-cave method and is at the 3,110-meter elevation level.

The DOZ is a mature block-cave mine that previously operated at 80,000 metric tons of ore per day. Current operating rates from the DOZ underground mine are driven by the value of the incremental DOZ ore grade compared to the ore from the DMLZ and Grasberg Block Cave underground mines. Ore milled from the DOZ underground mine averaged 20,900 metric tons per day in 2020, 25,500 metric tons per day in 2019 and 33,800 metric tons per day in 2018. Production at the DOZ underground mine is expected to continue through 2022.

The DOZ fleet consists of 186 pieces of mobile equipment. The primary mining equipment directly associated with production includes an available fleet of 40 LHD units and 19 haul trucks. The trucks dump into two gyratory crushers, and the ore is then conveyed to the surface stockpiles for processing.

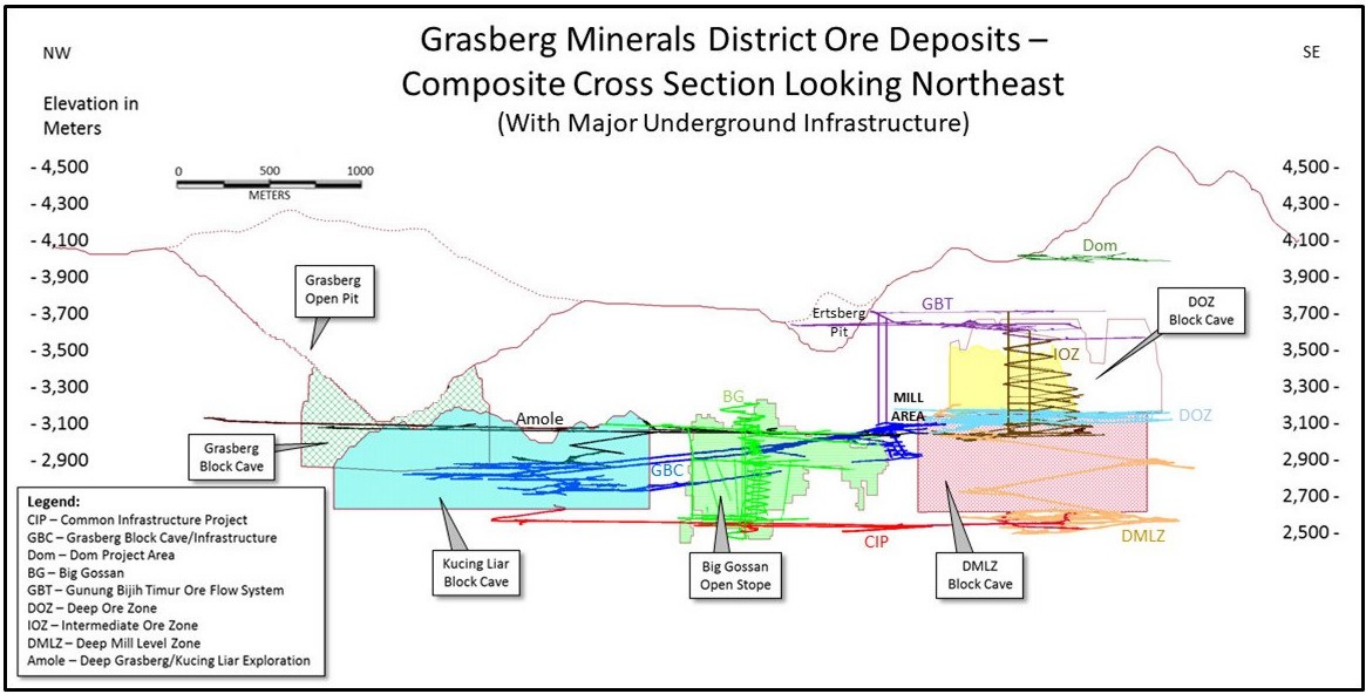
Grasberg Open Pit
PT-FI began open-pit mining of the Grasberg ore body in 1990. The final phase of the Grasberg open pit was mined during 2019, including the removal of the open pit ramps. In aggregate, the Grasberg open pit produced over 27 billion pounds of copper and 46 million ounces of gold in the 30-year period from 1990 through 2019.

Ore milled from the Grasberg open pit and stockpiles averaged 400 metric tons per day in 2020, 60,100 metric tons per day in 2019 and 133,300 metric tons per day in 2018.

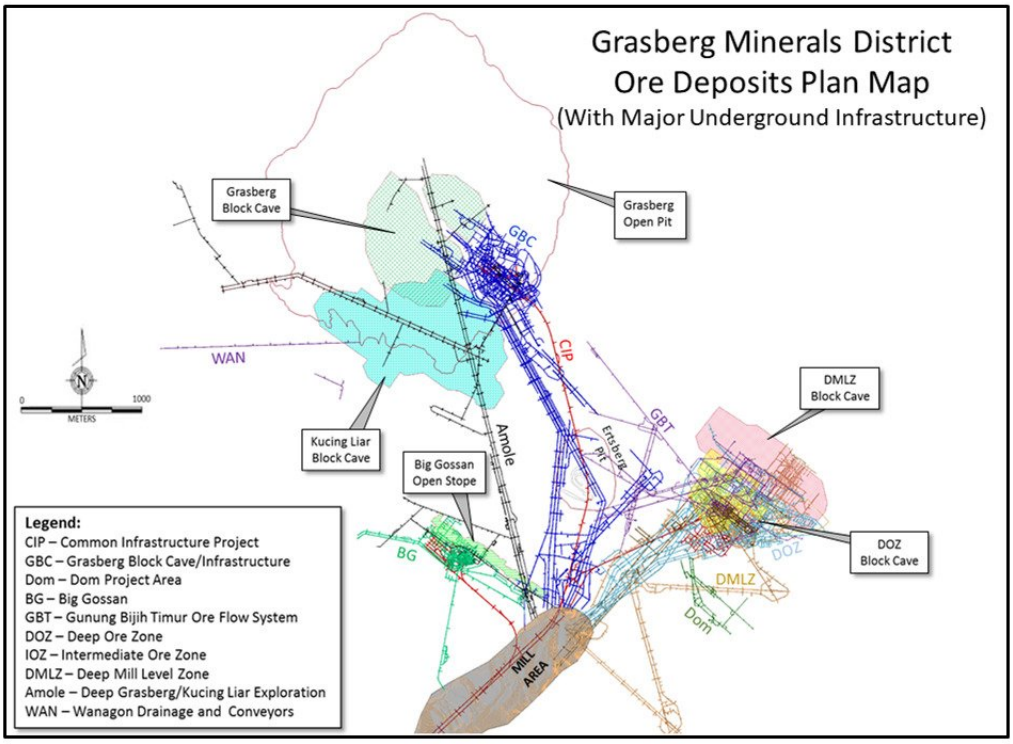
Description of Indonesia Ore Bodies. Our Indonesia ore bodies are located within and around two main igneous intrusions, the Grasberg monzodiorite and the Ertsberg diorite. The host rocks of these ore bodies include both carbonate and clastic rocks that form the ridge crests and upper flanks of the Sudirman Range, and the igneous rocks of monzonitic to dioritic composition that intrude them. The igneous-hosted ore bodies (the Grasberg Block Cave and portions of the DOZ) occur as vein stockworks and disseminations of copper sulfides, dominated by chalcopyrite and, to a lesser extent, bornite. The sedimentary-rock hosted ore bodies (portions of the DOZ and all of the Big Gossan) occur as “magnetite-rich, calcium/magnesian skarn” replacements, whose location and orientation are strongly influenced by major faults and by the chemistry of the carbonate rocks along the margins of the intrusions.

The copper mineralization in these skarn deposits is dominated by chalcopyrite, but higher bornite concentrations are common. Moreover, gold occurs in significant concentrations in all of the district’s ore bodies, though rarely visible to the naked eye. These gold concentrations usually occur as inclusions within the copper sulfide minerals, though, in some deposits, these concentrations can also be strongly associated with pyrite.

The following diagram indicates the relative elevations (in meters) of our reported Indonesia ore bodies.



The following map, which encompasses an area of 42 square kilometers (16 square miles), indicates the relative positions and sizes of our reported Indonesia ore bodies and their locations.



Smelting Facilities and Other Mining Properties

Atlantic Copper. Our wholly owned Atlantic Copper smelter and refinery is located on land concessions from the Huelva, Spain, port authorities, which are scheduled to expire in 2039.

The design capacity of the smelter is approximately 300,000 metric tons of copper per year, and the refinery has a capacity of 286,000 metric tons of copper per year. Atlantic Copper's anode production from its smelter totaled 275,900 metric tons of copper in 2020, 272,000 metric tons in 2019 and 295,300 metric tons in 2018. Copper cathode production from its refinery totaled 275,000 metric tons of copper in 2020, 268,300 metric tons in 2019 and 283,100 metric tons in 2018.

Following is the allocation of Atlantic Copper's concentrate purchases from unaffiliated third parties and our copper mining operations for the years ended December 31:

	2020	2019	2018
Third parties	79 %	73 %	77 %
North America copper mines	10	22	14
South America mining	7	2	5
Indonesia mining	4	3	4
	100 %	100 %	100 %

Atlantic Copper's major maintenance turnarounds typically occur approximately every eight years, with shorter-term maintenance turnarounds in the interim. Atlantic Copper completed a 79-day major maintenance turnaround in 2013, a 16-day maintenance turnaround in 2015, a 27-day maintenance turnaround in 2017 and a 16-day maintenance turnaround in 2019. The next major maintenance turnaround is scheduled for 2022.

PT Smelting. PT-FI's former COW required us to construct, or cause to be constructed, a smelter in Indonesia if we and the Indonesia government determined that such a project would be economically viable. In 1995, following the completion of a feasibility study, we entered into agreements relating to the formation of PT Smelting, an Indonesia company, and the construction of the copper smelter and refinery in Gresik, Indonesia. PT Smelting owns and operates the smelter and refinery. PT-FI owns 25 percent of PT Smelting, with the remainder owned by Mitsubishi

Materials Corporation (60.5 percent), Mitsubishi Corporation RtM Japan Ltd. (9.5 percent) and JX Nippon Mining & Metals Corporation (5 percent).

PT-FI's contract with PT Smelting requires PT-FI to supply 100 percent of the copper concentrate requirements (at market rates subject to a minimum or maximum treatment charge rate) necessary for PT Smelting to produce 205,000 metric tons of copper annually on a priority basis. PT-FI may also sell copper concentrate to PT Smelting at market rates for quantities in excess of 205,000 metric tons of copper annually. PT-FI supplied 74 percent of PT Smelting's concentrate requirements in 2020 and 90 percent in both 2019 and 2018.

In early 2017, the Indonesia government issued new regulations to address exports of unrefined metals, including copper concentrate and anode slimes, and other matters related to the mining sector. These regulations permit the export of anode slimes, which is necessary for PT Smelting to continue operating. In March 2020, PT Smelting received a one-year extension of its anode slimes export license through March 10, 2021, and in January 2021, PT Smelting received a six-month extension of its anodes slimes export license, which currently expires July 18, 2021. Refer to Item 1A. "Risk Factors" for further discussion.

In connection with PT-FI's commitment to develop additional smelter capacity in Indonesia, PT-FI has advanced discussions with the majority owner of PT Smelting regarding an expansion of the smelter to increase smelter concentrate treatment capacity by approximately 30 percent (300,000 metric tons of concentrate per year). Commercial and financial arrangements for this potential project are being advanced.

PT Smelting's anode production from its smelter totaled 276,900 metric tons of copper in 2020, 246,100 metric tons in 2019 and 258,800 metric tons in 2018. Copper cathode production from its refinery totaled 273,000 metric tons of copper in 2020, 241,200 metric tons in 2019 and 257,600 metric tons in 2018.

PT Smelting's maintenance turnarounds (which range from two weeks to a month to complete) typically are expected to occur approximately every two years, with short-term maintenance turnarounds in the interim. PT Smelting completed a 30-day maintenance turnaround during December 2020, and the next major turnaround is scheduled for the second half of 2022.

Miami Smelter. We own and operate a smelter at our Miami mining operation in Arizona. The smelter has been operating for over 100 years and has been upgraded numerous times during that period to implement new technologies, improve production and comply with air quality requirements. In 2018, the Miami smelter completed the installation of emission control equipment that allows it to operate in compliance with current air quality standards. Refer to Item 1A. "Risk Factors" for further discussion.

The Miami smelter processes copper concentrate primarily from our North America copper mines. Concentrate processed through the smelter totaled 764,000 metric tons in 2020, 641,000 metric tons in 2019 and 729,900 metric tons in 2018. In addition, because sulphuric acid is a by-product of smelting concentrate, the Miami smelter is also the most significant source of sulphuric acid for our North America leaching operations.

Major maintenance turnarounds are anticipated to occur approximately every two or three years for the Miami smelter. The Miami smelter completed a major maintenance turnaround in the first half of 2019, and the next major maintenance turnaround is scheduled for the first half of 2021.

Rod & Refining Operations. Our Rod & Refining operations consist of conversion facilities located in North America, including a refinery in El Paso, Texas and rod mills in El Paso, Texas, and Miami, Arizona. We refine our copper anode production from our Miami smelter at our El Paso refinery. The El Paso refinery has the potential to operate at an annual production capacity of about 900 million pounds of copper cathode, which is sufficient to refine all of the copper anode we produce at our Miami smelter. Our El Paso refinery also produces nickel carbonate, copper telluride and autoclaved slimes material containing gold, silver, platinum and palladium.

Molybdenum Conversion Facilities. We process molybdenum concentrate at our conversion plants in the U.S. and Europe into such products as technical-grade molybdic oxide, ferromolybdenum, pure molybdic oxide, ammonium molybdates and molybdenum disulfide. We operate molybdenum roasters in Sierrita, Arizona; Fort Madison, Iowa; and Rotterdam, the Netherlands, and we operate a molybdenum pressure-leach plant in Bagdad, Arizona. We also produce ferromolybdenum for customers worldwide at our conversion plant located in Stowmarket, United Kingdom.

Other North America Copper Mines. We also have five non-operating copper mines – Ajo, Bisbee, Tohono, Twin Buttes and Christmas, which are located in Arizona – that have been on care and maintenance status for several years and would require new or updated environmental studies, new permits, and additional capital investment, which could be significant, to return them to operating status.

MINING DEVELOPMENT PROJECTS AND EXPLORATION ACTIVITIES

Capital expenditures for mining operations totaled $2.0 billion (including $1.2 billion for major projects) in 2020, $2.65 billion (including $1.5 billion for major projects) in 2019 and $2.0 billion (including $1.2 billion for major projects) in 2018. Capital expenditures for major projects during 2020, 2019 and 2018 were primarily associated with underground development activities in the Grasberg minerals district and the now completed Lone Star copper leach project. Refer to MD&A for projected capital expenditures for the year 2021.

We have several projects and potential opportunities to expand production volumes, extend mine lives and develop large-scale underground ore bodies. As further discussed in MD&A, our near-term major development projects will focus on the underground development activities in the Grasberg minerals district. Considering the long-term nature and large size of our development projects, actual costs and timing could vary from estimates. Additionally, in response to market conditions, the timing of our expenditures will continue to be reviewed. We continue to review our mine development and processing plans to maximize the value of our mineral reserves.

We continue to plan the development of the Kucing Liar underground deposit, which lies on the southern flank of and underneath the southern portion of the Grasberg open pit at the 2,605-meter elevation level. We expect to mine the Kucing Liar ore body using the block-cave method at a full rate of 90,000 metric tons of ore per day. We have reviewed alternatives to improve the economics of the deposit by mining the sections of the ore body with lower pyrite content. The revised Kucing Liar reserve plan reduces mill and power capital expenditures as well as improves recoveries. The Kucing Liar project would produce 6 billion pounds of copper and 6 million ounces of gold between 2028 and 2041. Aggregate long-term capital cost estimates for development of the Kucing Liar ore body are projected to approximate $4 billion over an approximate 12-year period. In 2021, we are proceeding with a feasibility study, drilling (structure verification, geotechnical and metallurgical) and metallurgical testwork for the development of these reserves. Development of the Kucing Liar block cave could start as early as 2022 with caving and production ramp-up commencing in 2028.

Additionally, full development of the underground reserves is expected to require $2.8 billion (expected to be incurred over an approximate 17-year period) of capital expenditures at our processing facilities to optimize the handling of underground ore from the Grasberg Block Cave, DMLZ and Kucing Liar deposits. Increases in power loads at these processing facilities and the underground mines are expected to require additional power generation with capital expenditures approximating $0.7 billion for new power generation, upgrades to existing transmission lines, and refurbishment of the existing three coal units.

Our mining exploration activities are generally associated with our existing mines focusing on opportunities to expand reserves and resources to support development of additional future production capacity. Exploration results continue to indicate opportunities for significant future potential reserve additions in North America and South America. Exploration spending associated with mining operations totaled $34 million in 2020, $77 million in 2019 and $78 million in 2018. Refer to MD&A for projected exploration expenditures for the year 2021.

Refer to Item 1A. “Risk Factors” for further discussion of risks associated with mine development projects and exploration activities, and PT-FI’s IUPK.

SOURCES AND AVAILABILITY OF ENERGY, NATURAL RESOURCES AND RAW MATERIALS

Our copper mining operations require significant amounts of energy, principally diesel, electricity, coal and natural gas, most of which is obtained from third parties under long-term contracts. Energy represented approximately 16 percent of our copper mine site operating costs in 2020, including purchases of approximately 180 million gallons of diesel fuel; 7,500 gigawatt hours of electricity at our North America and South America copper mining operations (we generate all of our power at our Indonesia mining operation); 700 thousand metric tons of coal for our coal power plant in Indonesia; and 1 million MMBtu (million British thermal units) of natural gas at certain of our North America mines. Based on current cost estimates, energy will approximate 18 percent of our copper mine site operating costs in 2021.

Our mining operations also require significant quantities of water for mining, ore processing and related support facilities. The loss of water rights for any of our mines, in whole or in part, or shortages of water to which we have rights, could require us to curtail or shut down mining operations. For a further discussion of risks and legal proceedings associated with the availability of water, refer to Item 1A. “Risk Factors” and Item 3. “Legal Proceedings.”

Sulphuric acid is used in the SX/EW process and is produced as a by-product of the smelting process at our smelters and from our sulfur burners at the Safford mine. Sulphuric acid needs in excess of the sulphuric acid produced by our operations are purchased from third parties.

HUMAN CAPITAL

We are committed to promoting the health, safety and well-being of our workforce and striving to further strengthen our commitment to promoting an inclusive, diverse and agile workplace. We believe our global workforce is the foundation of our company’s success. The Corporate Responsibility Committee of FCX’s Board of Directors (the Board) assists the full Board in fulfilling its oversight responsibilities with respect to, among other things, our policies and implementation programs that govern our approach to management of our human capital.

Workforce

At December 31, 2020, we employed approximately 24,500 people (11,200 in North America, 6,500 in Indonesia, 5,600 in South America and 1,200 in Europe and other locations). We also had contractors that employ personnel at many of our operations, including approximately 20,900 at the Grasberg minerals district in Indonesia, 8,800 in North America, 3,400 at our South America mining operations and 700 in Europe and other locations.

Approximately 38 percent of our global employee population is covered by collective labor agreements (CLA). Our operations in Indonesia, Europe and South America are all covered by a minimum of 66 percent representation. In North America, our workforce is not represented by unions. Our North America hourly employees choose to work directly with company management rather than through union representation utilizing our Guiding Principles agreement, which sets out how we work together within the values of the company to achieve our collective goals. Employees represented by unions on December 31, 2020, are listed below, with the number of employees represented and the expiration date of the applicable union agreements:

Location	Number of Unions	Number of Union-Represented Employees	Expiration Date
PT-FI – Indonesia	3	4,788	March 2022 [a]
Cerro Verde – Peru	2	3,119	August 2021
El Abra – Chile	2	576	April 2023
Atlantic Copper – Spain	3	501	December 2019 [b]
Kokkola - Finland	3	190	December 2021
Rotterdam – The Netherlands	1	57	September 2022
Stowmarket - United Kingdom	1	41	May 2020 [c]

a. The previous Collective Labor Agreement (CLA) between PT-FI and its workers' unions expired in September 2019, but remains valid in accordance with Indonesia law until a new agreement is reached. In December 2020, PT-FI reached a new CLA with one union effective April 2020 through March 2022, giving all employees the option to reject the new stipulations, but no employees have rejected the agreement. The second union filed a lawsuit in November 2020 regarding the new CLA, and the pending decision could modify the agreement. Additionally, in October 2020, PT-FI was notified that a third union was established, however the organization has not informed PT-FI about its membership or organizational details.

b. The CLA between Atlantic Copper and its workers' unions expired in December 2019, but remains active by mutual agreement from both parties in accordance with Spanish law. A new agreement is currently under negotiation.

c. The CLA between Stowmarket and its workers' union expired in May 2020, but remains active by consensus agreement. Negotiations for a new CLA are ongoing.

We engage openly with our employee and union leadership to negotiate and uphold labor agreements, recognizing that prolonged strikes or other work stoppages can adversely affect our business, our workforce and regional stakeholders. In third-quarter 2020, we experienced a five-day labor-related work stoppage related to COVID-19 travel restrictions when a group of workers at PT-FI staged protests and a blockade restricting access to the main

road to the mining operations area. We reached an amicable resolution with the group of workers while upholding our COVID-19 safety protocols. There were no strikes or lockouts at any of our operations in 2020.

Health and Safety
Our highest priority is the health, safety and well-being of our employees and contractors. We also instill health and safety processes for our suppliers and the communities where we operate. We believe that health and safety considerations are integral to, and fundamental for, all other functions in our organization, and we understand that the health and safety of our workforce is critical to our operational efficiency and long-term success. Our global health and safety approach, “Safe Production Matters,” is focused on fatality prevention and continuous improvement through the use of robust management systems, empowering safe work behaviors and strengthening our safety culture.

We focus on fatality prevention through the use of data and technology as well as behavioral science principles. Our framework for managing risks and compliance obligations is certified in accordance with the internationally recognized Occupational Health and Safety Assessment (OHSAS) 18001 Standard. OHSAS requires third-party site-level verification of requirements, with a goal to prevent fatalities and reduce incidents. This standard is being replaced with the new ISO 45001 Health and Safety Management System, and company-wide conversion currently is expected to be complete in 2021.

As part of our commitment to providing a safe and healthy workplace, we strive to provide the training, tools and resources needed so our workforce can identify risks and consistently apply effective controls. We share information and key learnings about potentially fatal events, near misses and best practices throughout the company and engage with industry peers outside the organization to continuously improve our health and safety performance. We also review and discuss all fatalities with the Corporate Responsibility Committee and the Board.

Our objective is to achieve zero workplace fatalities and to decrease injuries and occupational illnesses. We measure our safety performance through regularly established benchmarks, including our company-wide Total Recordable Incident Rate (TRIR), which includes both employees and contractors. In 2020, regrettably, we had 5 workplace fatalities and 12 potential fatal events (PFEs), compared to 3 fatalities and 22 PFEs in 2019. Overall, the percentage of high risk incidents has continued to trend down from 23 percent in 2017, 11 percent in both 2018 and 2019 and 7 percent in 2020. Our 2020 target was to reach a TRIR of 0.70 per 200,000 man-hours worked. During 2020, our TRIR decreased to 0.69 from 0.74 in 2019, meeting our 2020 target. The metal mining sector industry average per 200,000 man-hours worked reported by the U.S. Mine Safety and Health Administration was 1.81 in 2019. The metal mining sector industry average for 2020 was not available at the time of this filing.

In response to the COVID-19 pandemic during 2020, we implemented operating protocols at each of our operating sites to contain and mitigate the risk of spread of COVID-19, including but not limited to, physical distancing, travel restrictions, sanitizing, and frequent testing and monitoring, and we obtained specialized medical equipment and set up quarantine and isolation facilities. We are committed to the communities where we operate and continue to work closely with them, including providing monetary support and in-kind contributions of medical supplies and food. To support our employees around the world, we adjusted our policies for sick leave and other pay practices to encourage ill employees to stay home. We also implemented a policy to allow those who can work from home to do so. During the pandemic and looking beyond, we have committed to maintaining health benefits and offer guidance resources to support mental and physical well-being.

Employee Engagement, Training and Development
We are committed to fostering a culture that is safety-focused, respectful, inclusive and representative of the communities where we operate. We operate in regions of varying ethnic, religious and cultural backgrounds, and we often are the largest employer in our local communities. A key to our success is the ability to recruit, retain, develop and advance talented employees with diverse perspectives.

In addition to the health, safety and well-being of our global workforce, we have prioritized a flexible, highly engaged and agile workforce. The COVID-19 pandemic has amplified our focus on the need for, and receptivity to, innovation across all facets of the business, particularly in how we communicate, engage and collaborate across our global workforce in a more virtual environment. To support our workforce transformation, engagement and ongoing talent development, we strengthened our Human Resources department in 2020 and established two new positions: Chief Human Resources Officer and Vice President – Transformation and Organizational Development, who maintain specific responsibility for inclusion and diversity efforts.

We are committed to ongoing training and development of our workforce. We focus on attracting and retaining talented people by offering quality employment with competitive compensation and opportunities for professional development. Strategic talent reviews and succession planning occur regularly and across all business areas. To support the advancement of our employees, we offer training and development programs encouraging advancement from within and continue to promote strong and experienced management talent. We leverage both formal and informal programs to identify, foster, and retain top talent at both the corporate and operations levels.

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

Inclusion and Diversity

We believe our greatest strength is our people. We respect and value the different ideas, beliefs, experiences, talents, skills, perspectives, backgrounds, and cultures of our workforce. We strive for, promote and foster a workplace where everyone feels a sense of belonging, is treated with respect and their opinions are valued. We believe an inclusive environment gives our people the confidence to speak up, share ideas that drive innovation, and achieve operational excellence. Our inclusive environment is the foundation of our high-performance culture and is paramount to the long-term sustainable success of our business. We are committed to fostering a culture that is safety focused, respectful, inclusive and representative of the communities where we operate.

Our inclusion and diversity principles align with our core values of safety, respect, integrity, excellence and commitment, and are reflected in our Principles of Business Conduct and other related policies. In addition to our Human Resources reorganization, in 2020, we formally established a stand-alone Inclusion and Diversity Policy and formalized a dedicated Inclusion and Diversity team to specifically support our enhanced focus on our program.

Refer to Item 1A. “Risk Factors” for further information on labor matters.

COMMUNITY AND HUMAN RIGHTS

We have adopted policies that govern our working relationships with the communities where we operate and that are designed to guide our practices and programs in a manner that respects human rights and the culture of the local people impacted by our operations.

We continue to make significant expenditures on community development, health, education, training and cultural programs, which include:

- comprehensive job training programs
- clean water and sanitation projects
- public health programs, including malaria control and human immunodeficiency virus
- agricultural assistance programs
- small and medium enterprise development programs
- basic education programs
- cultural promotion and preservation programs
- community infrastructure development
- charitable donations

In December 2000, we endorsed the joint U.S. State Department-British Foreign Office Voluntary Principles on Human Rights and Security (Voluntary Principles). We participated in developing these Voluntary Principles with other major natural resource companies and international human rights organizations and they are incorporated into our human rights policy. The Voluntary Principles provide guidelines for our security programs, including interaction with host-government security personnel, private security contractors and our internal security employees.

Our human rights policy, most recently updated in December 2020, reflects our commitment to implementing the United Nations Guiding Principles on Business and Human Rights. We have embarked on a program to plan and conduct site-level human rights impact assessments (HRIA) at our global operations.

HRIAs help us to embed human rights considerations into our business practices, including site-level sustainable development risk registers. We completed a HRIA at our Cerro Verde operation in Peru in 2017 and at our New Mexico mining operations in 2018. We also participate in a multi-industry human rights working group to gain insight from peer companies.

We believe that our social and economic development programs are responsive to the issues raised by the local communities near our areas of operation and help us maintain good relations with the surrounding communities and avoid disruptions of mining operations. As part of our ongoing commitment to our community stakeholders, we have made and expect to continue making investments in certain social programs, including in-kind support and administration, across our global operations from time to time. Over the last three years, these investments have averaged $121 million per year. Nevertheless, social and political instability in the areas of our operations may adversely impact our mining operations. Refer to Item 1A. “Risk Factors” for further discussion.

South America. Cerro Verde has provided a variety of community support projects over the years. Following engagements with regional and local governments, civic leaders and development agencies, in 2006, Cerro Verde committed to support the costs for a new potable water treatment plant to serve Arequipa. In addition, an agreement was reached with the Peru government for development of a water storage network that was financed by Cerro Verde and a distribution network that was financed by the Cerro Verde Civil Association.

Cerro Verde reached an agreement with the Regional Government of Arequipa, the National Government, the local water utility company and other local institutions to allow it to finance, engineer and construct a wastewater treatment plant for the city of Arequipa, which was completed in 2015. The wastewater treatment plant supplements existing water supplies to support Cerro Verde’s concentrator expansion and also improves the local water quality, enhances agriculture products grown in the area and reduces the risk of waterborne illnesses. In addition to these projects, Cerro Verde annually makes significant community development investments in the Arequipa region.

Security Matters. Consistent with our operating permits in Peru and our commitment to protect our employees and property, we have taken steps to provide a safe and secure working environment. As part of its security program, Cerro Verde maintains its own internal security department. Both employees and contractors perform functions such as protecting company facilities, monitoring shipments of supplies and products, assisting in traffic control and aiding in emergency response operations. The security department receives human rights and Voluntary Principles training annually. Some contractors assigned to protection of expatriate personnel are armed. These contractors also receive training in defensive driving and firearms handling. Cerro Verde’s costs for its internal civilian security department totaled $7 million in 2020, $9 million in 2019 and $8 million in 2018.

Cerro Verde, like all businesses and residents of Peru, relies on the Peru government for the maintenance of public order, upholding the rule of law and the protection of personnel and property. The Peru government is responsible for employing police personnel and directing their operations. Cerro Verde has limited public security forces in support of its operation, with the arrangement defined through a memorandum of understanding with the Peru National Police. Cerro Verde’s share of support costs for government-provided security approximated $1 million in each of the years 2020, 2019 and 2018.

Indonesia. In 1996, PT-FI established the Freeport Partnership Fund for Community Development (the Partnership Fund) through which PT-FI has made available funding and technical assistance to support community development initiatives in the areas of health, education, economic development and local infrastructure. PT-FI has committed to provide funding through 2041 for the development of the local communities in its area of operations through the Partnership Fund. PT-FI recorded costs of $36 million in 2020, $28 million in 2019 and $55 million in 2018 for this commitment.

Historically, the Amungme and Kamoro Community Development Organization (*Lembaga Pengembangan Masyarakat Amungme dan Kamoro*) oversaw disbursement of the program funds PT-FI contributed to the Partnership Fund. Throughout 2019, PT-FI consulted with key stakeholders to restructure the management of the Partnership Fund in compliance with PT-FI’s IUPK. Throughout the restructuring process, PT-FI continued its contributions to ensure no disruptions in implementation of approved projects. Beginning in February 2020, the Partnership Fund is now managed by a legally recognized Indonesia foundation (*Yayasan Pemberdayaan Masyarakat Amungme dan Kamoro* or YPMAK). YPMAK is governed by a Board of Governors consisting of seven representatives, including four from PT-FI.

In addition to the Partnership Fund, PT-FI has made and expects to continue making annual investments in public health, education, community infrastructure and local economic development.

Security Matters. Consistent with our ongoing commitment to protect our employees and property, we have taken steps to provide a safe and secure working environment. As part of its security program, PT-FI maintains its own internal civilian security department. Both employees and contractors are unarmed and perform functions such as protecting company facilities, monitoring shipments of supplies and products, assisting in traffic control and aiding in emergency response operations. The security department receives human rights training annually.

PT-FI's costs for its internal civilian security department totaled $47 million in 2020, $52 million in 2019 and $59 million in 2018.

PT-FI, like all businesses and residents of Indonesia, relies on the Indonesia government for the maintenance of public order, upholding the rule of law and protection of personnel and property. The Grasberg minerals district has been designated by the Indonesia government as one of Indonesia's vital national assets. This designation results in the police, and to a lesser extent, the military, playing a significant role in protecting the area of our operations. The Indonesia government is responsible for employing police and military personnel and directing their operations.

From the outset of PT-FI's operations, the Indonesia government has looked to PT-FI to provide logistical and infrastructure support and assistance for these necessary services because of the limited resources of the Indonesia government and the remote location of and lack of development in Papua. PT-FI's financial support of the Indonesia government security institutions assigned to PT-FI's operations area represents a prudent response to PT-FI's requirements and commitments to protect its workforce and property better ensuring that personnel are properly fed and lodged and have the logistical resources to patrol PT-FI's roads and secure its area of operations. In addition, the provision of such support is consistent with our philosophy of responsible corporate citizenship, and reflects our commitment to pursue practices that protect and respect human rights.

PT-FI's support costs for the government-provided security totaled $22 million in both 2020 and 2019 and $27 million in 2018. This supplemental support consists of various infrastructure and other costs, including food, housing, fuel, travel, vehicle repairs, allowances to cover incidental and administrative costs, and community assistance programs conducted by the military and police.

Refer to Item 1A. "Risk Factors" for further discussion of security risks in Indonesia.

MINING PRODUCTION AND SALES DATA

	Years Ended December 31,					
	Production			Sales		
COPPER (millions of recoverable pounds)	2020	2019	2018	2020	2019	2018
(FCX's net interest in %)						
North America						
Morenci (72%)[a]	707	730	684	711	717	700
Bagdad (100%)	216	218	199	213	218	197
Safford (100%)	161	110	123	150	111	127
Sierrita (100%)	178	160	152	177	157	154
Miami (100%)	17	15	16	16	15	16
Chino (100%)	92	175	173	108	174	176
Tyrone (100%)	45	48	55	45	49	56
Other (100%)	2	1	2	2	1	2
Total North America	1,418	1,457	1,404	1,422	1,442	1,428
South America						
Cerro Verde (53.56%)	820	1,003	1,049	825	1,002	1,051
El Abra (51%)	159	180	200	151	181	202
Total South America	979	1,183	1,249	976	1,183	1,253
Indonesia						
Grasberg minerals district[b]	809	607	1,160	804	667	1,130
Consolidated	**3,206**	**3,247**	**3,813**	**3,202** [c]	**3,292** [c]	**3,811** [c]
Less noncontrolling interests	610	668	695	608	679	694
Net	**2,596**	**2,579**	**3,118**	**2,594**	**2,613**	**3,117**
Average realized price per pound				$ 2.95	$ 2.73	$ 2.91
GOLD (thousands of recoverable ounces)						
North America (100%)	9	19	23	13	18	23
Indonesia[b]	848	863	2,416	842	973	2,366
Consolidated	**857**	**882**	**2,439**	**855**	**991**	**2,389**
Less noncontrolling interests	159	162	228	158	182	223
Net	**698**	**720**	**2,211**	**697**	**809**	**2,166**
Average realized price per ounce				$ 1,832	$ 1,415	$ 1,254
MOLYBDENUM (millions of recoverable pounds)						
Henderson (100%)	10	12	14	N/A	N/A	N/A
Climax (100%)	14	17	21	N/A	N/A	N/A
North America copper mines (100%)[a]	33	32	32	N/A	N/A	N/A
Cerro Verde (53.56%)	19	29	28	N/A	N/A	N/A
Consolidated	**76**	**90**	**95**	**80**	**90**	**94**
Less noncontrolling interest	9	13	13	10	13	13
Net	**67**	**77**	**82**	**70**	**77**	**81**
Average realized price per pound				$ 10.20	$ 12.61	$ 12.50

a. Amounts are net of Morenci's undivided joint venture partners' interest.

b. Effective December 21, 2018, our share ownership in PT-FI is 48.76 percent (refer to Note 2 for further discussion). Our economic interest in PT-FI is expected to approximate 81 percent through 2022 and 48.76 percent thereafter.

c. Consolidated sales volumes exclude purchased copper of 290 million pounds in 2020, 379 million pounds in 2019 and 356 million pounds in 2018.

SELECTED OPERATING DATA

	Years Ended December 31,				
	2020	2019	2018	2017	2016
CONSOLIDATED MINING					
Copper (millions of recoverable pounds)					
Production	3,206	3,247	3,813	3,737	4,222
Sales, excluding purchases	3,202	3,292	3,811	3,700	4,227
Average realized price per pound	$ 2.95	$ 2.73	$ 2.91	$ 2.93	$ 2.28
Gold (thousands of recoverable ounces)					
Production	857	882	2,439	1,577	1,088
Sales, excluding purchases	855	991	2,389	1,562	1,079
Average realized price per ounce	$ 1,832	$ 1,415	$ 1,254	$ 1,268	$ 1,238
Molybdenum (millions of recoverable pounds)					
Production	76	90	95	92	80
Sales, excluding purchases	80	90	94	95	74
Average realized price per pound	$ 10.20	$ 12.61	$ 12.50	$ 9.33	$ 8.33
NORTH AMERICA COPPER MINES					
Operating Data, Net of Joint Venture Interests[a]					
Copper (millions of recoverable pounds)					
Production	1,418	1,457	1,404	1,518	1,831
Sales, excluding purchases	1,422	1,442	1,428	1,484	1,841
Average realized price per pound	$ 2.82	$ 2.74	$ 2.96	$ 2.85	$ 2.24
Molybdenum (millions of recoverable pounds)					
Production	33	32	32	33	33
100% Operating Data					
Leach operations					
Leach ore placed in stockpiles (metric tons per day)	714,300	750,900	681,400	679,000	737,400
Average copper ore grade (percent)	0.27	0.23	0.24	0.28	0.31
Copper production (millions of recoverable pounds)	1,047	993	951	1,016	1,120
Mill operations					
Ore milled (metric tons per day)	279,700	326,100	301,000	299,500	300,500
Average ore grade (percent):					
Copper	0.35	0.34	0.35	0.39	0.47
Molybdenum	0.02	0.02	0.02	0.03	0.03
Copper recovery rate (percent)	84.1	87.0	87.8	86.4	85.5
Copper production (millions of recoverable pounds)	647	748	719	788	958
SOUTH AMERICA MINING					
Copper (millions of recoverable pounds)					
Production	979	1,183	1,249	1,235	1,328
Sales	976	1,183	1,253	1,235	1,332
Average realized price per pound	$ 3.05	$ 2.71	$ 2.87	$ 2.97	$ 2.31
Molybdenum (millions of recoverable pounds)					
Production	19	29	28	27	21
Leach operations					
Leach ore placed in stockpiles (metric tons per day)	160,300	205,900	195,200	142,800	149,100
Average copper ore grade (percent)	0.35	0.37	0.33	0.37	0.41
Copper production (millions of recoverable pounds)	241	268	287	255	328
Mill operations					
Ore milled (metric tons per day)	331,600	393,100	387,600	360,100	353,400
Average ore grade (percent):					
Copper	0.34	0.36	0.38	0.44	0.43
Molybdenum	0.01	0.02	0.01	0.02	0.02
Copper recovery rate (percent)	84.3	83.5	84.3	81.2	85.8
Copper production (millions of recoverable pounds)	738	916	962	980	1,000

a. Net of Morenci's joint venture interest; effective May 31, 2016, our undivided interest in Morenci was prospectively reduced from 85 percent to 72 percent.

SELECTED OPERATING DATA (Continued)

	Years Ended December 31,				
	2020	2019	2018	2017	2016
INDONESIA MINING					
Operating Data, Net of Rio Tinto Joint Venture Interest[a]					
Copper (millions of recoverable pounds)					
Production	809	607	1,160	984	1,063
Sales	804	667	1,130	981	1,054
Average realized price per pound	$ 3.08	$ 2.72	$ 2.89	$ 3.00	$ 2.32
Gold (thousands of recoverable ounces)					
Production	848	863	2,416	1,554	1,061
Sales	842	973	2,366	1,540	1,054
Average realized price per ounce	$ 1,832	$ 1,416	$ 1,254	$ 1,268	$ 1,237
100% Operating Data					
Ore milled (metric tons per day)	87,700	110,100	178,100	140,400	165,700
Average ore grade:					
Copper (percent)	1.32	0.84	0.98	1.01	0.91
Gold (grams per metric ton)	1.10	0.93	1.58	1.15	0.68
Recovery rates (percent):					
Copper	91.9	88.4	91.8	91.6	91.0
Gold	78.1	75.0	84.7	85.0	82.2
Production:					
Copper (millions of recoverable pounds)	809	607	1,227	996	1,063
Gold (thousands of recoverable ounces)	848	863	2,697	1,554	1,061
MOLYBDENUM MINES					
Molybdenum production (millions of recoverable pounds)	24	29	35	32	26
Ore milled (metric tons per day)	20,700	30,100	27,900	22,500	18,300
Average molybdenum ore grade (percent)	0.17	0.14	0.18	0.20	0.21

a. Prior to December 21, 2018, PT-FI had an unincorporated joint venture with Rio Tinto. Refer to Notes 2 and 3 for further discussion.

MINERAL RESERVES

Proven and probable reserves were determined by the use of mapping, drilling, sampling, assaying and evaluation methods generally applied in the mining industry, as more fully discussed below. The term “reserve,” as used in the reserve data presented here, means that part of a mineral deposit that can be economically and legally extracted or produced at the time of the reserve determination. The term “proven reserves” means reserves for which (i) quantity is computed from dimensions revealed in outcrops, trenches, workings or drill holes; (ii) grade and/or quality are computed from the results of detailed sampling; and (iii) the sites for inspection, sampling and measurements are spaced so closely and the geologic character is sufficiently defined that size, shape, depth and mineral content of reserves are well established. The term “probable reserves” means reserves for which quantity and grade are computed from information similar to that used for proven reserves but the sites for sampling are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven reserves, is high enough to assume continuity between points of observation.

Our mineral reserve estimates are based on the latest available geological and geotechnical studies. We conduct ongoing studies of our ore bodies to optimize economic values and to manage risk. We revise our mine plans and estimates of recoverable proven and probable mineral reserves as required in accordance with the latest available studies. Refer to Item 1A. “Risk Factors” for discussion of risks associated with our estimates of proven and probable reserves.

Estimated recoverable proven and probable reserves at December 31, 2020, were determined using metals price assumptions of $2.50 per pound for copper, $1,200 per ounce for gold and $10 per pound for molybdenum.

For the three-year period ended December 31, 2020, LME copper settlement prices averaged $2.83 per pound, London PM gold prices averaged $1,477 per ounce and the weekly average price for molybdenum quoted by *Metals Week* averaged $10.65 per pound.

The estimated recoverable proven and probable reserves presented in the table below represent the estimated metal quantities from which we expect to be paid after application of estimated metallurgical recovery rates and smelter recovery rates, where applicable. Recoverable reserves are that part of a mineral deposit that we estimate can be economically and legally extracted or produced at the time of the reserve determination.

Estimated Recoverable Proven and Probable Mineral Reserves at December 31, 2020

	Copper[a] (billion pounds)	**Gold** (million ounces)	**Molybdenum** (billion pounds)
North America	47.1	0.6	3.01
South America	32.7	—	0.70
Indonesia[b]	33.4	28.3	—
Consolidated basis[c]	**113.2**	**28.9**	**3.71**
Net equity interest[d]	**81.8**	**15.5**	**3.39**

a. Estimated consolidated recoverable copper reserves include 1.7 billion pounds in leach stockpiles and 0.3 billion pounds in mill stockpiles (refer to “Mill and Leach Stockpiles” for further discussion).

b. Reflects estimates of minerals that can be recovered through 2041. Refer to Item 1A. “Risk Factors.”

c. Consolidated reserves represent estimated metal quantities after reduction for joint venture partner interests at the Morenci mine in North America (refer to Note 3 for further discussion of our Morenci joint venture). Excluded from the table above are our estimated recoverable proven and probable reserves of 362 million ounces of silver, which were determined using $15 per ounce.

d. Net equity interest reserves represent estimated consolidated metal quantities further reduced for noncontrolling interest ownership (refer to Note 3 for further discussion of our ownership in subsidiaries). Excluded from the table above are our estimated recoverable proven and probable reserves of 247 million ounces of silver. Our net equity interest for estimated metal quantities in Indonesia reflects approximately 81 percent from 2021 through 2022 and 48.76 percent from 2023 through 2041.

Estimated Recoverable Proven and Probable Mineral Reserves at December 31, 2020

		Proven Reserves					Probable Reserves				
			Average Ore Grade					Average Ore Grade			
	Processing Method	Million metric tons	Copper %	Gold g/t	Moly %	Silver g/t	Million metric tons	Copper %	Gold g/t	Moly %	Silver g/t
North America											
Morenci	Mill	918	0.38	—	0.02	—	124	0.33	—	0.02	—
	Crushed leach	479	0.35	—	—	—	70	0.32	—	—	—
	ROM leach	2,273	0.15	—	—	—	435	0.16	—	—	—
Bagdad	Mill	1,977	0.32	— [a]	0.02	1.35	602	0.27	— [a]	0.02	1.12
	ROM leach	5	0.28	—	—	—	7	0.26	—	—	—
Safford, including Lone Star	Crushed leach	610	0.46	—	—	—	167	0.41	—	—	—
Sierrita	Mill	2,875	0.22	— [a]	0.02	1.21	366	0.18	— [a]	0.02	0.94
Chino, including Cobre	Mill	143	0.53	0.04	—	0.89	70	0.49	0.05	—	0.92
	ROM leach	87	0.28	—	—	—	13	0.27	—	—	—
Tyrone	ROM leach	31	0.28	—	—	—	2	0.17	—	—	—
Henderson	Mill	40	—	—	0.19	—	20	—	—	0.13	—
Climax	Mill	143	—	—	0.15	—	13	—	—	0.10	—
		9,582 [b]					**1,889**				
South America											
Cerro Verde	Mill	701	0.38	—	0.02	2.02	3,302	0.36	—	0.01	1.91
	Crushed leach	29	0.44	—	—	—	6	0.34	—	—	—
	ROM leach	21	0.23	—	—	—	20	0.14	—	—	—
El Abra	Crushed leach	543	0.44	—	—	—	191	0.38	—	—	—
	ROM leach	32	0.15	—	—	—	13	0.13	—	—	—
		1,325 [b]					**3,532**				
Indonesia											
Grasberg Block Cave	Mill	326	1.13	0.75	—	3.62	548	1.05	0.72	—	3.61
DMLZ	Mill	89	0.94	0.78	—	4.50	350	0.88	0.71	—	4.25
Big Gossan	Mill	17	2.53	1.03	—	15.77	36	2.19	0.95	—	13.05
DOZ	Mill	2	0.59	0.54	—	2.62	6	0.54	0.45	—	2.62
Kucing Liar[c]	Mill	168	0.99	0.92	—	4.13	183	0.87	0.89	—	3.42
		603 [b]					**1,122** [b]				
Total FCX - 100% Basis		**11,510**					**6,542** [b]				

a. Amounts not shown because of rounding.

b. Does not foot because of rounding.

c. Would require additional capital investment, which could be significant, to bring into production.

The reserve table above and the tables on the following pages utilize the abbreviations described below:

- g/t – grams per metric ton
- Moly – Molybdenum

Estimated Recoverable Proven and Probable Mineral Reserves
at December 31, 2020
(continued)

	Processing Method	Proven and Probable[a] Million metric tons	Average Ore Grade Copper %	Gold g/t	Moly %	Silver g/t	Recoveries[b] Copper %	Gold %	Moly %	Silver %
North America										
Morenci	Mill	1,042	0.37	—	0.02	—	81.2	—	49.0	—
	Crushed leach	550	0.35	—	—	—	80.0	—	—	—
	ROM leach	2,708	0.15	—	—	—	40.3	—	—	—
Bagdad	Mill	2,579	0.31	— [c]	0.02	1.30	86.1	59.1	82.4	49.3
	ROM leach	12	0.27	—	—	—	40.2	—	—	—
Safford, including Lone Star	Crushed leach	777	0.45	—	—	—	70.4	—	—	—
Sierrita	Mill	3,240	0.22	— [c]	0.02	1.18	82.8	59.1	76.7	49.3
Chino, including Cobre	Mill	213	0.51	0.05	—	0.90	80.0	77.9	—	78.5
	ROM leach	100	0.28	—	—	—	40.9	—	—	—
Tyrone	ROM leach	33	0.27	—	—	—	55.2	—	—	—
Henderson	Mill	60	—	—	0.17	—	—	—	89.4	—
Climax	Mill	156	—	—	0.15	—	—	—	88.7	—
		11,471 [d]								
South America										
Cerro Verde	Mill	4,002	0.36	—	0.01	1.93	86.5	—	54.4	44.9
	Crushed leach	34	0.42	—	—	—	78.4	—	—	—
	ROM leach	41	0.19	—	—	—	45.2	—	—	—
El Abra	Crushed leach	734	0.43	—	—	—	54.9	—	—	—
	ROM leach	45	0.15	—	—	—	36.4	—	—	—
		4,856								
Indonesia										
Grasberg Block Cave	Mill	874	1.08	0.73	—	3.61	84.0	63.6	—	56.9
DMLZ	Mill	439	0.89	0.72	—	4.30	86.3	79.1	—	64.3
Big Gossan	Mill	53	2.30	0.98	—	13.93	91.6	67.6	—	63.9
DOZ	Mill	8	0.55	0.47	—	2.62	86.9	79.3	—	64.5
Kucing Liar[e]	Mill	351	0.92	0.90	—	3.76	83.4	58.4	—	42.8
		1,724 [d]								
Total FCX - 100% Basis		**18,052** [d]								

a. Amounts may not equal the sum of proven and probable reserves as presented on the previous page because of rounding.

b. Recoveries are net of estimated mill and smelter losses.

c. Amounts not shown because of rounding.

d. Does not foot because of rounding.

e. Would require additional capital investment, which could be significant, to bring into production.

Estimated Recoverable Proven and Probable Mineral Reserves
at December 31, 2020
(continued)

	FCX's Interest	Processing Method	Recoverable Reserves: Copper billion lbs.	Gold million ozs.	Moly billion lbs.	Silver million ozs.
North America						
Morenci	72%	Mill	6.9	—	0.20	—
		Crushed leach	3.4	—	—	—
		ROM leach	3.7	—	—	—
Bagdad	100%	Mill	15.1	0.2	0.92	53.1
		ROM leach	— [a]	—	—	—
Safford, including Lone Star	100%	Crushed leach	5.4	—	—	—
Sierrita	100%	Mill	13.0	0.2	1.28	60.7
Chino, including Cobre	100%	Mill	1.9	0.2	—	4.8
		ROM leach	0.3	—	—	—
Tyrone	100%	ROM leach	0.1	—	—	—
Henderson	100%	Mill	—	—	0.20	—
Climax	100%	Mill	—	—	0.46	—
			49.8	0.6	3.05 [b]	118.7 [b]
Recoverable metal in stockpiles[c]			1.2	— [a]	0.02	0.1
100% operations			**51.1** [b]	**0.6**	**3.07**	**118.9** [b]
Consolidated			**47.1**	**0.6**	**3.01**	**118.9**
Net equity interest			**47.1**	**0.6**	**3.01**	**118.9**
South America						
Cerro Verde	53.56%	Mill	27.7	—	0.69	111.4
		Crushed leach	0.3	—	—	—
		ROM leach	0.1	—	—	—
El Abra	51%	Crushed leach	3.8	—	—	—
		ROM leach	0.1	—	—	—
			31.9 [b]	—	0.69	111.4
Recoverable metal in stockpiles[c]			0.9	—	0.01	1.2
100% operations			**32.7** [b]	**—**	**0.70**	**112.6**
Consolidated			**32.7**	**—**	**0.70**	**112.6**
Net equity interest			**17.4**	**—**	**0.37**	**60.3**
Indonesia						
Grasberg Block Cave	[d]	Mill	17.5	13.1	—	57.8
DMLZ	[d]	Mill	7.4	8.1	—	39.0
Big Gossan	[d]	Mill	2.5	1.1	—	15.3
DOZ	[d]	Mill	0.1	0.1	—	0.4
Kucing Liar	[d]	Mill	6.0	6.0	—	18.1
100% operations			**33.4** [b]	**28.3** [b]	**—**	**130.6**
Consolidated			**33.4**	**28.3**	**—**	**130.6**
Net equity interest			**17.3**	**14.9**	**—**	**67.7**
Total FCX – 100% basis			**117.2**	**28.9**	**3.77**	**362.1**
Total FCX – Consolidated basis[e]			**113.2**	**28.9**	**3.71**	**362.1**
Total FCX – Net equity interest[f]			**81.8**	**15.5**	**3.39** [b]	**246.9**

a. Amounts not shown because of rounding.

b. Does not foot because of rounding.

c. Refer to "Mill and Leach Stockpiles" for additional information.

d. Effective December 21, 2018, our share ownership in PT-FI is 48.76 percent (refer to Note 2 for further discussion). Our economic interest in PT-FI is expected to approximate 81 percent through 2022 and 48.76 percent thereafter.

e. Consolidated reserves represent estimated metal quantities after reduction for Morenci's joint venture partner interests (refer to Note 3 for further discussion).

f. Net equity interest represents estimated consolidated metal quantities further reduced for noncontrolling interest ownership (refer to Note 3 for further discussion of our ownership in subsidiaries). Our net equity interest for estimated metal quantities in Indonesia reflects approximately 81 percent from 2021 through 2022 and 48.76 percent from 2023 through 2041.

In defining our open-pit reserves, we apply a “variable cutoff grade” strategy. The objective of this strategy is to maximize the net present value of our operations. We use a “break-even cutoff grade” to define the in-situ reserves for our underground ore bodies. The break-even cutoff grade is defined for a metric ton of ore as that equivalent copper grade, once produced and sold, that generates sufficient revenue to cover all operating and administrative costs associated with our production.

Our copper mines may contain other commercially recoverable metals, such as gold, molybdenum and silver. We value all commercially recoverable metals in terms of a copper equivalent percentage to determine a single cutoff grade. Copper equivalent percentage is used to express the relative value of multi-metal ores in terms of one metal. The calculation expresses the relative value of the ore using estimates of contained metal quantities, metals prices as used for reserve determination, recovery rates, treatment charges and royalties. Our molybdenum properties use a molybdenum cutoff grade.

The table below shows the minimum cutoff grade by process for each of our existing ore bodies as of December 31, 2020:

	Copper Equivalent Cutoff Grade (Percent)			Molybdenum Cutoff Grade (Percent)
	Mill	Crushed Leach	ROM Leach	Mill
North America				
Morenci	0.17	0.12	0.03	—
Bagdad	0.09	—	0.04	—
Safford, including Lone Star	—	0.12	—	—
Sierrita	0.15	—	—	—
Chino, including Cobre	0.22	—	0.07	—
Tyrone	—	—	0.02	—
Henderson	—	—	—	0.13
Climax	—	—	—	0.05
South America				
Cerro Verde	0.15	0.09	0.08	—
El Abra	—	0.11	0.06	—
Indonesia				
Grasberg Block Cave	0.58	—	—	—
DMLZ	0.64	—	—	—
Big Gossan	1.70	—	—	—
DOZ	0.91	—	—	—
Kucing Liar	0.65	—	—	—

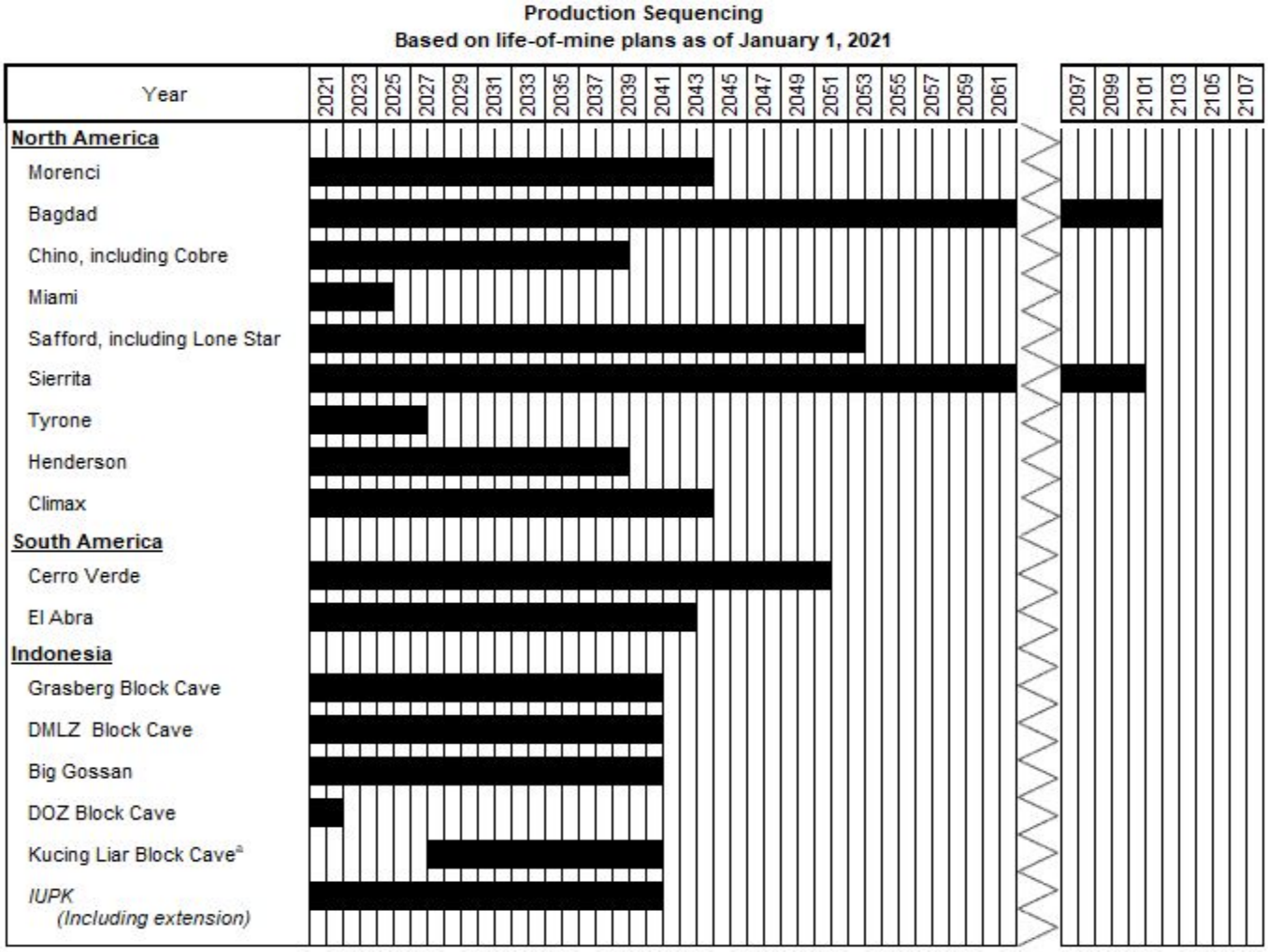
Drill hole spacing data is used by mining professionals, such as geologists and geological engineers, in determining the suitability of data coverage (on a relative basis) in a given deposit type and mining method scenario so as to achieve a given level of confidence in the resource estimate. Drill hole spacing is only one of several criteria necessary to establish resource classification. Drilling programs are typically designed to achieve an optimum sample spacing to support the level of confidence in results that apply to a particular stage of development of a mineral deposit.

The following table sets forth the average drill hole spacing based on average sample distance or drill pattern spacing for proven and probable ore reserves by process type:

		Average Drill Hole Spacing (in Meters)			
		Proven		Probable	
	Mining Unit	Mill	Leach	Mill	Leach
North America					
Morenci	Open Pit	86	86	122	122
Bagdad	Open Pit	86	86	122	122
Safford, including Lone Star	Open Pit	—	86	—	122
Sierrita	Open Pit	73	—	104	—
Chino	Open Pit	43	86	86	122
Cobre	Open Pit	86	86	122	122
Tyrone	Open Pit	—	86	—	122
Henderson	Block Cave	47	—	96	—
Climax	Open Pit	61	—	91	—
South America					
Cerro Verde	Open Pit	55	55	110	110
El Abra	Open Pit	—	75	—	120
Indonesia					
Grasberg Block Cave	Block Cave	28	—	66	—
DMLZ	Block Cave	22	—	63	—
Big Gossan	Open Stope	13	—	37	—
DOZ	Block Cave	23	—	54	—
Kucing Liar	Block Cave	39	—	88	—

Production Sequencing

The following chart illustrates our current plans for sequencing and producing our proven and probable reserves at each of our ore bodies and the years in which we currently expect production from each ore body and related stockpiles. Our proven and probable ore reserves in Indonesia reflect estimates of minerals that can be recovered through the end of 2041, and our current mine plan and planned operations are based on the assumption that PT-FI will comply with its obligations under the IUPK and receive the second 10-year extension from 2031 through 2041 (refer to Item 1A. “Risk Factors” and Note 13 for further discussion). Production volumes are typically lower in the first few years for each ore body as development activities are ongoing and as the mine ramps up to full production and production volumes may also be lower as the mine reaches the end of its life. The sequencing dates shown in the chart below include development activity that results in metal production. The ultimate timing of the start of production from our undeveloped mines is dependent upon a number of factors, including the results of our exploration and development efforts, and may vary from the dates shown below. In addition, we develop our mine plans based on maximizing the net present value from the ore bodies. Significant additional capital expenditures will be required at many of these mines in order to achieve the life-of-mine plans reflected below.



a. The timing of development is still under review.

Mill and Leach Stockpiles

Mill and leach stockpiles generally contain lower grade ores that have been extracted from an ore body and are available for metal recovery. Mill stockpiles contain sulfide ores and recovery of metal is through milling, concentrating, smelting and refining or, alternatively, by concentrate leaching. Leach stockpiles contain oxide ores and certain secondary sulfide ores and recovery of metal is through exposure to acidic solutions that dissolve contained copper and deliver it in solution to extraction processing facilities.

Because it is impracticable to determine copper contained in mill and leach stockpiles by physical count, reasonable estimation methods are employed. The quantity of material delivered to mill and leach stockpiles is based on surveyed volumes of mined material and daily production records. Sampling and assaying of blasthole cuttings determine the estimated copper grades of material delivered to mill and leach stockpiles.

Expected copper recovery rates for mill stockpiles are determined by metallurgical testing. The recoverable copper in mill stockpiles, once entered into the production process, can be produced into copper concentrate almost immediately.

Expected copper recovery rates for leach stockpiles are determined using small-scale laboratory tests, small- to large-scale column testing (which simulates the production process), historical trends and other factors, including mineralogy of the ore and rock type. Total copper recovery in leach stockpiles can vary significantly from a low percentage to more than 90 percent depending on several variables, including processing methodology, processing variables, mineralogy and particle size of the rock. For newly placed material on active stockpiles, as much as 80 percent of total copper recovery may be extracted during the first year, and the remaining copper may be recovered over many years. Processes and recovery rates are monitored regularly, and recovery rate estimates are adjusted periodically as additional information becomes available and as related technology changes.

Following are our stockpiles and the estimated recoverable copper contained within those stockpiles as of December 31, 2020:

	Million Metric Tons	Average Ore Grade (%)	Recovery Rate (%)	Recoverable Copper (billion pounds)
Mill stockpiles				
Cerro Verde	77	0.27	64.7	0.3
North America copper mines	6	0.45	88.2	— [a]
	83			0.3
Leach stockpiles				
Morenci	7,019	0.24	0.7	0.3
Bagdad	504	0.25	0.2	— [a]
Safford, including Lone Star	350	0.41	7.5	0.2
Sierrita	650	0.15	9.1	0.2
Miami	498	0.39	1.3	0.1
Chino, including Cobre	1,761	0.25	3.1	0.3
Tyrone	1,170	0.28	1.4	0.1
Cerro Verde	535	0.46	4.4	0.2
El Abra	818	0.43	4.3	0.3
	13,306 [b]			1.7
Total FCX - 100% basis				**2.1** [b]
Total FCX - Consolidated basis[c]				**2.0**
Total FCX - Net equity interest[d]				**1.6**

a. Rounds to less than 0.1 billion pounds of recoverable copper.

b. Does not foot because of rounding.

c. Consolidated stockpiles represent estimated metal quantities after reduction for Morenci's joint venture partner interests. Refer to Note 3 for further discussion.

d. Net equity interest represents estimated consolidated metal quantities further reduced for noncontrolling interest ownership (refer to Note 3 for further discussion of our ownership in subsidiaries).

Mineralized Material

We hold various properties containing mineralized material that we believe could be brought into production should market conditions warrant. However, permitting and significant capital expenditures would be required before operations could commence at these properties. Mineralized material is a mineralized body that has been delineated by appropriately spaced drilling and/or underground sampling to support the reported tonnage and average metal grades. Such a deposit cannot qualify as recoverable proven and probable reserves until legal and economic feasibility are confirmed based upon a comprehensive evaluation of development costs, unit costs, grades, recoveries and other material factors. Accordingly, no assurance can be given that the estimated mineralized material not included in reserves will become proven and probable mineral reserves. Estimated mineralized materials as presented on the following page were assessed using prices of $3.00 per pound for copper, $1,200 per ounce for gold, $12 per pound for molybdenum and $20 per ounce for silver. Refer to Item 1A. "Risk Factors" for discussion of risks associated with our estimates of mineralized material.

Estimated Mineralized Material
at December 31, 2020

		Milling Material					Leaching Material		Total Mineralized Material[a]
	FCX's Interest	Million metric tons	Copper %	Gold g/t	Moly %	Silver g/t	Million metric tons	Copper %	Million metric tons
North America									
Morenci	72%	1,228	0.26	—	0.02	—	862	0.22	2,090
Bagdad	100%	378	0.30	— [b]	0.02	1.3	1	0.14	379
Safford, including Lone Star	100%	1,084	0.42	0.05	—	1.1	887	0.29	1,971
Sierrita	100%	1,125	0.18	— [b]	0.02	1.0	—	—	1,125
Chino, including Cobre	100%	260	0.47	0.04	0.01	0.9	30	0.25	291
Tyrone	100%	—	—	—	—	—	52	0.28	52
Henderson	100%	116	—	—	0.14	—	—	—	116
Climax	100%	383	—	—	0.16	—	—	—	383
Ajo	100%	601	0.37	0.06	0.01	0.8	—	—	601
Cochise/Bisbee	100%	—	—	—	—	—	262	0.46	262
Sanchez	100%	—	—	—	—	—	175	0.29	175
Tohono	100%	269	0.67	—	—	—	281	0.67	550
Twin Buttes	100%	169	0.57	0.01	0.03	6.0	80	0.21	249
Christmas	100%	301	0.40	0.06	— [b]	1.1	—	—	301
South America									
Cerro Verde	53.56%	451	0.32	—	0.01	1.7	29	0.26	480
El Abra	51%	2,065	0.40	0.02	0.01	1.3	147	0.23	2,212
Indonesia									
Grasberg minerals district	48.76%	2,649	0.72	0.61	—	4.0	—	—	2,649
Total FCX - 100% basis		**11,081** [c]					**2,805** [c]		**13,886**
Total FCX - Consolidated basis[d]		**10,737**					**2,562**		**13,299**
Total FCX - Net equity interest[e]		**8,158**					**2,476**		**10,635**

a. Amounts may not equal the sum of milling and leach material because of rounding.

b. Amounts not shown because of rounding.

c. Does not foot because of rounding.

d. Consolidated basis represents estimated mineralized materials after reduction for Morenci's joint venture partner interests. Refer to Note 3 for further discussion.

e. Net equity interest represents estimated consolidated mineralized material further reduced for noncontrolling interest ownership. Refer to Note 3 for further discussion of our ownership in subsidiaries.

Item 1A. Risk Factors.

This report contains "forward-looking statements" within the meaning of United States (U.S.) federal securities laws. Forward-looking statements are all statements other than statements of historical facts, such as plans, projections or expectations relating to ore grades and milling rates; business outlook; production and sales volumes; unit net cash costs; cash flows, capital expenditures, liquidity; operating costs; operating plans; our financial policy; our expectations regarding PT Freeport Indonesia's (PT-FI) ramp-up of underground mining activities and future cash flows through 2022; PT-FI's development, financing, construction and completion of a new smelter in Indonesia and possible expansion of the smelter at PT Smelting; our commitments to deliver responsibly produced copper, including plans to implement and validate all of our operating sites under specific frameworks; improvements in operating procedures and technology; exploration efforts and results; development and production activities, rates and costs; tax rates; export quotas and duties; the impact of copper, gold and molybdenum price changes; the impact of deferred intercompany profits on earnings; mineralization and reserve estimates; execution of the settlement agreements associated with the Louisiana coastal erosion cases and talc-related litigation; descriptions of our objectives, strategies, plans, goals or targets, including our net debt target, anticipated improvements in energy efficiency at certain operating sites, and environmental, social and governance (ESG) targets; and future dividend payments, share purchases and sales, including under our Board of Director's (Board's) financial policy.

We undertake no obligation to update any forward-looking statements. We caution readers that forward-looking statements are not guarantees of future performance and our 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 the following:

Risk Factor Summary

Investing in our securities involves a high degree of risk and uncertainties. Below is a summary of the material risk factors associated with an investment in our securities. You should read this summary together with the more detailed description of each risk factor that immediately follows this summary.

However, the risk factors described herein are not all of the risks we may face. Other risks not presently known to us or that we currently believe are immaterial may materially affect our business if they occur. Moreover, new risks emerge from time to time. Further, our business may also be affected by additional factors that apply to all companies operating in the U.S. and globally, which have not been included.

In addition to this summary and the more detailed description of the risk factors, you should carefully consider other sections of this annual report on Form 10-K, which may include additional factors that could adversely affect our business, prior to investing in our securities.

Financial risks

- Fluctuations in the market prices of the commodities we produce have caused and may continue to cause significant volatility in our financial performance and in the trading prices of our common stock and debt. Extended declines in the market prices of the commodities we produce could have an adverse effect on our business.
- Our debt and other financial commitments may limit our financial and operating flexibility.
- The ongoing COVID-19 pandemic and any future pandemic, epidemic, endemic or similar public health threats and resulting negative impact on the global economy and financial markets may have an adverse impact on our business and results of operations, the duration and extent of which is highly uncertain and could be material.
- Changes in or the failure to comply with the financial assurance requirements relating to our mine closure reclamation and plugging and abandonment obligations could have a material adverse effect on our business.
- Unanticipated litigation or negative developments in pending litigation or with respect to other contingencies could have a material adverse effect on our business.
- We may be adversely impacted by increased liabilities and costs related to our defined benefit pension plans.

International risks

- Our international operations are subject to, and may be adversely affected by, political, economic, social and regional risks of doing business in countries outside the U.S.
- Our special mining license (IUPK) may not be extended through 2041 if PT-FI fails to abide by the terms and conditions of the IUPK and applicable laws and regulations.

Operational risks

- Our mining operations are subject to operational risks that could adversely affect our business and our underground mining operations can be particularly dangerous.
- Our management of waste rock and tailings are subject to significant environmental, safety and engineering challenges and risks that could adversely affect our business.
- Violence, including shooting incidents, civil and religious strife, and activism could result in loss of life and/or disrupt our operations and may adversely affect our business.
- Our business depends on good relations with our workforce and labor disputes or labor unrest could disrupt our operations from time to time, which could adversely affect our financial results.
- Our mining operations depend on the availability of significant quantities of secure water supplies.
- Development projects are inherently risky and may require more capital than anticipated, which could adversely affect our business. The development of our underground mines and operations are also subject to other unique risks.
- We must continually replace reserves depleted by production but exploration is highly speculative and our exploration activities may not result in additional discoveries.
- Estimates of proven and probable reserves and mineralized material are uncertain and the volume and grade of ore actually recovered may vary from our estimates.
- Our operations are subject to extensive laws and regulations, some of which require permits and other approvals, which may increase our costs and may delay or result in a suspension of our operations.
- Our business is dependent upon information technology systems, which may be adversely affected by disruptions, damage, failure and risks associated with implementation and integration.

Environmental and social risks

- Our operations are subject to environmental laws and regulations, and compliance with these laws and regulations involves significant costs and may constrain existing operations or expansion opportunities.
- We incur significant costs for remediating environmental conditions on properties that have not been operated in many years.
- Our Indonesia mining operations create difficult and costly environmental challenges, which could require us to incur increased costs.
- Our operations require significant energy and regulation of greenhouse gas emissions may increase our costs and adversely affect our operations.
- The physical impacts of climate change may adversely affect our copper mining operations.
- Increasing scrutiny and evolving expectations from stakeholders with respect to our environmental, social and governance practices, performance and disclosures may impact our reputation and business and impose additional costs on us.
- Failure or perceived failure to manage our relationships with the communities where we operate, including communities that are adjacent to or near our operations and Indigenous People, could harm our reputation and social license to operate.

Other risks

- Our holding company structure may impact our ability to service debt and our stockholders' ability to receive dividends.
- Anti-takeover provisions in our charter documents and Delaware law may make an acquisition of us more difficult.

Financial risks

Fluctuations in the market prices of the commodities we produce, primarily copper, gold and molybdenum, have caused and may continue to cause significant volatility in our financial performance and in the trading prices of our common stock and debt. Extended declines in the market prices of copper, gold and, to a lesser extent, molybdenum, could adversely affect our earnings, cash flows and asset values and, if sustained, may adversely affect our ability to repay debt.

Our financial results vary with fluctuations in the market prices of the commodities we produce, primarily copper and gold, and to a lesser extent molybdenum. During 2020, the COVID-19 pandemic and resulting negative impact on the global economy created significant volatility in the financial markets, including the copper market. In 2020, copper prices ranged from a low of $2.09 per pound in March 2020 and a high of $3.61 per pound in December 2020, and with the ongoing COVID-19 pandemic, significant volatility may continue. Extended declines in market prices of our commodities, whether related to the ongoing COVID-19 pandemic or otherwise, could have a material adverse effect on our financial results and the value of our assets, may depress the price of our common stock, and may have a material adverse effect on our ability to comply with financial and other covenants in our debt agreements, repay our debt and meet our other obligations.

Additionally, if market prices for our primary commodities decline and remain low for a sustained period of time, we may have to revise our operating plans, including curtailing or modifying some of our mining and processing operations. We may be unable to decrease our costs in an amount sufficient to offset reductions in revenues, in which case we may incur losses, and those losses may be material. For example, in early 2020, we announced revised operating plans in response to the global COVID-19 pandemic and resulting negative impact on the global economy, which resulted in reductions in (i) operating costs, (ii) capital expenditures, (iii) exploration and administrative costs, and (iv) sales volumes and production from those planned.

Fluctuations in commodities prices are caused by varied and complex factors beyond our control, including global supply and demand and inventory levels; global economic and political conditions; international regulatory, trade and/or tax policies, including national tariffs; commodities investment activity and speculation; interest rates; expectations regarding future inflation rates; the strength of the U.S. dollar compared to foreign currencies; the price and availability of substitute products; and changes in technology. Volatility in global economic growth, particularly in developing economies, has the potential to adversely affect future demand and prices for commodities. Geopolitical uncertainty and protectionism, have the potential to inhibit international trade and negatively impact business confidence, which creates the risk of constraints on our ability to trade in certain markets and has the potential to increase price volatility.

Copper prices may be affected by demand from China, which is currently the largest consumer of refined copper in the world, and by changes in demand for industrial, commercial and residential products containing copper. China had a major economic shutdown during first-quarter 2020 in connection with its efforts to contain and mitigate the spread of COVID-19, which resulted in the country's first reported economic contraction in over 40 years. Although our sales during 2020 were not significantly affected, a slowing in China's economic growth, another widespread COVID-19 outbreak in China or other pandemic, epidemic or endemic health issues, the adoption and expansion of trade restrictions, changes in China-U.S. relations, or other governmental action related to tariffs or trade agreements or policies are difficult to predict and could adversely affect copper prices, demand for our products, our costs, our customers, our suppliers, and the U.S. economy, which in turn could have a material adverse effect on our business, results of operations, or financial condition.

Copper prices have fluctuated historically, with London Metal Exchange (LME) copper settlement prices ranging from $2.09 per pound to $3.61 per pound during the three years ended December 31, 2020. LME copper settlement prices averaged $2.80 per pound in 2020, $2.72 per pound in 2019 and $2.96 per pound in 2018. The LME copper settlement price was $3.51 per pound on December 31, 2020, and $3.57 per pound on January 29, 2021.

Factors affecting gold prices may include the relative strength of the U.S. dollar to other currencies, inflation and interest rate expectations, purchases and sales of gold by governments and central banks, demand from China and India, two of the world's largest consumers of gold, and global demand for jewelry containing gold. The London Bullion Market Association (London) PM gold price averaged $1,770 per ounce in 2020, $1,393 per ounce in 2019 and $1,268 per ounce in 2018. The London PM gold price was $1,888 per ounce on December 30, 2020 (there was no London PM gold price quote on December 31, 2020), and $1,864 per ounce on January 29, 2021.

The *Metals Week* Molybdenum Dealer Oxide weekly average price averaged $8.69 per pound in 2020, $11.37 per pound in 2019 and $11.93 per pound in 2018. The *Metals Week* Molybdenum Dealer Oxide weekly average price was $9.86 per pound on December 31, 2020, and $10.38 per pound on January 29, 2021.

Declines in prices of commodities we sell could result in metals inventory adjustments and impairment charges for our long-lived assets. During 2020, we recorded unfavorable metals inventory adjustments totaling $96 million associated with lower market prices for copper and molybdenum. Refer to Note 4 for additional information regarding metals inventory adjustments. Other events that could result in impairment of our long-lived assets include, but are not limited to, decreases in estimated proven and probable mineral reserves and any event that might have a material adverse effect on current and future expected mine production costs.

Our debt and other financial commitments may limit our financial and operating flexibility.

At December 31, 2020, our total consolidated debt was $9.7 billion (see Note 8) and our total consolidated cash was $3.7 billion. We also have various other financial commitments, including reclamation and environmental obligations, take-or-pay contracts and leases. For further information, see risk factor below relating to mine closure and reclamation regulations, and plugging and abandonment obligations related to our remaining oil and gas properties. Although we have been successful in repaying debt in the past, refinancing our bank facilities, and issuing new debt securities in capital markets transactions, there can be no assurance that we can continue to do so. In addition, we may incur additional debt in future periods or reduce our holdings of cash and cash equivalents in connection with funding existing operations, capital expenditures, dividends, share repurchases or in pursuing other business opportunities.

Our level of indebtedness and other financial commitments could have important consequences to our business, including the following:

- Limiting our flexibility in planning for, or reacting to, changes in the industry in which we operate;
- Increasing our vulnerability to general adverse economic, industry and regulatory conditions;
- Limiting our ability to fund future working capital, capital expenditures, general corporate requirements and/or material contingencies, to engage in future development activities, or to otherwise realize the value of our assets and opportunities fully because of the need to dedicate a substantial portion of our cash flows from operations to payments on our debt;
- Requiring us to sell assets to reduce debt; or
- Placing us at a competitive disadvantage compared to our competitors that have less debt and/or fewer financial commitments.

Any failure to comply with the financial and/or other covenants in our debt agreements may result in an event of default that would allow the creditors to accelerate maturities of the related debt, which in turn may trigger cross-acceleration or cross-default provisions in other debt agreements. Our available cash and liquidity may not be sufficient to fully repay borrowings under our debt instruments that may be accelerated upon an event of default.

As of January 29, 2021, our senior unsecured debt was rated “BB“ with a positive outlook by Standard & Poor’s, “BB+” with a stable outlook by Fitch Ratings, and “Ba1” with a stable outlook by Moody’s Investors Service. If we are unable to maintain our indebtedness and financial ratios at levels acceptable to these credit rating agencies, or should our business prospects deteriorate, our current credit ratings could be downgraded, which could adversely affect the value of our outstanding securities and existing debt and our ability to obtain new financing on favorable terms and could increase our borrowing costs.

The ongoing COVID-19 pandemic and any future pandemic, epidemic, endemic or similar public health threats and resulting negative impact on the global economy and financial markets may have an adverse impact on our business and results of operations, the duration and extent of which is highly uncertain and could be material.

The ongoing COVID-19 pandemic continues to adversely impact the global economy and is creating significant volatility in the financial markets, including the copper markets. The duration and scope of and uncertainties associated with, the ongoing COVID-19 pandemic and the related impact on commodity prices, our business and the global economy are evolving and beyond our control. The extent and duration of adverse impacts that the COVID-19 pandemic may have on supply, demand and prices of the commodities we produce, on our suppliers, vendors, customers and employees and on global financial markets is unknown at this time, but could be both material and prolonged. Prolonged unfavorable economic conditions, and any resulting slowed global economic growth, including the current U.S. recession, may result in lower demand for the commodities we produce, as well as the inability of various customers, contractors, suppliers and other business partners to fulfill their obligations, which could have a material adverse effect on our business and results of operations.

The COVID-19 pandemic disrupted our 2020 operating plans. In April 2020, we announced revised operating plans in response to the global COVID-19 pandemic and resulting negative impact on the global economy. Our revised operating plans focused on safeguarding our business in an uncertain public health and economic environment, advancing the ramp-up of underground production at Grasberg, and advancing initiatives in North America and South America. The ongoing COVID-19 pandemic or any future pandemic, epidemic, endemic or other similar public health threats could disrupt or change our future operating plans. For additional information, refer to Part 1, Item 2. herein.

Our business and results of operations could be adversely affected if significant portions of our workforce are unable to work effectively, including because of illness, quarantines, government actions or other restrictions in connection with the COVID-19 pandemic. We have proactively implemented operating protocols at each of our operating sites to contain and mitigate the risk of spread of COVID-19, including but not limited to, physical distancing, travel restrictions, sanitizing, and frequent health screening and monitoring. COVID-19 cases have been confirmed through testing at our operating sites, including PT-FI's remote operating site in Papua, Indonesia. Despite our efforts to manage these impacts, there can be no assurance that our actions will be effective in containing and mitigating the risk of spread or a major outbreak of COVID-19 at our operating sites. Additionally, although several vaccines for COVID-19 have been approved, there are risks that these vaccines will not be effective against variants of the virus and that these vaccines may not be accepted or widely available in the areas in which we operate due to shortages or other issues with distribution. A major outbreak of COVID-19 at any of our operating sites, and particularly at PT-FI's remote operating site, could have a material adverse effect on our business and results of operations.

Actions taken by governmental authorities and third parties to contain and mitigate the risk of spread of COVID-19 may have an adverse impact on our business. For example, in mid-March 2020, the Peru government issued a Supreme Decree and declaration of a National Emergency in its efforts to contain the outbreak of COVID-19, and subsequently extended the order through May 10, 2020. The Peru government also extended the quarantine measures instituted in mid-March 2020 through August 31, 2020, for certain cities in Peru (including Arequipa, where our Cerro Verde mine is located). To comply with the government's requirements, we temporarily transitioned our Cerro Verde mine to care and maintenance status and adjusted operations to prioritize critical activities. Strict health protocols have been implemented and a plan for Cerro Verde to restore operations was approved by the Peru government in second-quarter 2020. Cerro Verde continued to increase milling rates while operating consistent with our April 2020 revised operating plans and under strict COVID-19 restrictions and protocols. Cerro Verde expects mill rates to average approximately 360,000 metric tons of ore per day in 2021 with the potential to ramp-up to pre-COVID-19 levels approximating 400,000 metric tons of ore per day as COVID-19 restrictions are lifted.

These and other impacts of COVID-19 or other pandemic, epidemic, endemic or similar public health threats could also have the effect of heightening many of the other risks described in these "Risk Factors." The ultimate impact of COVID-19 on our business is difficult to predict and depends on factors that are evolving and beyond our control, including the scope and duration of the outbreak and recovery, including any future resurgences, as well as actions taken by governmental authorities and third parties, including the distribution, effectiveness and acceptance of

vaccines, to contain its spread and mitigate its public health effects. Any of these disruptions could continue to adversely impact our business and results of operations, and such adverse impacts could be material.

Mine closure and reclamation regulations impose substantial costs on our operations and include requirements that we provide financial assurance supporting those obligations. We also have plugging and abandonment obligations related to our remaining oil and gas properties, and are required to provide bonds or other forms of financial assurance in connection with those properties. Changes in or the failure to comply with these requirements could have a material adverse effect on our business.

We are required by U.S. federal and state laws and regulations to provide financial assurance sufficient to allow a third party to implement approved closure and reclamation plans for our mining properties if we are unable to do so. Most of our financial assurance obligations are imposed by state laws that vary significantly by jurisdiction, depending on how each state regulates land use and groundwater quality. The U.S. Environmental Protection Agency (EPA) and state agencies may also require financial assurance for investigation and remediation actions that are required under settlements of enforcement actions under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) or similar state laws. Refer to Note 12 for additional information regarding our financial assurance obligations.

We are also subject to financial assurance requirements in connection with our remaining oil and gas properties and certain of our previously sold oil and gas properties under both state and federal laws, including financial responsibility required under the Oil Pollution Act of 1990 to cover containment and cleanup costs resulting from an oil spill. As a result of a significant increase in the number of oil and gas companies experiencing financial distress, especially those operating in the Outer Continental Shelf, we may have additional exposure if our partners or buyers of our previously owned properties file for bankruptcy and/or default on their share of the abandonment obligations. In 2016, the U.S. Bureau of Ocean Energy Management (BOEM) issued revised requirements for lessees operating in federal waters to secure the cost of plugging, abandoning, decommissioning and/or removing wells, platforms and pipelines at the end of production. The revised requirements eliminate previously provided waivers from requirements to post security. In early 2017, the BOEM announced a delay in the implementation of certain aspects of the rules pending further review and in June 2017, BOEM further extended the start date for implementation indefinitely. On October 16, 2020, BOEM issued a Notice of Proposed Rulemaking and Request for Comments that proposed to limit the circumstances in which it will require supplemental bonding so that it will apply more narrowly than the 2016 requirements. However, we may still be subject to significant levels of supplemental bonding. The cost for bonds or other forms of assurances can be substantial, and there is no assurance that they can be obtained in all cases.

As of December 31, 2020, our financial assurance obligations totaled $1.5 billion for closure and reclamation/restoration costs of U.S. mining sites, and $0.5 billion for plugging and abandonment obligations of our remaining oil and gas properties. A substantial portion of our financial assurance obligations are satisfied by Freeport-McMoRan Inc. (FCX) and subsidiary guarantees and financial capability demonstrations. Our ability to continue to provide guarantees and financial capability demonstrations depends on state and other regulatory requirements, our financial performance and our financial condition. Other forms of assurance, such as letters of credit and surety bonds, are costly to provide and, depending on our financial condition and market conditions, may be difficult or impossible to obtain. Failure to provide the required financial assurance could result in the closure of the affected properties.

The laws and regulations governing mine closure and remediation in a particular jurisdiction and oil and gas properties plugging and abandonment obligations are subject to review at any time and may be amended to impose additional requirements and conditions, which may cause our provisions for environmental and asset retirement obligations to be underestimated and could materially affect our financial position or results of operations. Similarly, our implementation of the Global Industry Standard for Tailings Management (the Tailings Standard) (discussed below) could require changes to our closure and reclamation plans, although it is uncertain if these changes would result in material capital or operating cost increases. In addition, 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 materially increase the costs associated with implementing closure and reclamation at any or all of our active or inactive mine sites and the financial assurance obligations related to the same. Refer to Notes 1 and 12, for further discussion of our environmental and asset retirement obligations.

Unanticipated litigation or negative developments in pending litigation or with respect to other contingencies could have a material adverse effect on our cash flows, results of operations and financial condition.

We are involved in numerous legal proceedings and subject to other contingencies that have arisen or may arise in the ordinary course of our business or are associated with environmental issues, including those described in Note 12 and in Item 3. “Legal Proceedings” involving matters such as remediation, restoration and reclamation of environmental contamination, claims of personal injury or property damage arising from contamination or from exposure to substances such as lead, arsenic, asbestos, talc, uranium and other allegedly toxic substances, disputes over water rights, and disputes with foreign governments or regulatory authorities over royalties, taxes, rights and obligations under concession or other agreements, or other matters. We are also involved periodically in other reviews, inquiries, investigations and other proceedings initiated by or involving government agencies, some of which may result in adverse judgments, settlements, fines, penalties, injunctions or other relief. From time to time we are involved in disputes over the allocation of environmental remediation obligations at “superfund” and other sites. In addition, we may be held responsible for the costs of addressing contamination at the site of current or former activities or at third party sites, or be held liable to third parties for exposure to hazardous substances should those be identified in the future. The outcome of litigation is inherently uncertain and adverse developments or outcomes can result in significant monetary damages, penalties, other sanctions or injunctive relief against us, limitations on our property rights, or regulatory interpretations that increase our operating costs. Management does not believe, based on currently available information, that the outcome of any individual legal proceeding will have a material adverse effect on our financial condition, although individual or cumulative outcomes could be material to our operating results for a particular period, depending on the nature and magnitude of the outcome and the operating results for the period.

We may be adversely impacted by increased liabilities and costs related to our defined benefit pension plans.

We sponsor defined benefit pension plans for certain current and former employees in the U.S. and a few pension plans for non-U.S. locations which provide for specified payments after retirement. The major defined benefit pension plans are funded with trust assets invested in a diversified portfolio of securities and other investments. Changes in regulatory requirements or the market value of plan assets, investment returns, interest rates and mortality rates affect the funded status of our defined benefit pension plans and may cause volatility in the net periodic benefit cost, future funding requirements of the plans and the funded status as recorded on the balance sheet. A sustained period of low or insufficient investment returns or low interest rates could require us to fund our pension plans to a greater extent than anticipated. Refer to Note 9 for further discussion.

International risks

Our international operations are subject to political, economic, social and regional risks of doing business in countries outside the U.S.

We are a U.S.-based mining company with substantial assets located outside of the U.S. Risks of conducting business in countries outside the U.S. include:

- Delays in obtaining or renewing, or the inability to obtain, maintain or renew, or the renegotiation, cancellation, revocation or forced modification of existing contracts, leases, licenses, permits or other agreements and/or approvals;

- Expropriation or nationalization of property, protectionism, or restrictions on repatriation of earnings or capital;

- Changes in the host country’s laws, regulations and policies (which may be applied retroactively), including, but not limited to, those relating to labor, taxation, royalties, duties, tariffs, divestment, imports, exports (including restrictions on the export of copper concentrates, copper and/or gold), trade regulations, immigration, currency and environmental matters (including land use and water use), which because of rising “resource nationalism” in countries around the world, may impose increasingly onerous requirements on foreign operations and investment, and/or result in fines, fees, and sanctions imposed for failure to comply with the laws and regulations of the jurisdictions in which we operate;

- Political, social and economic instability, bribery, extortion, corruption, civil unrest, acts of war, guerrilla activities, insurrection and terrorism, certain of which may result in, among other things, an inability to access our property;

- Risk of loss associated with trespass, local artisanal or illegal mining, theft and vandalism or due to potential pandemic, epidemic and endemic health issues;

- Changes in U.S. trade, tariff, tax, immigration or other policies that may harm relations with foreign countries or result in retaliatory policies;

- Increases in training and other costs and challenges relating to requirements by governmental entities to employ the nationals of the country in which a particular operation is located;

- Foreign exchange controls, fluctuations in foreign currency exchange rates and inflation;

- Reduced protection for intellectual property rights; and

- The risk of having to submit to the jurisdiction of an international court or arbitration panel or having to enforce the judgment of an international court or arbitration panel against a sovereign nation.

Our insurance does not cover most losses caused by the above described risks. Accordingly, our exploration, development and production activities outside of the U.S. may be substantially affected by many unpredictable factors beyond our control, some of which could have a material adverse effect on our cash flows, results of operations and financial condition.

Our international operations must comply with the U.S. Foreign Corrupt Practices Act and similar anti-corruption and anti-bribery laws of the other jurisdictions in which we operate. There has been a substantial increase in the global enforcement of these laws in recent years. We operate in jurisdictions that have experienced public and private sector corruption and where significant anti-corruption enforcement activities, prosecutions, and settlements have occurred. There can be no assurance that our internal control policies and procedures will always protect us from misinterpretation of or noncompliance with applicable laws and internal policies, recklessness, fraudulent behavior, dishonesty or other inappropriate acts committed by our affiliates, employees, agents or contractors. As such, our corporate policies and processes may not prevent or detect all potential breaches of law or other governance practices. Any violation of anti-corruption or anti-bribery laws could result in significant criminal or civil fines and penalties, litigation, and loss of operating licenses or permits, and may damage our reputation, which could have a material adverse effect on our cash flows, results of operations and financial condition.

We conduct international mining operations in Indonesia, Peru and Chile and exploration activities in various foreign jurisdictions. Accordingly, in addition to the usual risks associated with conducting business in countries outside the U.S., our business may be adversely affected by political, economic, social and regional uncertainties in each of these countries. For example, we are involved in several significant tax proceedings and other tax disputes with Indonesia and Peru tax authorities (refer to Note 12 for further discussion of these matters). Other risks specific to certain countries in which we operate are discussed in more detail below.

Because our mining operations in Indonesia are a significant operating asset, our business may be adversely affected by political, economic and social uncertainties in Indonesia.

Our Indonesia mining operations include the Grasberg minerals district, one of the world's largest copper and gold deposits. These operations are conducted by our subsidiary PT-FI pursuant to a special mining license (IUPK) issued by the Indonesia government. Refer to Note 13 for a summary of the IUPK's key fiscal terms.

Maintaining a good working relationship with the Indonesia government is important because of the significance of our Indonesia operations to our business, and because our mining operations there are among Indonesia's most significant business enterprises. The Grasberg minerals district has been designated by the Indonesia government as one of Indonesia's vital national assets. Partially because of its significance to Indonesia's economy, the environmentally sensitive area where it is located, and the number of people employed, our Indonesia operations have been the subject of political debates and criticism in the Indonesia press, and have been the target of protests and occasional violence. Improper management of our working relationship with the Indonesia government could lead to a disruption of operations and/or impact our reputation in Indonesia and in the region where we operate,

which could adversely affect our business. In addition, PT Indonesia Asahan Aluminium (Persero) (PT Inalum, also known as MIND ID), a shareholder in PT-FI, is an Indonesia state-owned enterprise. Disputes between us and PT Inalum may result in litigation or arbitration, which could increase our expenses and distract our officers and directors from focusing their time and effort on our business and could create tensions with the Indonesia government.

The Indonesia mining industry is subject to extensive regulation within Indonesia, and there have been major developments in laws and regulations applicable to mining concession holders, some of which have conflicted with PT-FI's contractual rights in the past. In particular, the enactment of Law No. 4 of 2009 on Coal and Mineral Mining on January 12, 2009 (the Mining Law) replaced the previous regulatory framework which allowed concession holders, including PT-FI, to conduct mining activities in Indonesia under a contract of work system. The Mining Law, which sets out the regulatory framework for the mining industry in Indonesia, only contains substantive principles and leaves many specific issues to be addressed in implementing regulations, some of which have conflicted with PT-FI's contractual rights in the past, including, but not limited to, regulations that imposed a progressive export duty on copper concentrate, restricted exports of copper concentrate and anode slimes, increased royalty rates, and required payment of a smelter assurance bond to support a commitment to construct a new smelter in Indonesia (refer to Note 13 for further discussion of the smelter assurance bond).

Notwithstanding provisions in PT-FI's former Contract of Work (COW) prohibiting it from doing so, the Indonesia government sought to modify PT-FI's former COW to address provisions contained in the Mining Law and implementing regulations adopted thereunder, some of which were not required under or conflicted with PT-FI's former COW, including, but not limited to (i) restrictions on PT-FI's basic right to export mining products; (ii) imposition of additional export duties and higher royalty rates; (iii) imposition of excess surface water taxes (refer to Note 12); (iv) imposition of new requirement to build additional smelter capacity in Indonesia; (v) unreasonable withholding and delay in granting approval of two successive ten-year extensions of the term of the former COW; and (vi) imposition of new divestment requirements.

In early 2017, the Indonesia government issued new regulations to address exports of unrefined metals, including copper concentrate and anode slimes, and other matters related to the mining sector. PT-FI's export license for copper concentrate is valid for one year periods, subject to review and approval by the Indonesia government every six months, depending on smelter construction progress. PT-FI's export license expires on March 15, 2021. Refer to MD&A and Note 12 for further discussion of the administrative fine levied by the Indonesia government on PT-FI for failing to achieve physical development progress on the new smelter, and ongoing discussions with the Indonesia government regarding a deferred schedule for the completion of the new smelter project as well as other alternatives in light of the ongoing COVID-19 pandemic and volatile global economic conditions. The 2017 regulations also permit the export of anode slimes, which is necessary for PT Smelting (PT-FI's 25-percent-owned copper smelter and refinery located in Gresik, Indonesia) to continue operating. PT Smelting's export license for anode slimes expires on July 18, 2021. In addition to a delay in the renewal of its export license for anode slimes in 2017, PT Smelting's operations were shut down from mid-January 2017 until early March 2017 as a result of labor disturbances. Copper concentrate sales to PT Smelting totaled over 10 percent of our consolidated revenues for each of the years ended December 31, 2020, 2019 and 2018. We cannot predict when PT-FI's copper concentrate license and PT Smelting's anode slimes export license may be renewed. PT-FI's sale of concentrates could be interrupted if either of these export license is not timely renewed or if PT Smelting is unable to operate either due to other operational or financial constraints, which would adversely impact our revenues and operations.

We cannot assure you that future regulatory changes affecting the mining industry in Indonesia will not be introduced or unexpectedly repealed, or that new interpretations of existing laws and regulations will not be issued, which could adversely affect our business, financial condition and results of operations.

We will not mine all of PT-FI's ore reserves in the Grasberg minerals district before the initial term of PT-FI's IUPK expires in 2031 and the IUPK may not be extended through 2041 if PT-FI fails to abide by the terms and conditions of the IUPK and applicable laws and regulations.

On December 21, 2018, PT-FI was granted an IUPK to replace its former COW, enabling PT-FI to conduct operations in the Grasberg minerals district through 2041. Under the terms of the IUPK, PT-FI has been granted mining rights through 2031, with rights to extend its mining rights through 2041, subject to, among other things, PT-FI completing the construction of a new smelter in Indonesia by December 21, 2023 (an extension of which has been requested due to COVID-19 mitigation measures subject to the approval of the Indonesia government), and

fulfilling its defined fiscal obligations to the Indonesia government. Refer to Note 13 for a summary of the IUPK's key fiscal terms.

The IUPK also requires PT-FI to pay duties on concentrate exports of 5 percent, declining to 2.5 percent when smelter development progress exceeds 30 percent, and eliminated when smelter development progress exceeds 50 percent. Refer to MD&A and Note 12 for further discussion of the administrative fine levied by the Indonesia government on PT-FI for failing to achieve physical development progress on the new smelter, and ongoing discussions with the Indonesia government regarding a deferred schedule for the completion of the new smelter project as well as other alternatives in light of the ongoing COVID-19 pandemic and volatile global economic conditions. Engineering and front-end engineering and design for the selected process technology are ongoing. The preliminary capital cost estimate for the project approximates $3 billion, and PT-FI plans to arrange financing for the project. The economics of the new smelter will be borne by PT-FI's shareholders according to their respective share ownership percentages. PT-FI's ability to raise and service significant new sources of capital will be a function of macroeconomic conditions, future market prices as well as PT-FI's operational performance, cash flow and debt position, among other factors. Financing may not be available when needed or, if available, the terms of such financing may not be favorable to PT-FI.

Our proven and probable ore reserves in Indonesia reflect estimates of minerals that can be recovered through the end of 2041, and PT-FI's current long-term mine plan and planned operations are based on the assumption that PT-FI will abide by the terms and conditions of the IUPK and will be granted the 10-year extension from 2031 through 2041. As a result, we will not mine all of these ore reserves during the initial term of the IUPK. Prior to the end of 2031, we expect to mine 50 percent of aggregate proven and probable recoverable ore at December 31, 2020, representing 57 percent of our net equity share of recoverable copper reserves and 59 percent of our net equity share of recoverable gold reserves.

If PT-FI does not complete the construction of a new smelter in Indonesia by December 21, 2023 (an extension of which has been requested due to COVID-19 mitigation measures subject to the approval of the Indonesia government), or fulfill its defined fiscal obligations to the Indonesia government as set forth in the IUPK, the IUPK will likely not be extended from 2031 to 2041, and we would be unable to mine all of PT-FI's ore reserves in the Grasberg minerals district, which would adversely affect our business, results of operations and financial position.

Operational risks

Our mining operations are subject to operational risks that could adversely affect our business and our underground mining operations can be particularly dangerous.

Our mines are very large in scale and, by their nature are subject to significant operational risks, some of which are outside of our control, and many of which are not covered fully, or in some cases even partially, by insurance. These operational risks, which could materially and adversely affect our business, operating results and cash flow, include earthquakes, rainstorms, floods, and other natural disasters; environmental hazards, including discharge of metals, concentrates, pollutants or hazardous chemicals; surface or underground fires; equipment failures; accidents, including in connection with mining equipment, milling equipment or conveyor systems, transportation of chemicals, explosives or other materials and in the transportation of employees and business partners to and from sites; wall failures and rock slides in our open-pit mines, and structural collapses of our underground mines or tailings impoundments; lower than expected ore grades or recovery rates; and unexpected geological formations or conditions (whether in mineral or gaseous form).

For a discussion of risks specific to our tailings management, see below "*Our management of waste rock and tailings are subject to significant environmental, safety and engineering challenges and risks that could adversely affect our business."*

We are facing continued geotechnical challenges due to the older age of some of our open-pit mines and a trend toward mining deeper pits and more complex deposits. No assurances can be given that unanticipated geotechnical and hydrological conditions may or may not occur, nor whether these conditions may lead to events such as landslides and pit wall failures, in the future or that such events will be detected in advance. Geotechnical instabilities can be difficult to predict and are often affected by risks and hazards outside of our control, such as seismic activity or severe weather, which may lead to floods, mudslides, pit-wall instability, and possibly even slippage of material. During the first quarter of 2019, our El Abra operation in Chile experienced heavy rainfall and electrical storms. As a result, our operating results for 2019 were impacted by a suspension of El Abra's crushed

leach stacking operations for approximately 35 days. We cannot predict whether similar events will occur in the future or the extent to which any such event would affect this, or any of our other operations.

Underground mining operations can be particularly dangerous, and in May 2013, a tragic accident, which resulted in 28 fatalities and 10 injuries, occurred at PT-FI when the rock structure above the ceiling of an underground training facility collapsed. PT-FI temporarily suspended mining and processing activities at the Grasberg complex to conduct inspections and resumed open-pit mining and concentrating activities in June 2013, and underground operations in July 2013. No assurance can be given that similar events will not occur in the future.

In addition to the usual risks encountered in the mining industry, our Indonesia mining operations involve additional risks given their location in steep mountainous terrain in a remote area of Indonesia. These conditions have required us to overcome special engineering difficulties and develop extensive infrastructure facilities. The area also receives extreme rainfall, which has led to periodic floods and mudslides. Further, the mine site is also in an active seismic area and has experienced earth tremors from time to time.

We maintain insurance at amounts we believe to be reasonable to cover some of these risks and hazards; however, our insurance may not sufficiently cover losses from certain natural or operating disasters. No assurance can be given that such insurance will continue to be available, or that it will be available at economically feasible premiums, or that we will be able to obtain or maintain such insurance. We may elect to not purchase insurance for certain risks due to the high premium costs associated with insuring such risk or for various other reasons. We do not have coverage for certain environmental losses and other risks, as such coverage generally cannot be purchased at a commercially reasonable cost by us or other companies within the mining industry. The lack of, or insufficiency of, insurance coverage could adversely affect our cash flow and overall profitability.

The occurrence of one or more of these events in connection with our exploration activities and development of and production from mining operations may result in the death of, or personal injury to, our employees, other personnel or third parties, the loss of mining equipment, damage to or destruction of mineral properties or production facilities, significant repair costs, monetary losses, deferral or unanticipated fluctuations in production, extensive community disruption, loss of licenses, permits or necessary approvals to operate, loss of infrastructure and services, disruption to essential supplies or delivery of our products, environmental damage and potential legal liabilities, all of which may adversely affect our reputation, business, prospects, results of operations and financial position.

Our management of waste rock and tailings are subject to significant environmental, safety and engineering challenges and risks that could adversely affect our business.

The waste rock (including overburden) and tailings produced in our mining operations represent our largest volume of waste material. Managing the volume of waste rock and tailings presents significant environmental, safety and engineering challenges and risks primarily relating to structural stability, geochemistry, water quality and dust generation. Management of this waste is regulated in the jurisdictions where we operate and our programs are designed to comply with applicable national, state and local laws, permits and approved environmental impact studies.

We maintain large leach pads and tailings impoundments containing viscous material. Tailings impoundments include large embankments that must be engineered, constructed and monitored to ensure structural stability and avoid leakages or structural collapse. Our tailings impoundments in arid areas must have effective programs to suppress fugitive dust emissions, and we must effectively monitor and treat acid rock drainage at all of our operations. In Indonesia, we use a river transport system for tailings management, which presents other risks discussed in more detail below under Environmental and social risks - "*Our Indonesia mining operations create difficult and costly environmental challenges, and future changes in environmental laws, or unanticipated environmental impacts from those operations, could require us to incur increased costs*."

Affiliates of our company currently operate 17 tailings storage facilities, 15 in the U.S. and 2 in Peru; and manage 56 tailings storage facilities in the U.S. that are inactive or closed (approximately three-fourths of the inactive facilities have been closed). Our inventory of tailings storage facilities comprises 12 active and 51 inactive or closed facilities with an upstream design and 5 active and 5 inactive with a centerline design. In 2020, we produced approximately 259 million metric tons of tailings. The failure of tailings and other embankments at any of our mining operations could cause severe, and in some cases catastrophic, property and environmental damage and loss of life, as well as adverse effects on our business and reputation. Many of our tailings storage facilities are located in areas where a failure has the potential to impact individual dwellings and a limited number of impoundments are in areas where a

failure has the potential to impact nearby communities or mining infrastructure. As a result, our programs take into account the significant consequences resulting from a potential failure, and we apply substantial financial resources and internal and external technical resources to pursue the safe management of all those facilities. Our tailings management and stewardship program, which involves qualified external Engineers of Record and periodic oversight by independent tailings Technical Review Boards and our Tailings Stewardship Team, complies with the tailings governance framework on preventing catastrophic failure of tailings storage facilities adopted in December 2016 by the International Council on Mining and Metals (ICMM), an industry group of which we are a founding member, and required to be implemented by ICMM members. We continue to enhance our existing practices and work with ICMM on additional initiatives to strengthen the design, operation and closure of tailings storage facilities in an effort to reduce the risk of severe or catastrophic failure of those facilities. However, no assurance can be given that these events will not occur in the future.

The importance of careful design, management and monitoring of large impoundments has been emphasized in recent years by large scale tailings dam failures at unaffiliated mines, which resulted in numerous fatalities and caused extensive property and environmental damage. As a result of failures at unaffiliated mines, in 2019, international groups initiated the drafting of standards for the safe management of tailings facilities. In August 2020, the co-conveners of the Global Tailings Review, which included ICMM, published the Tailings Standard. The Tailings Standard includes 77 requirements across 6 key areas including the design, construction, operation and monitoring of tailings facilities, management and governance, emergency response and long-term recovery, and public disclosure. ICMM has committed that members will implement the Tailings Standard within three years for certain facilities and within five years for all others. ICMM members have prepared a guidance document focused on practices that drive safe tailings management and prepared a conformance protocol document to be used by companies on demonstrating implementation of the Tailings Standard; both documents are expected to be published in early 2021. As an ICMM member, management has committed to implement the Tailings Standard at our tailings storage facilities, including providing required public disclosures regarding our facilities and efforts. We are evaluating changes to our tailings stewardship and management programs and approaches that may be needed to demonstrate conformance with the Tailings Standard, although it is uncertain if changes would result in material capital or operating cost increases.

In addition, changes in physical risks to our facilities resulting from climate change could lead to changes in our plans for managing tailings and waste rock in order to address such risks, which may materially increase the costs associated with managing waste rock and tailings at any or all of our active or inactive mine sites. Addressing the effects of climate change on tailings facilities is a requirement under the Tailings Standard.

Based on observations from such tailings failures at unaffiliated mines, in addition to fatalities and severe personal, property and environmental damages, these events could result in limited or restricted access to mine sites, suspension of operations, decrease in reserves, legal liability (possibly involving the freezing of assets), government investigations, additional regulations and restrictions on mining operations in response to any such failure, increased monitoring costs and production costs, increased insurance costs or inability to obtain insurance, increased costs and/or limited access to capital, remediation costs, inability to comply with any additional safety requirements or obtain necessary certifications, evacuation or relocation of communities or other emergency action, and other impacts, which could have a material adverse effect on our operations and financial position.

Violence, including shooting incidents, civil and religious strife, and activism could result in loss of life and/or disrupt our operations and may adversely affect our business, financial condition, results of operations and prospects.

Indonesia has long faced separatist movements and civil and religious strife in a number of provinces. Several separatist groups have sought increased political independence for the province of Papua, where our Grasberg minerals district is located. In Papua, there have been sporadic attacks on civilians by separatists and sporadic but highly publicized conflicts between separatists and the Indonesia military and police. In addition, illegal miners have periodically clashed with police who have attempted for years to move them away from our facilities. Social, economic and political instability in Papua could materially and adversely affect us if it results in damage to our property or interruption of our Indonesia operations.

In 2009, a series of shooting incidents occurred within the PT-FI project area, including along the road leading to our mining and milling operations. The shooting incidents continued on a sporadic basis through January 2020. During this time, there were 22 fatalities and more than 75 injuries to our employees, contractor employees, government

security personnel and civilians. In addition, in December 2018, a mass shooting incident targeting a highway construction crew occurred in a remote mountain area approximately 100 miles east of the PT-FI project area, resulting in at least 19 fatalities and several reported as missing. During first-quarter 2020 and April 2020, there was an escalation in shooting incidents in PT-FI's area of operations. In late March 2020, a shooting incident occurred near PT-FI's administrative offices in the lowlands in Papua, Indonesia, resulting in the death of one PT-FI employee and injuries to two other workers. In January 2021, another shooting incident occurred when a helicopter operating under contract to PT-FI was struck by a single gunshot. Separatist security incidents, including shootings, continue to be sporadically reported, and PT-FI continues to monitor the occurrence of incidents in the region.

The safety of our workforce is a critical concern, and PT-FI continues to work with the Indonesia government to enhance security and address security issues within the PT-FI project area and in nearby areas. We continue to limit the use of the road leading to our mining and milling operations to secured convoys, including transport of personnel by armored vehicles in designated areas.

We cannot predict whether additional incidents will occur that could result in loss of life, disrupt or suspend our operations. If other disruptive incidents occur, they could adversely affect our results of operations and financial condition in ways that we cannot predict at this time.

South America countries have historically experienced uneven periods of economic growth, as well as recession, periods of high inflation and general economic and political instability. During 2019 and 2020, both Peru and Chile experienced significant and prolonged civil unrest unrelated to our operations. Production and sales for the third quarter and first nine months of 2019 were impacted by protests associated with an unaffiliated copper development project in Peru that blocked access to the shipping ports and main transportation routes. Although the civil unrest did not significantly impact our results for 2019, similar events in the future could cause, our South America operations to be materially impacted, in which case, we may not be able to meet our production and sales targets. We cannot predict whether similar or more significant incidents of civil unrest will occur in the future in Peru or Chile.

Our business depends on good relations with our workforce and labor disputes or labor unrest could disrupt our operations from time to time, which could adversely affect our financial results.

Our business is dependent, in part, on maintaining good relations with our workforce. A significant portion of our employees are represented by labor unions in a number of countries under various collective bargaining agreements with varying durations and expiration dates. Refer to Items 1. and 2. "Business and Properties" of this annual report on Form 10-K for additional information regarding labor matters, and expiration dates of such agreements. As of December 31, 2020, approximately 38 percent of our global labor force was covered by collective bargaining agreements and approximately 16 percent of our global labor force was covered by agreements that have expired and are currently being negotiated or will expire during 2021.

Labor agreements are negotiated on a periodic basis, and may not be renewed on reasonably satisfactory terms to us or at all. If we do not successfully negotiate new collective bargaining agreements with our union workers, we may incur prolonged strikes and other work stoppages at our mining operations, which could adversely affect our financial condition and results of operations. Additionally, if we enter into a new labor agreement with any union that significantly increases our labor costs relative to our competitors, our ability to compete may be materially and adversely affected.

We could experience labor disruptions such as work stoppages, work slowdowns, union organizing campaigns, strikes, or lockouts that could adversely affect our operations. For example, during third-quarter 2016, PT-FI experienced labor productivity issues and a 10-day work stoppage, which continued during fourth-quarter 2016 and into the first half of 2017. Beginning in mid-April 2017, PT-FI experienced a high level of worker absenteeism, which unfavorably impacted mining and milling rates, and in May 2017, a significant number of employees and contractors elected to participate in an illegal strike action. These employees were subsequently deemed to have voluntarily resigned under existing Indonesia laws and regulations resulting in increased costs associated with employee severance. In third-quarter 2020, we experienced a five-day labor-related work stoppage related to COVID-19 travel restrictions when a small group of workers at PT-FI staged protests and a blockade restricting access to the main road to the mining operations area. We reached an amicable resolution with the group of workers while upholding our COVID-19 safety protocols. There were no strikes or lockouts at any of our operations in 2020.

We cannot predict whether additional labor disruptions will occur. Significant reductions in productivity or protracted work stoppages at one or more of our operations could significantly reduce our production and sales volumes or disrupt operations, which could adversely affect our cash flow, results of operations and financial condition.

Our mining operations depend on the availability of significant quantities of secure water supplies.

Our mining operations require physical availability and secure legal rights to significant quantities of water for mining and ore processing activities, and related support facilities. Most of our North America and South America mining operations are in areas where competition for water supplies is significant, and where climate change may lead to increasing scarcity of water resources in the future. Continuous production at our mines is dependent on many factors, including our ability to maintain our water rights and claims, and the continuing physical availability of the water supplies.

As discussed in Item 3. “Legal Proceedings,” in Arizona, where our operations use both surface water and groundwater, we are a participant in an active adjudication in which Arizona courts have been attempting, for over 45 years, to quantify and prioritize surface water claims for the Gila River watershed, one of the state’s largest river systems. This adjudication primarily affects our Morenci, Safford and Sierrita mines. The adjudication is addressing the state law claims of thousands of competing users, including us, as well as significant federal water claims that are potentially adverse to the state law claims of both surface water and groundwater users. Groundwater is treated differently than surface water under Arizona law, which historically allowed land owners to pump subsurface water, subject only to the requirement of putting it to “reasonable use.” However, court decisions in the adjudication have concluded that some, as yet undetermined, volume of subsurface underground water constitutes “subflow” that is to be treated legally as surface water (rather than groundwater) and is therefore subject to the Arizona doctrine of prior appropriation (first in time, first in right) and subject to the adjudication and potentially unavailable to groundwater pumpers, including us, in the absence of valid surface water claims. A re-characterization of groundwater as surface water could affect the ability of consumers, farmers, ranchers, municipalities, and industrial users like us to continue to access water supplies that have been relied on for decades. Because we are a user of both groundwater and surface water in Arizona, we are an active participant in the adjudication proceedings. Given the legal and technical complexity of these adjudications, their long history, and their long-term legal, economic and political implications, it is difficult to predict the timing or the outcome of these proceedings. If we are not able to satisfactorily resolve the issues being addressed in the adjudications, our ability to pump groundwater could be diminished or curtailed, and our operations at Morenci, Safford and Sierrita could be adversely affected unless we are able to acquire alternative resources.

Water for our Cerro Verde operation in Peru comes from renewable sources through a series of storage reservoirs on the Rio Chili watershed that collects water primarily from seasonal precipitation and from wastewater collected from the city of Arequipa and treated at a wastewater treatment plant. As a result of occasional drought conditions, temporary supply shortages that could affect our Cerro Verde operations are possible.

Water for our El Abra mining operation in Chile comes from the continued pumping of groundwater from the Salar de Ascotán aquifer. In 2010, El Abra obtained regulatory approval for the continued pumping of groundwater from the Salar de Ascotán aquifer for its sulfide processing plant, which began operations in 2011. Our current permit will expire in 2029 unless we are able to renew it again. The agreement to pump from this aquifer is subject to continued monitoring of the aquifer level to ensure that environmentally sensitive areas are not impacted by our pumping. If impact occurs, we would have to reduce pumping to restore water levels, which could have an adverse effect on production from El Abra.

Although we typically have sufficient water for our Indonesia operations, the area receives considerable rainfall that makes us susceptible to periodic floods and mudslides, the nature and magnitude of which cannot be predicted.

Although each of our mining operations currently has access to sufficient water supplies to support current operational demands, as discussed above, some supplies are subject to adjudication proceedings, the outcome of which we cannot predict, and the availability of additional supplies that may be required for potential future expansions is uncertain. While we are taking actions to acquire additional back-up water supplies, such supplies may not be available at acceptable cost, or at all, so that the loss of a water right or currently available water supply could force us to curtail operations or force premature closures, thereby increasing and/or accelerating costs or foregoing profitable operations.

Development projects are inherently risky and may require more capital than anticipated, which could adversely affect our business. The development of our underground mines and operations are also subject to other unique risks.

Mine development projects typically require a number of years and significant expenditures during the development phase before production is possible. Currently, our major projects include underground development activities in the Grasberg minerals district, which currently constitutes approximately 29 percent of our estimated consolidated recoverable proven and probable copper reserves. There are many risks and uncertainties inherent in all development projects including, but not limited to, unexpected or difficult geological formations or conditions, potential delays, cost overruns, lower levels of production during ramp-up periods, shortages of material or labor, construction defects, breakdowns and injuries to persons and property. The development of our underground mines and operations are also subject to other unique risks including, but not limited to, underground fires or floods, ventilating harmful gases, fall-of-ground accidents, and seismic activity resulting from unexpected or difficult geological formations or conditions. While we anticipate taking all measures that we deem reasonable and prudent in connection with the development of our underground mines to safely manage production, there is no assurance that these risks will not cause schedule delays, revised mine plans, injuries to persons and property, or increased capital costs, any of which may have a material adverse impact on our cash flows, results of operations and financial condition. Additionally, although we devote significant time and resources to our project planning, approval and review processes, many of our development projects are highly complex and rely on factors that are outside of our control, which may cause us to underestimate the time and capital required to complete a development project.

For example, we experience mining induced seismic activity from time to time at the Deep Mill Level Zone (DMLZ) underground mine in the Grasberg minerals district. Results to date of hydraulic fracturing activities to manage rock stresses and pre-condition the DMLZ underground mine for large-scale production have been effective. However, we cannot predict whether additional occurrences of seismic activity or other unexpected geological activity will occur that could cause schedule delays or additional revisions to PT-FI's mine plans, which could adversely affect our cash flows, results of operations and financial condition.

We must continually replace reserves depleted by production but exploration is highly speculative and our exploration activities may not result in additional discoveries.

Our existing mineral reserves will be depleted over time by production from our operations. Because our profits are primarily derived from our mining operations, our ability to replenish our mineral reserves is essential to our long-term success. Depleted reserves can be replaced in several ways, including expanding known ore bodies, reducing operating costs that could extend the life of a mine by allowing us to cost-effectively process ore types that were previously considered uneconomic, by locating new deposits or acquiring interests in reserves from third parties. Exploration is highly speculative in nature, involves many risks and uncertainties, requires substantial capital expenditures, and is frequently unsuccessful in discovering significant mineralization. Accordingly, our current or future exploration programs may not result in the discovery of additional deposits that can be produced profitably. Even if significant mineralization is discovered, it will likely take many years from the initial phases of exploration until commencement of production, during which time the economic feasibility of production may change. We may not be able to discover, enhance, develop or acquire reserves in sufficient quantities to maintain or grow our current reserve levels, which could negatively affect our cash flow, results of operations and financial condition.

Estimates of proven and probable reserves and mineralized material are uncertain and the volume and grade of ore actually recovered may vary from our estimates.

Our estimates of recoverable proven and probable mineral reserves have been prepared in accordance with Industry Guide 7 as required by the Securities Exchange Act of 1934. There are numerous uncertainties inherent in mineral reserves estimates. Such estimates are, to a large extent, based on assumed long-term prices for the commodities we produce, primarily copper, gold and molybdenum, and interpretations of geologic data obtained from drill holes and other exploration techniques, which data may not necessarily be indicative of future results. Our mineral reserve estimates are based on the latest available geological and geotechnical studies. We conduct ongoing studies of our ore bodies to optimize economic values and to manage risk. We revise our mine plans and estimates of recoverable proven and probable mineral reserves as required in accordance with the latest available studies. Geological assumptions about our mineralization that are valid at the time of estimation may change significantly when new information becomes available.

Estimates of recoverable proven and probable mineral reserves, or the cost at which we anticipate such mineral reserves will be recovered, are based on uncertain assumptions. The uncertain global financial outlook may affect economic assumptions related to reserve recovery and may require reserve revisions. Changes to such estimates could affect our asset carrying values and may also negatively impact our future financial condition and results.

In addition, if the market prices for the commodities we produce decline from recent levels, if production costs increase or recovery rates decrease, or if applicable laws and regulations are adversely changed, we can offer no assurance that the indicated level of recovery will be realized or that mineral reserves can be mined or processed profitably. If we determine that certain of our estimated recoverable proven and probable mineral reserves have become uneconomic, this may ultimately lead to a reduction in our aggregate reported mineral reserves which could have a material adverse effect on our business, financial condition and results of operations.

Additionally, the term “mineralized material” does not indicate recoverable proven and probable mineral reserves as defined by the U.S. Securities and Exchange Commission (SEC). Estimates of mineralized material are subject to further exploration and potential development, and, therefore, are subject to considerable uncertainty. Mineralized material is a mineralized body that has been delineated by appropriately spaced drilling and/or underground sampling to support the reported tonnage and average metal grades. Such a deposit cannot qualify as recoverable proven and probable mineral reserves until legal and economic feasibility are confirmed based upon a comprehensive evaluation of development costs, unit costs, grades, recoveries and other material factors. Accordingly, no assurance can be given that the estimated mineralized material not included in reserves will become recoverable proven and probable mineral reserves.

In 2018, the SEC adopted amendments to the disclosure requirements for mining registrants. We will be required to comply with the new rules beginning with our annual report on Form 10-K for fiscal year 2021. Future adjustment to estimates of mineral reserves or mineralized material may occur as a result of the differing standards under the new requirements including, but not limited to, the replacement of our estimate of mineralized material with an estimate of “mineral resources.”

Our operations are subject to extensive laws and regulations, some of which require permits and other approvals. Compliance with these regulations increases our costs and, in the event of an alleged violation, may delay or result in a suspension of our operations.

Our operations are subject to extensive and complex laws and regulations that 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 legal requirements is an integral and costly part of our business. For additional information, see “Environmental and social risks” below. We are also subject to extensive regulation of worker health and safety, including the requirements of the U.S. Occupational Safety and Health Act and similar laws of other jurisdictions. In the U.S., the operation of our mines is subject to regulation by the U.S. Mine Safety and Health Administration (MSHA) under the Federal Mine Safety and Health Act of 1977 (Mine Act). MSHA inspects our mines on a regular basis and issues citations and orders when it believes a violation has occurred under the Mine Act. Additionally, in the U.S. various state agencies have concurrent jurisdiction arising under state law that regulate worker health and safety in both our industrial facilities and mines. If regulatory inspections result in an alleged violation, we may be subject to fines and penalties and, in instances of alleged significant violations, our mining operations or industrial facilities could be subject to temporary or extended closures. Refer to Exhibit 95.1 to this annual report on Form 10-K for additional information regarding certain orders and citations issued by MSHA for our operations during the year ended December 31, 2020.

Many other governmental bodies regulate other aspects of our operations, and our failure to comply with these legal requirements can result in substantial penalties. In addition, new laws and regulations, including executive orders, or changes to or new interpretations of existing laws and regulations by courts or regulatory authorities occur regularly, but are difficult to predict. Changes under a new president, administration and Congress in the U.S. are also difficult to predict. Any such variations could negatively impact the mining sector, including our business, substantially increase costs to achieve compliance or otherwise could have a material adverse effect on our cash flow, results of operations and financial condition.

Our business is dependent upon information technology systems, which may be adversely affected by disruptions, damage, failure and risks associated with implementation and integration.

Our industry has become increasingly dependent on digital technologies. Our strategy of operating large, long-lived, geographically diverse assets has been increasingly dependent on our ability to become fully integrated and highly automated. Many of our business and operational processes are heavily dependent on traditional and emerging technology systems to conduct day-to-day operations, improve safety and efficiency, and lower costs.

As our dependence on information systems, including those of our third party service providers and vendors, grows, we become more vulnerable to an increasing threat of continually evolving cybersecurity risks. In recent years, cybersecurity incidents have increased in frequency and magnitude. These incidents may include, but are not limited to, installation of malicious software, phishing, credential attacks, unauthorized access to data and other advanced and sophisticated cybersecurity breaches and threats, including threats that increasingly target critical operational technologies and process control networks. If any of these threats materialize, we could be subject to manipulation or improper use of our systems and networks, production downtimes, communication interruption or other disruptions and delays to our operations or to the transportation of products or infrastructure utilized by our operations, unauthorized release of proprietary, commercially sensitive, confidential or otherwise protected information, the corruption of data, significant health and safety consequences, environmental damage, loss of intellectual property, fines and litigation, damage to our reputation or financial losses from remedial actions, any of which could have a material adverse effect on our cash flow, results of operations and financial condition. We have experienced targeted and non-targeted cybersecurity incidents in the past and may experience them in the future. While these cybersecurity incidents did not result in any material loss to us or interrupt our day-to-day operations, there can be no assurance that we will not experience any such losses in the future. Given the unpredictability of the timing and the evolving nature and scope of information technology disruptions, the various procedures and controls we use to monitor and protect against these threats and to mitigate our potential risks to such threats may not be sufficient in preventing cybersecurity incidents from materializing. Further, as cybersecurity threats continue to evolve, we may be required to expend significant additional resources to continue to modify or enhance our protective measures or to investigate and remediate vulnerabilities to cybersecurity threats.

We could also be adversely affected by system or network disruptions if new or upgraded information technology systems are defective, not installed properly or not properly integrated into our operations. Various measures have been implemented to manage our risks related to system implementation and modification, but system modification failures could have a material adverse effect on our business, financial position and results of operations and could, if not successfully implemented, adversely impact the effectiveness of our internal controls over financial reporting.

Environmental and social risks

Our operations are subject to complex, evolving and increasingly stringent environmental laws and regulations. Compliance with environmental regulatory requirements involves significant costs and may constrain existing operations or expansion opportunities.

Our operations, both in the U.S. and internationally, are subject to extensive and complex environmental laws and regulations governing the generation, storage, treatment, transportation and disposal of hazardous substances; solid waste disposal; air emissions; wastewater discharges; remediation, restoration and reclamation of environmental contamination, including mine closures and reclamation; well plug and abandonment requirements; protection of endangered and protected species and designation of critical habitats; and other related matters. In addition, we must obtain regulatory permits and approvals to start, continue and expand operations.

Our Miami, Arizona, smelter processes a significant portion of the copper concentrate produced by our North America copper mines. EPA regulations required us to invest approximately $230 million in 2017 for new pollution control equipment to reduce sulfur dioxide (SO_2) to meet both regional haze requirements and to allow the Arizona Department of Environmental Quality (ADEQ) to demonstrate compliance with EPA's SO_2 ambient air quality standards. In addition, EPA is currently in the process of revising the standards for hazardous air pollutants from primary copper smelters, which could impose additional requirements on our operations. We cannot guarantee that we will not be required to modify our systems or install additional equipment to address findings, new requirements or for other reasons, which could result in significant costs, including increased capital expenditures and operating costs, and could adversely impact our business.

Laws such as CERCLA and similar state laws 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 below risk factor - *"We incur significant costs for remediating environmental conditions on properties that have not been operated in many years,"* we have substantial obligations for environmental remediation on mining properties previously owned or operated by Freeport Minerals Corporation (FMC) 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.

New or revised environmental regulatory requirements are frequently proposed, many of which result in substantially increased costs for our business, including those regarding financial assurance in the Financial Risks above. For example, criteria for man-made organic compounds that could be present in soil, groundwater and surface water at our existing and former operations are currently under review by federal and state agencies, including drinking water regulation of Perfluorooctanesulfonic and Perfluorooctanoic acids proposed by EPA in February 2020 and a provisional National Pollutant Discharge Elimination strategy for permitting Per- and Polyfluoroalkyl substances proposed by EPA in November 2020.

In 2015, EPA and the Department of the Army (collectively, the Agencies) adopted rules that added remote "tributaries" into the regulatory definition of "waters of the United States" that are protected by the Clean Water Act, thereby imposing significant additional restrictions on land uses in remote areas with only tenuous connections to active waterways. These rules were challenged by multiple states and industry parties and litigation is ongoing. On October 22, 2019, the Agencies published a final rule that repeals these 2015 rules and recodifies the regulations in place prior to adoption of the 2015 rules. EPA also published a proposed rule on February 14, 2019, which revises the definition of "waters of the United States" to clarify the scope of waters federally regulated under the Clean Water Act. The final rule became effective on June 22, 2020, and is currently subject to multiple legal challenges. In connection with the Presidential Executive Order issued on January 20, 2021 (the Executive Order), this final rule will be reviewed again by the Agencies. These rules define whether we need federal authorization under the Clean Water Act to expand our operations.

Regulations have been considered at various governmental levels to increase financial responsibility requirements both for mine closure and reclamation and for oil and gas decommissioning. In 2019, legislation was enacted in Colorado that eliminates our ability to use parent company guarantees, and requires proof of an end date for water treatment as a condition of permit issuance authorizing mining operations, with some exceptions for existing operations. Adoption of similar environmental regulations or more stringent application of existing regulations may materially increase our costs, threaten certain operating activities and constrain our expansion opportunities. In 2018, EPA concluded a rulemaking that considered the need for financial responsibility for hardrock mining operations under CERCLA by publishing its determination that it did not intend to require financial responsibility for the hardrock mining industry sector. In connection with the Executive Order, EPA will review this final action.

Our mining operations are subject to regulations under the Endangered Species Act (ESA) that are intended to protect species listed by the Department of Interior's Fish & Wildlife Service (FWS) as endangered or threatened, along with critical habitat designated by FWS for these listed species. The regulations limit the ability of landowners, including us, to obtain federal permits or authorizations needed for expansion of our operations, and may also affect our ability to obtain, retain or deliver water to some operations. On August 27, 2019, FWS published final rules that mitigate, but do not eliminate, potential regulatory constraints on mining operations under the ESA and on December 16, 2020, FWS published revisions to its definition of critical habitat. On December 18, 2020, FWS published a final rule governing exclusion of areas from critical habitat based on a discretionary exclusion analysis. In connection with the Executive Order, these rules will be reviewed again by FWS. FWS is also reconsidering the listing of certain species and designation of critical habitat for several listed species. No assurances can be made that restrictions relating to conservation will not have an adverse impact on expansion of our operations or not result in delays in project development, constraints on exploration and constraints on operations in impacted areas.

We incurred environmental capital expenditures and other environmental costs (including our joint venture partners' shares) to comply with applicable environmental laws and regulations that affect our operations totaling $0.3 billion in 2020 and $0.4 billion in both 2019 and 2018. For 2021, we expect to incur approximately $0.4 billion of aggregate environmental capital expenditures and other environmental costs. The timing and amounts of estimated payments

could change as a result of changes in regulatory requirements, changes in scope and costs of reclamation and plug and abandonment activities, the settlement of environmental matters and the rate at which actual spending occurs on continuing matters.

We incur significant costs for remediating environmental conditions on properties that have not been operated in many years.

FMC and its subsidiaries, and many of their affiliates and predecessor companies, have been involved in exploration, mining, milling, smelting and manufacturing in the U.S. for more than a century. Activities that occurred in the late 19th century and the 20th century prior to the advent of modern environmental laws were not subject to environmental regulation and were conducted before American industrial companies fully understood the long-term effects of their operations on the surrounding environment.

With the passage of CERCLA in 1980, companies like FMC became legally responsible for remediating hazardous substances released into the environment from properties owned or operated by them as well as properties where they arranged for disposal of such substances, irrespective of when the release to the environment occurred or who caused it. That liability is often asserted on a joint and several basis with other prior and subsequent owners, operators and arrangers, meaning that each owner or operator of the property is, and each arranger may be, held fully responsible for the remediation, although in many cases some or all of the other responsible parties no longer exist, do not have the financial ability to respond or cannot be found. As a result, because of our acquisition of FMC in 2007, many of the subsidiary companies we now own are potentially responsible for a wide variety of environmental remediation projects throughout the U.S., and we expect to spend substantial sums annually for many years to address those remediation issues. We are also subject to claims where the release of hazardous substances is alleged to have damaged natural resources. At December 31, 2020, we had more than 100 active remediation projects in 24 U.S. states. In addition, FMC and certain affiliates and predecessor companies were parties to agreements relating to the transfer of businesses or properties that contained indemnification provisions relating to environmental matters, and from time to time these provisions become the source of claims against us.

At December 31, 2020, we had $1.6 billion recorded in our consolidated balance sheet for environmental obligations attributable to CERCLA or analogous state programs and for estimated future costs associated with environmental matters at closed facilities or closed portions of operating facilities.

Our environmental obligation estimates are primarily based upon:

- Our knowledge and beliefs about complex scientific and historical facts and circumstances that in many cases occurred many decades ago;

- Our beliefs and assumptions regarding the nature, extent and duration of remediation activities that we will be required to undertake and the estimated costs of those remediation activities, which are subject to varying interpretations; and

- Our beliefs regarding the requirements that are imposed on us by existing laws and regulations and, in some cases, the clarification of uncertain regulatory requirements that could materially affect our environmental obligation estimates.

Significant adjustments to these estimates are likely to occur in the future as additional information becomes available. The actual environmental costs may exceed our current and future accruals for these costs, and any such changes could be material.

In addition, remediation standards imposed by EPA and state environmental agencies have generally become more stringent over time and may become even more stringent in the future. Imposition of more stringent remediation standards, particularly for arsenic and lead in soils, poses a risk that additional remediation work could be required at our active remediation sites and at sites that we have already remediated to the satisfaction of the responsible governmental agencies, and may increase the risk of toxic tort litigation.

EPA is considering how to reduce lead exposure in the environment under multiple environmental programs. Certain federal and state health agencies also support lower lead cleanup levels. The timing for these EPA activities is unclear, but reduction in lead cleanup levels could result in material increases to our environmental reserves for ongoing residential property cleanup projects near former smelter sites.

Refer to Note 12 for further discussion of our environmental obligations.

Our Indonesia mining operations create difficult and costly environmental challenges, and future changes in environmental laws, or unanticipated environmental impacts from those operations, could require us to incur increased costs.

Mining operations on the scale of our Indonesia operations involve significant environmental risks and challenges. Our primary challenge is to dispose of the large amount of crushed and ground rock material, called tailings, that results from the process by which we physically separate the copper-, gold- and silver-bearing materials from the ore that we mine. In 2020, PT-FI produced approximately 30 million metric tons of tailings. Our tailings management plan, which has been approved by the Indonesia government, uses the unnavigable river system in the highlands near our mine to transport the tailings to an engineered area in the lowlands where the tailings and natural sediments are managed in a deposition area. Lateral levees have been constructed to help contain the footprint of the tailings and to limit their impact in the lowlands.

Another major environmental challenge is managing overburden, which is the rock that must be moved aside in the mining process to reach the ore. In the presence of air, water and naturally occurring bacteria, some overburden can generate acid rock drainage, or acidic water containing dissolved metals that, if not properly managed, can adversely affect the environment. In addition, certain overburden stockpiles are subject to erosion caused by the large amounts of rainfall, with the eroded stockpile material eventually being deposited in the lowlands tailings management area. Certain of the Grasberg overburden stockpiles have experienced significant erosion over time, exacerbated in 2011 by unanticipated work stoppages that adversely affected our ability to properly manage these overburden stockpiles. This overburden affects the volume as well as the physical and chemical characteristics of the sediment material deposited in the lowlands tailings management area, resulting in increased environmental impacts. PT-FI's current tailings deposition management plan as well as environmental monitoring programs take into account the presence of this overburden in the lowlands tailings management area. As part of its management and monitoring program, PT-FI expanded the scope of its studies and analysis to assess the environmental and potential human health impacts resulting from the overburden erosion, including conducting and updating risk assessments to determine what additional monitoring and mitigation efforts such impacts may require in the future, which will result in increased costs that could be significant.

In the past, certain Indonesia government officials have raised questions with respect to our tailings and overburden management plans, including a suggestion that we implement a pipeline system rather than the river transport system for tailings management and disposition. Because our Indonesia mining operations are remotely located in steep mountainous terrain and in an active seismic area, a pipeline system would be costly, difficult to construct and maintain, and more prone to catastrophic failure, and could therefore involve significant potentially adverse environmental issues. Based on our own studies and others conducted by third parties we do not believe that a pipeline system is necessary or practical.

We cannot guarantee that we will not have overtopping or levee failure caused by extreme weather events or unanticipated structural failure in the future, which could result in flooding of the nearby communities. If flooding were to occur, it could result in loss of lives, and severe personal, property and environmental damages, which could necessitate evacuation or relocation of communities or other emergency action, financial assistance to the communities impacted, and remediation costs to repair and compensate for the social, cultural and economic impacts.

In December 2018, Indonesia's Ministry of Environment and Forestry (MOEF) issued a revised environmental permit to PT-FI to address many of the operational activities that it alleged were inconsistent with earlier studies. PT-FI and the MOEF also established a new framework for continuous improvement in environmental practices in PT-FI's operations, including initiatives that PT-FI will pursue to increase tailings retention and to evaluate large scale beneficial uses of tailings within Indonesia. In addition, PT-FI continues to work with MOEF to finalize environmental permitting related to the rail facilities and certain of the underground mining production operations as well as permitting for the extension of levees to contain the lateral flow of tailings in the lowlands. Refer to Note 12 for further discussion.

We cannot assure you that future environmental changes affecting the mining industry in Indonesia will not be introduced or unexpectedly altered or repealed, or that new interpretations of existing environmental laws and regulations will not be issued, which might have a significant impact on PT-FI.

Our operations require significant energy and regulation of greenhouse gas (GHG) emissions may increase our costs and adversely affect our operations.

Our operations require significant energy, much of which is from fossil fuel sources, and is obtained from third parties under long-term contracts. Energy represented approximately 16 percent of our copper mine site operating costs in 2020, and is expected to approximate 18 percent in 2021. 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.

In certain aspects of our operations, our ability to reduce our GHG emissions is directly dependent on the actions of third parties, and our ability to make significant, rapid changes in our GHG emissions in response to potential future regulations may be limited. For example, GHG emissions from our diesel-fueled mine trucks make up the majority of our Scope 1 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. In addition, while we strive to purchase renewable power for our mining operations, as a commercial consumer of power, our ability to reduce our Scope 2 GHG emissions associated with our power demand is dependent upon the mix of our suppliers and locally-available renewable energy resources. As a result, we could face additional costs associated with any new regulation of GHG emissions, and our ability to modify our operations to avoid these costs may be limited in the near term.

As a result of the Paris Agreement reached during the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change in 2015, a number of governments have pledged “Nationally Determined Contributions” to control and reduce GHG emissions. Under the new presidential administration, the U.S. re-joined the Paris Agreement in January 2021, which may result in a renewed focus on policies to reduce GHG emissions at the federal level. In the U.S., several states, including Colorado and New Mexico, have advanced goals reducing or eliminating fossil-fuel based energy production. Transitions to renewable and other energy sources could, among other things, increase our operating and energy costs depending on the scope, magnitude, and timing of increased regulation of fossil-fuel based energy production, including GHG emissions.

The physical impacts of climate change may adversely affect our copper mining operations.

The 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 copper 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. 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.

As part of our commitment to implementing the Tailings Standard, we will be required to consider uncertainties due to climate change, incorporate that assessment into the relevant knowledge base for our tailings facilities, use this knowledge base to enhance the resilience of our approach to the impacts of climate change using an adaptive management approach, incorporate that knowledge into facility operations, and take measures to mitigate both environmental impact and potential failure risks at our tailings facilities, including those arising from climate change. To the extent these obligations require future changes at our tailings facilities, it could increase our operational expenses or require further capital investments.

Increasing scrutiny and evolving expectations from stakeholders with respect to our ESG practices, performance and disclosures may impact our reputation and business and impose additional costs on us.

There is increased scrutiny from stakeholders related to our ESG practices, performance and disclosures, including prioritization of sustainable and responsible production practices, decarbonization and reduction of our carbon footprint, tailings stewardship and social license to operate among others in the jurisdictions where we operate. We have adopted certain policies and programs as highlighted in our Annual Report on Sustainability, including with respect to responsible production frameworks, climate change, water stewardship, biodiversity, tailings management and stewardship, waste management, safety and health, human capital management, human rights, social performance and community and Indigenous People relations, and responsible sourcing. It is possible,

however, that our stakeholders might not be satisfied with our ESG practices, performance and/or disclosures, or the speed of their adoption, implementation and measurable success. If we do not meet our evolving stakeholders' expectations, our reputation, our access to and cost of capital, and our stock price could be negatively impacted.

In addition, our customers and end users may require that we implement certain additional ESG procedures or standards before they will start or continue to do business with us, which could lead to preferential buying based on our ESG practices compared to our competitors' ESG practices.

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 implications of their investments. Organizations that provide information to investors 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. Unfavorable ratings or assessment of our ESG practices 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. Additionally, if we do not adapt to or comply with investor or stakeholder expectations and standards, which are evolving, or if we are perceived to have not responded appropriately, regardless of whether there is a legal requirement to do so, we may suffer from reputational damage and our business, financial condition, and/or stock price could be materially and adversely affected.

Failure or perceived failure to manage our relationships with the communities where we operate, including communities that are adjacent to or near our operations and Indigenous People, could harm our reputation and social license to operate.

Our relationships with the communities where we operate, including communities that are adjacent to or near our operations and Indigenous People, are critical to the long-term success of our existing operations and the development of any future projects. There is an ongoing and potentially increasing public concern relating to social license to operate and the perceived effect of mining activities on the environment and on communities impacted by such activities. We may engage in activities, such as exploration, production, construction or expansion of our operations that have or are perceived to have adverse impacts on the local communities and their relevant stakeholders, society as a whole, Indigenous Peoples, cultural heritage, human rights and the environment. For example, our operations may take place on or adjacent to Indigenous Peoples' territories. We may be required or expected by our stakeholders to consult with and/or obtain consent from Indigenous Peoples with respect to these operations. In addition, our assets are generally long-lived and perceptions and expectations from stakeholders can change over the life of the mine. Changes in the aspirations and expectations of local communities where we operate, including Indigenous Peoples, with respect to our contributions to employee health and safety, infrastructure, community development, environmental management and other factors could affect our social license to operate and reputation and lead to increased costs and reduced future earnings if expansions or new projects are blocked either temporarily or for extended periods. Failure to effectively engage with communities on an ongoing basis, including the withdrawal of consent or support of Indigenous Peoples, or other stakeholders, could adversely impact our business, damage our reputation and/or result in loss of rights to explore, operate or develop our projects.

Other risks

Our holding company structure may impact our ability to service debt and our stockholders' ability to receive dividends.

We are a holding company with no material assets other than the capital stock and intercompany receivables of our subsidiaries. As a result, our ability to repay our indebtedness and pay dividends is dependent on the generation of cash flow by our subsidiaries and their ability to make such cash available to us, by dividend, loan, debt repayment or otherwise. Our subsidiaries do not have any obligation to make funds available to us to repay our indebtedness or pay dividends. Dividends from subsidiaries that are not wholly owned are shared with other equity owners. Cash at our international operations is also typically subject to foreign withholding taxes upon repatriation into the U.S.

In addition, our subsidiaries may not be able to, or be permitted to, make distributions to us or repay loans to us, to enable us to repay our indebtedness or pay dividends. Each of our subsidiaries is a distinct legal entity and, under certain circumstances, legal restrictions, as well as the financial condition and operating requirements of our subsidiaries, may limit our ability to obtain cash from our subsidiaries. Certain of our subsidiaries are parties to

credit agreements that restrict their ability to make distributions or loan repayments to us if such subsidiary is in default under such agreements, or to transfer substantially all of the assets of such subsidiary without the consent of the lenders.

Our rights to participate in any distribution of our subsidiaries' assets upon their liquidation, reorganization or insolvency would generally be subject to the prior claims of the subsidiaries' creditors, including any trade creditors.

Anti-takeover provisions in our charter documents and Delaware law may make an acquisition of us more difficult.

Anti-takeover provisions in our charter documents and Delaware law may make an acquisition of us more difficult. These provisions:

- Authorize the Board to issue preferred stock without stockholder approval and to designate the rights, preferences and privileges of each class; if issued, such preferred stock would increase the number of outstanding shares of our capital stock and could include terms that may deter an acquisition of us;

- Establish advance notice requirements for nominations to the Board or for proposals that can be presented at stockholder meetings;

- Limit who may call stockholder meetings and establish information requirements and timing restrictions for meeting requests;

- Require the approval of the holders of two thirds of our outstanding common stock to enter into certain business combination transactions, subject to certain exceptions, including if the consideration to be received by our common stockholders in the transaction is deemed to be a fair price; and

- Provide to the fullest extent permitted by law that unless FCX consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have, or declines to accept, jurisdiction, the United States District Court for the District of Delaware) will be the sole and exclusive forum for any (i) derivative action or proceeding brought on behalf of FCX, (ii) action asserting a claim that is based upon a violation of a duty by a current or former director, officer, employee or stockholder of FCX in such capacity, (iii) action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law or to which the Delaware General Corporation Law confers jurisdiction upon the Court of Chancery of the State of Delaware, (iv) action asserting a claim governed by the internal affairs doctrine, or (v) action asserting an "internal corporate claim" as that term is defined in Section 115 of the Delaware General Corporation Law.

These provisions may discourage potential takeover attempts, discourage bids for our common stock at a premium over market price or adversely affect the market price of, and the voting and other rights of the holders of, our common stock. These provisions could also discourage proxy contests and make it more difficult for stockholders to elect directors other than the candidates nominated by the Board.

The choice of forum provision may increase costs to bring a claim, discourage claims or limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with FCX or its directors, officers or other employees, which may discourage such lawsuits against FCX or its directors, officers and other employees. Alternatively, if a court were to find the choice of forum provision contained in FCX's By-laws to be inapplicable or unenforceable in an action, FCX may incur additional costs associated with resolving such action in other jurisdictions. The exclusive forum provision in FCX's By-laws will not preclude or contract the scope of exclusive federal or concurrent jurisdiction for actions brought under the federal securities laws including the Securities Exchange Act of 1934, as amended, or the Securities Act of 1933, as amended, or the respective rules and regulations promulgated thereunder.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may prohibit large stockholders from consummating a merger with, or acquisition of, us.

These provisions may deter an acquisition of us that might otherwise be attractive to our stockholders.

Item 1B. Unresolved Staff Comments.

Not applicable.

Item 3. Legal Proceedings.

Below is a discussion of our material pending legal proceedings not otherwise required to be disclosed in our Notes to Consolidated Financial Statements. Refer to Note 12 for a discussion of other material pending legal proceedings.

In addition to the material pending legal proceedings discussed below and in Note 12, we are involved periodically in ordinary routine litigation incidental to our business and not required to be disclosed, some of which may result in adverse judgments, settlements, fines, penalties, injunctions or other relief.

United States (U.S.) Securities and Exchange Commission (SEC) regulations require us to disclose environmental proceedings involving a governmental authority if we reasonably believe that such proceedings may result in monetary sanctions above a stated threshold. Pursuant to the SEC regulations, we use a threshold of $1 million for purposes of determining whether disclosure of any such environmental proceedings is required.

Management does not believe, based on currently available information, that the outcome of any currently pending legal proceeding will have a material adverse effect on our financial condition; although individual or cumulative outcomes could be material to our operating results for a particular period, depending on the nature and magnitude of the outcome and the operating results for the period.

Water Rights Adjudications

Our operations in the western U.S. require significant secure quantities of water for mining and ore processing activities, and related support facilities. Continuous operation of our mines is dependent on, among other things, our ability to maintain our water rights and claims and the continuing physical availability of the water supplies. In the arid western U.S., where certain of our mines are located, water rights are often contested, and disputes over water rights are generally time-consuming, expensive and not necessarily dispositive unless they resolve both actual and potential claims. The loss of a water right or a currently available water supply could force us to curtail operations, or force premature closures, thereby increasing and/or accelerating costs or foregoing profitable operations.

At our North America operations, certain of our water supplies are supported by surface water rights, which give us the right to use public waters for a statutorily defined beneficial use at a designated location. In Arizona, where our operations use both surface and groundwater, we are a participant in an active adjudication in which Arizona courts have been attempting, for over 45 years, to quantify and prioritize surface water claims for the Gila River system, one of the state's largest river systems. This Gila River adjudication primarily affects our Morenci, Safford and Sierrita mines. The Gila River adjudication is addressing the state law claims of thousands of competing users, including us, as well as significant federal water claims that are potentially adverse to the state law claims of both surface water and groundwater users. Groundwater is treated differently from surface water under Arizona law, which historically allowed land owners to pump unlimited quantities of subsurface water, subject only to the requirement of putting it to "reasonable use." However, court decisions in the adjudication have concluded that some subsurface water constitutes "subflow" that is to be treated legally as surface water and is therefore subject to the Arizona doctrine of prior appropriation and to the adjudication, and potentially unavailable to groundwater pumpers, including us, in the absence of valid surface water claims. Any re-characterization of groundwater as surface water could affect the ability of consumers, farmers, ranchers, municipalities, and industrial users like us to continue to access water supplies that have been relied on for decades. Because we are a user of both groundwater and surface water in Arizona, we are an active participant in the Gila River adjudication.

In Re The General Adjudication of All Rights to Use Water in the Gila River System and Sources, Maricopa County, Superior Court, Cause Nos. W-1 (Salt), W-2 (Verde), W-3 (Upper Gila), and W-4 (San Pedro). This case was originally initiated in 1974 with the filing of a petition with the Arizona State Land Department and was consolidated and transferred to the Maricopa County Superior Court in 1981. The principal parties, in addition to us, include: Arizona Public Service Company, ASARCO, LLC; BHP Copper, Inc; the state of Arizona; various cities and towns and water companies; the Gila Valley Irrigation District; the Franklin Irrigation District; the San Carlos Irrigation and Drainage District; the Salt River Project; the San Carlos Apache Tribe; the Gila River Indian Community; and the U.S. on behalf of those tribes, on its own behalf, and on behalf of the White Mountain Apache Tribe, the Fort

McDowell Mohave-Apache Indian Community, the Salt River Pima-Maricopa Indian Community, and the Payson Community of Yavapai Apache Indians. Prior to January 1, 1983, various Indian tribes filed separate suits in the U.S. District Court in Arizona claiming superior rights to water being used by many other parties, including us, and claiming damages for prior use in derogation of their allegedly superior rights. These federal proceedings have been stayed in favor of the adjudications pending in Arizona state courts, and some of the federal suits have since been settled.

In 2005, the Maricopa County Superior Court directed the Arizona Department of Water Resources (ADWR) to prepare detailed recommendations regarding the delineation of the "subflow" zone of the San Pedro River, a tributary of the Gila River. Subsurface water within the subflow zone is presumed to constitute appropriable subflow rather than groundwater. Although we have minimal interests in the San Pedro River Basin, a decision that re-characterizes groundwater in that basin as appropriable subflow may set a precedent for other river systems in Arizona that could have material implications for many commercial, industrial, municipal and agricultural users of groundwater, including our Arizona operations. In 2017, the court approved ADWR's proposed subflow zone maps; water pumped from wells located inside the mapped subflow zone is now presumed to be appropriable subflow. No party has appealed that decision.

In 2014, ADWR submitted a proposal for the development of procedures for "cone of depression" analyses to determine whether a well located outside of the subflow zone creates a cone of depression that intersects the subflow zone. Based on these cone of depression analyses, wells outside of the subflow zone could be subject to the adjudications pending in Arizona state courts. In the absence of a valid surface water claim to support the pumping, owners of wells deemed to be depleting the subflow zone through their cones of depression may be subject to claims that they must refrain from pumping subflow or must pay damages. In January 2017, ADWR issued a report containing its recommended cone of depression test, and a trial was held in March 2018 concerning ADWR's recommended action.

On November 14, 2018, the Special Master for the Gila River adjudication issued a final decision rejecting ADWR's recommended cone of depression test, instead adopting our position that a numeric model capable of accounting for complexities of the aquifer system should be used. The Special Master also confirmed that the cone of depression test instead would be an initial test for determining which wells are subject to the adjudications, rather than proving that a well is pumping subflow or establishing how much of a well's water production is subflow. Such matters will be determined by a subsequent "subflow depletion test," which has not yet been formulated. Some of our adversaries objected to the Special Master's final decision, and the Arizona Superior Court heard oral argument on the objections in February 2020. This issue remains under advisement with the Arizona Superior Court.

In response to the Special Master's decision, in December 2018, ADWR submitted its initial report on the "subflow depletion test," which will specify the methodology a well owner must use to quantify the portion of the water drawn from a well that is subflow as opposed to groundwater; however, ADWR remains in the process of developing its proposed subflow depletion test. We, along with the other parties, will have the opportunity to provide input throughout the process. The first issue being litigated concerning the subflow depletion test is scheduled for trial in February 2021, and we are among the active litigants.

In June 2020, the Special Master designated legal questions to be resolved concerning a well owner's ability to obtain a surface water right for subsurface water that is ultimately determined to be appropriable subflow. The parties will be briefing these issues in January and February 2021, and the Special Master has scheduled a trial for April 2021.

As part of the adjudications, the U.S. has asserted numerous claims for express and implied "reserved" surface water and groundwater rights on Indian and non-Indian federal lands throughout Arizona. These claims are related to reservations of federal land for specific purposes (*e.g.*, Indian reservations, national parks, military bases and wilderness areas). Unlike state law-based water rights, federal reserved water rights are given priority in the "prior appropriation" system based on the date the land was reserved, not the date that water was first used on the land. In addition, federal reserved water rights may enjoy greater protection from groundwater pumping than is accorded to state law-based water rights.

In multiple instances, the U.S. asserts a right to all water in a particular watershed that was not effectively appropriated under state law prior to the establishment of the federal reservation. This creates risks for both surface water users and groundwater users because such expansive claims may severely impede competing uses of water

within the same watershed. Because there are numerous federal reservations in watersheds across Arizona, the reserved water right claims of the U.S. pose a significant risk to multiple operations, including Morenci and Safford in the Upper Gila River watershed, and Sierrita in the Santa Cruz watershed. Because federal reserved water rights may adversely affect water uses at each of these operations, we have been actively involved in litigation over these claims. Because federal reserved water rights have not yet been quantified, the task of determining how much water each federal reservation may use has been left to the Arizona Superior Court handling the Gila River adjudication. Several "contested cases" to quantify reserved water rights for particular federal reservations in Arizona are currently pending with only one resolved at this time. That case, In re Aravaipa Canyon Wilderness Area, was to resolve the U.S.'s claims to water for the Aravaipa Canyon Wilderness Area. The case was tried in 2015 and the court issued a decision in December 2018 supportive of our position on almost all issues, including rejection of U.S.'s core argument that wilderness areas are entitled to all water that was not appropriated at the time the reservation was created. We believe the rulings in this case will support our positions in other pending federal reserved water right cases, including these: In re Fort Huachuca, which involves the U.S.'s claims to water for an Arizona army base and is awaiting a decision following a trial which concluded in February 2017; In re Redfield Canyon Wilderness Area, which involves the U.S.'s claims to water for another wilderness area and is awaiting a decision following a trial which concluded in May 2017; and In re San Pedro Riparian National Conservation Area, which involves the U.S.'s claims to water for a national conservation area and is awaiting a decision following a trial which concluded in May 2018.

Given the legal and technical complexity of these adjudications, their long history, and their long-term legal, economic and political implications, it is difficult to predict the timing or the outcome of these proceedings. If we are not able to satisfactorily resolve the issues being addressed in the adjudications, our ability to pump groundwater could be diminished or curtailed, and our operations at Morenci, Safford and Sierrita could be adversely affected unless we are able to acquire alternative resources.

Item 4. Mine Safety Disclosures.

Our highest priority is the health, safety and well-being of our workforce. We believe that health and safety considerations are integral to, and fundamental for, all other functions in our organization, and we understand that the health and safety of our workforce is critical to our operational efficiency and long-term success. Our global health and safety approach, "Safe Production Matters," is focused on fatality prevention and continuous improvement through the use of robust management systems, empowering safe work behaviors and strengthening our safety culture.

Our objective is to achieve zero workplace fatalities and to decrease injuries and occupational illnesses. We measure progress toward achieving our objective against regularly established benchmarks, including measuring company-wide Total Recordable Incident Rates (TRIR). Our TRIR (including contractors) per 200,000 man-hours worked was 0.69 in 2020, 0.74 in 2019 and 0.71 in 2018. The metal mining sector industry average per 200,000 man-hours worked reported by the U.S. Mine Safety and Health Administration was 1.81 in 2019 and 1.68 in 2018. The metal mining sector industry average for 2020 was not available at the time of this filing.

Refer to Exhibit 95.1 for mine safety disclosures required in accordance with Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K.

Information About our Executive Officers.

Certain information as of February 3, 2021, about our executive officers is set forth in the following table and accompanying text:

Name	Age	Position or Office
Richard C. Adkerson	74	Chairman of the Board and Chief Executive Officer
Kathleen L. Quirk	57	President and Chief Financial Officer

Richard C. Adkerson was appointed as Chairman of the Board in February 2021. He has served as Chief Executive Officer since December 2003 and has been a director since October 2006. Mr. Adkerson previously served as Vice Chairman of the Board from May 2013 to February 2021, President from January 2008 to February 2021 and also from April 1997 to March 2007, and Chief Financial Officer from October 2000 to December 2003.

Kathleen L. Quirk was appointed as President in February 2021 and has served as Chief Financial Officer since December 2003. Ms. Quirk previously served as Executive Vice President from March 2007 to February 2021, Treasurer from February 2000 to August 2018 and as Senior Vice President from December 2003 to March 2007. Ms. Quirk also serves on the Board of Directors of Vulcan Materials Company.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Unregistered Sales of Equity Securities

None.

Common Stock

Our common shares trade on the New York Stock Exchange under the symbol "FCX." At January 29, 2021, there were 11,309 holders of record of our common stock.

Common Stock Dividends

In March 2020, in response to the COVID-19 pandemic and resulting global economic uncertainties, our Board of Directors (the Board) suspended FCX's quarterly cash dividend of $0.05 per share. In February 2021, the Board reinstated a cash dividend on our common stock at an annual rate of $0.30 per share. The Board intends to declare a quarterly dividend of $0.075 per share, with the initial quarterly dividend expected to be paid on May 3, 2021. The Board also adopted a new financial policy for the allocation of cash flows aligned with our strategic objectives of maintaining a strong balance sheet, increasing cash returns to shareholders and advancing opportunities for future growth. The declaration of dividends is at the discretion of our Board and will depend upon our financial results, cash requirements, future prospects and other factors deemed relevant by our Board. See "Cautionary Statement," and Notes 8 and 10 for further discussion.

Issuer Purchases of Equity Securities

The following table sets forth information with respect to shares of FCX common stock purchased by us during the three months ended December 31, 2020:

Period	(a) Total Number of Shares Purchased		(b) Average Price Paid Per Share	(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs[a]	(d) Maximum Number of Shares That May Yet Be Purchased Under the Plans or Programs[a]
October 1-31, 2020	—		—	—	23,685,500
November 1-30, 2020	109,952	[b]	$ 23.54	—	23,685,500
December 1-31, 2020	145,926	[b]	$ 24.95	—	23,685,500
Total	255,878		$ 24.35	—	23,685,500

a. We have a Board-approved open-market share purchase program for up to 30 million shares, which does not have an expiration date.

b. Consists of shares acquired in connection with stock option exercises during the periods shown.

Item 6. Reserved.

Items 7. and 7A. Management's Discussion and Analysis of Financial Condition and Results of Operations and Quantitative and Qualitative Disclosures About Market Risk.

In Management's Discussion and Analysis of Financial Condition and Results of Operations and Quantitative and Qualitative Disclosures About Market Risk (MD&A), "we," "us" and "our" refer to Freeport-McMoRan Inc. and its consolidated subsidiaries. The results of operations reported and summarized below are not necessarily indicative of future operating results (refer to "Cautionary Statement" for further discussion). References to "Notes" are Notes included in our Notes to Consolidated Financial Statements. Throughout MD&A, all references to earnings or losses per share are on a diluted basis.

This section of our Form 10-K generally discusses the results of operations for the years 2020 and 2019 and comparisons between these years. Discussion of the results of operations for the year 2018 and comparisons between the years 2019 and 2018 are not included in this Form 10-K and can be found in "Management's Discussion and Analysis of Financial Condition and Results of Operations and Quantitative and Qualitative Disclosures About Market Risk" in Part II, Items 7. and 7A. of our Annual Report on Form 10-K for the fiscal year ended December 31, 2019.

OVERVIEW

We are a leading international mining company with headquarters in Phoenix, Arizona. We operate large, long-lived, geographically diverse assets with significant proven and probable reserves of copper, gold and molybdenum. We are one of the world's largest publicly traded copper producers. Our portfolio of assets includes the Grasberg minerals district in Indonesia, one of the world's largest copper and gold deposits; and significant mining operations in North America and South America, including the large-scale Morenci minerals district in Arizona and the Cerro Verde operation in Peru.

Protecting the health of our workforce and communities where we operate is a top priority and we continue to focus on safeguarding our business in an uncertain public health and economic environment. Our operating sites successfully executed our April 2020 revised operating plans implemented in response to the global COVID-19 pandemic and resulting negative impact on the global economy.

We believe that we have a high-quality portfolio of long-lived copper assets positioned to generate long-term value. The ramp-up of underground mining at PT Freeport Indonesia (PT-FI) and production from the Lone Star copper leach project are both advancing on schedule. Cerro Verde is continuing to increase milling rates while operating under strict COVID-19 restrictions and protocols that remain in place. Refer to "Operations" for further discussion. We are also pursuing other opportunities to enhance our mines' net present values, and we continue to advance studies for future development of our resources, the timing of which will depend on market conditions. We plan to prioritize long-term development opportunities during 2021 while focusing on the continued execution of our strategic objectives of maintaining a strong balance sheet, increasing cash returns to shareholders and advancing opportunities for future growth.

Our 2020 results reflect strong cash flows and effective cost and capital expenditure management. Net income (loss) attributable to common stock totaled $599 million in 2020 and $(239) million in 2019. Our results in 2020, compared to 2019, primarily reflect higher copper and gold prices and lower production and delivery costs. Refer to "Consolidated Results" for discussion of items impacting our consolidated results for the two years ended December 31, 2020.

At December 31, 2020, we had $3.7 billion in consolidated cash and cash equivalents, $9.7 billion in total debt, and no borrowings and $3.5 billion available under our revolving credit facility.

In connection with our financing activities in 2019 and 2020, we issued a total of $4.0 billion in new senior notes and used most of the net proceeds to purchase and redeem outstanding senior notes. As a result, we have extended our debt maturities and strengthened our financial flexibility. We have no significant scheduled debt maturities in 2021. Refer to Note 8 and "Capital Resources and Liquidity" for further discussion.

We have significant mineral reserves, resources and future development opportunities within our portfolio of mining assets. At December 31, 2020, our estimated consolidated recoverable proven and probable mineral reserves totaled 113.2 billion pounds of copper, 28.9 million ounces of gold and 3.71 billion pounds of molybdenum. Refer to "Critical Accounting Estimates – Mineral Reserves" and Note 17 for further discussion.

During 2020, production from our mines totaled 3.2 billion pounds of copper, 0.9 million ounces of gold and 76 million pounds of molybdenum. Following is an allocation of our consolidated copper, gold and molybdenum production in 2020 by geographic location:

	Copper	Gold	Molybdenum
North America	44 %	1 %	75 % [a]
South America	31	—	25
Indonesia	25	99	—
	100 %	100 %	100 %

a. Our North America copper mines produced 43 percent of consolidated molybdenum production, and our Henderson and Climax molybdenum mines produced 32 percent.

Copper production from the Morenci mine in North America, Cerro Verde mine in Peru and the Grasberg minerals district in Indonesia together totaled 73 percent of our consolidated copper production in 2020.

OUTLOOK

Despite volatile market conditions and global economic uncertainty as a result of the ongoing COVID-19 pandemic, we continue to view the long-term outlook for our business positively, supported by limitations on supplies of copper and by the requirements for copper in the world's economy. Our financial results vary as a result of fluctuations in market prices primarily for copper, gold and, to a lesser extent, molybdenum, as well as other factors. World market prices for these commodities have fluctuated historically and are affected by numerous factors beyond our control. Refer to "Markets" for further discussion. Because we cannot control the price of our products, the key measures that management focuses on in operating our business are sales volumes, unit net cash costs, operating cash flows and capital expenditures.

Sales Volumes

Following are our projected consolidated sales volumes for 2021 and actual consolidated sales volumes for 2020:

	2021 (Projected)	2020 (Actual)
Copper (millions of recoverable pounds):		
North America copper mines	1,465	1,422
South America mining	1,035	976
Indonesia mining	1,320	804
Total	3,820	3,202
Gold (thousands of recoverable ounces)	1,325	855
Molybdenum (millions of recoverable pounds)	85 [a]	80

a. Includes 25 million pounds from our Molybdenum mines and 60 million pounds from our North America and South America copper mines.

Consolidated sales for first-quarter 2021 are expected to approximate 825 million pounds of copper, 275 thousand ounces of gold and 20 million pounds of molybdenum. Projected sales volumes are dependent on operational performance, continued progress of the ramp-up of underground mining at PT-FI, impacts and duration of the COVID-19 pandemic, timing of shipments, the Indonesia government's extension of PT-FI's export license beyond March 15, 2021, and other factors. For other important factors that could cause results to differ materially from projections, refer to "Cautionary Statement" and "Risk Factors" contained in Part I, Item 1A. of our annual report on Form 10-K for the year ended December 31, 2020.

Consolidated Unit Net Cash Costs

Assuming average prices of $1,850 per ounce of gold and $9.00 per pound of molybdenum and achievement of current sales volume and cost estimates, consolidated unit net cash costs (net of by-product credits) for our copper mines are expected to average $1.25 per pound of copper in 2021. The impact of price changes on 2021 consolidated unit net cash costs would approximate $0.03 per pound for each $100 per ounce change in the average price of gold and $0.01 per pound for each $2 per pound change in the average price of molybdenum. Quarterly unit net cash costs vary with fluctuations in sales volumes and realized prices, primarily for gold and molybdenum.

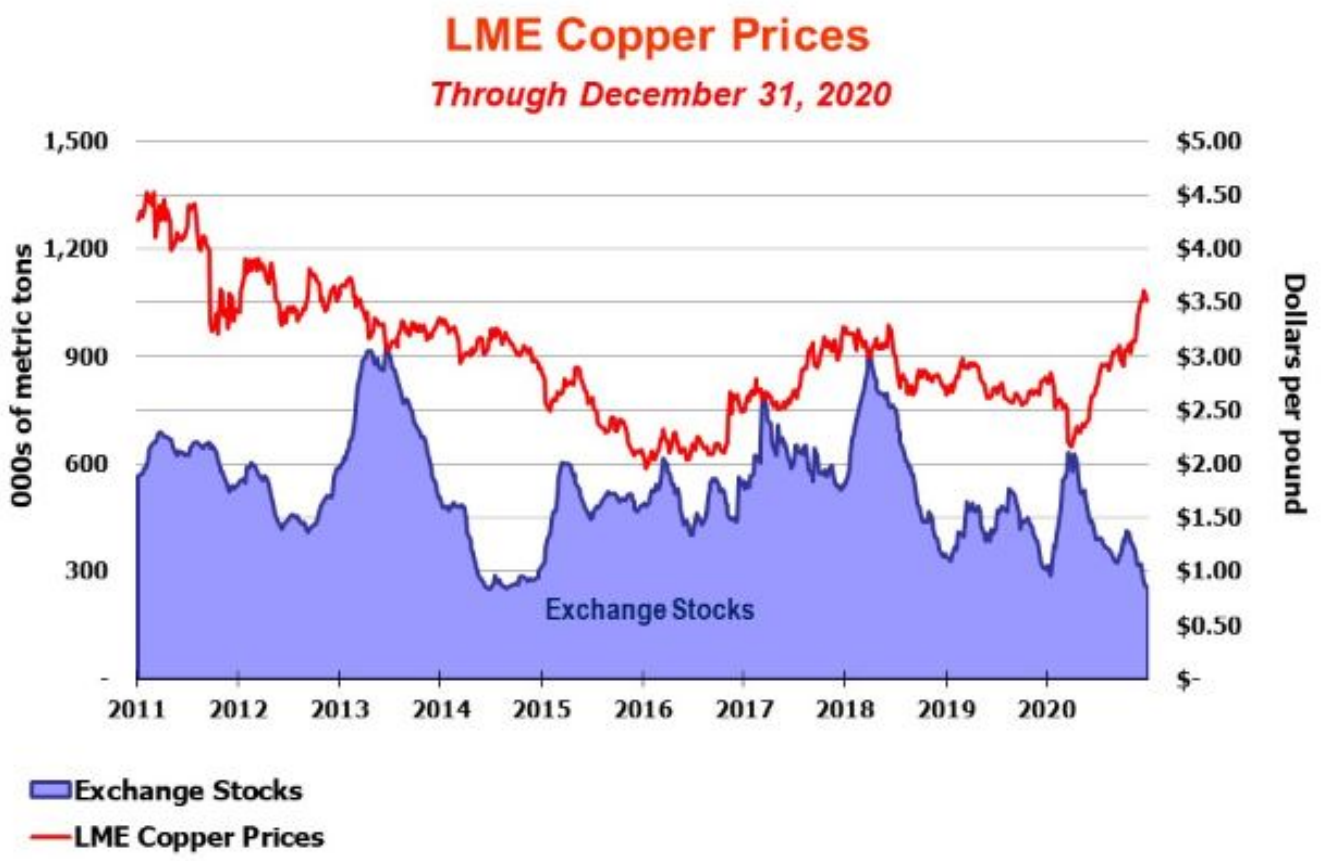
Consolidated Operating Cash Flows
Our consolidated operating cash flows vary with sales volumes; prices realized from copper, gold and molybdenum sales; production costs; income taxes; other working capital changes; and other factors. Based on current sales volume and cost estimates, and assuming average prices of $3.50 per pound of copper, $1,850 per ounce of gold and $9.00 per pound of molybdenum, our consolidated operating cash flows are estimated to approximate $5.5 billion (including $0.4 billion from working capital and other sources) for the year 2021. Estimated consolidated operating cash flows in 2021 also reflect a projected income tax provision of $1.8 billion (refer to “Consolidated Results - Income Taxes” for further discussion of our projected income tax rate for the year 2021). The impact of price changes during 2021 on operating cash flows would approximate $380 million for each $0.10 per pound change in the average price of copper, $120 million for each $100 per ounce change in the average price of gold and $80 million for each $2 per pound change in the average price of molybdenum.

Consolidated Capital Expenditures
Consolidated capital expenditures are expected to approximate $2.3 billion in 2021, including $1.4 billion for major projects primarily associated with underground development activities in the Grasberg minerals district and exclude estimates associated with the new smelter in Indonesia.

We expect capital expenditures for the development of the new smelter in Indonesia to approximate $0.1 billion in 2021, of which approximately 49 percent will be attributable to our equity interest. PT-FI expects these amounts to be funded by a new bank loan.

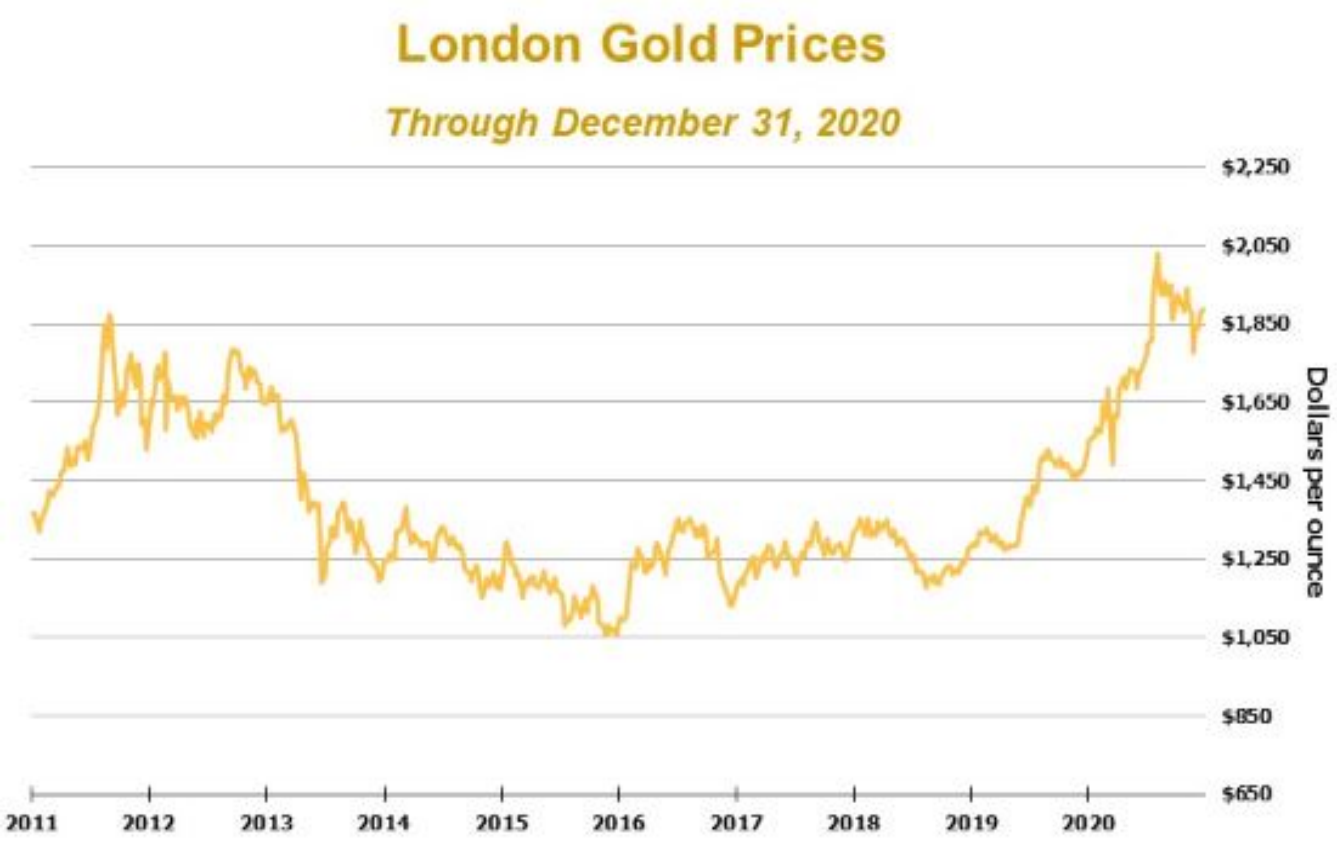
MARKETS

World prices for copper, gold and molybdenum can fluctuate significantly. During the period from January 2011 through December 2020, the London Metal Exchange (LME) copper settlement price varied from a low of $1.96 per pound in 2016 to a record high of $4.60 per pound in 2011; the London Bullion Market Association (London) PM gold price fluctuated from a low of $1,049 per ounce in 2015 to a record high of $2,067 per ounce in 2020, and the *Metals Week* Molybdenum Dealer Oxide weekly average price ranged from a low of $4.46 per pound in 2015 to a high of $17.88 per pound in 2011. Copper, gold and molybdenum prices are affected by numerous factors beyond our control as described further in our “Risk Factors” contained in Part I, Item 1A. of our annual report on Form 10-K for the year ended December 31, 2020.



This graph presents LME copper settlement prices and the combined reported stocks of copper at the LME, Commodity Exchange Inc., and the Shanghai Futures Exchange from January 2011 through December 2020. For the year 2020, LME copper settlement prices ranged from a low of $2.09 per pound to a high of $3.61 per pound, averaged $2.80 per pound and closed at $3.51 per pound on December 31, 2020. During 2020, copper prices were initially negatively impacted by economic uncertainty associated with the COVID-19 pandemic, but began to rise in second-quarter 2020 and continued to rise through the end of 2020 as a result of a positive economic outlook lead by China's continued recovery, decreasing inventories and supply curtailments related to the COVID-19 pandemic. The LME copper settlement price was $3.57 per pound on January 29, 2021.

While we acknowledge the global economic turmoil associated with the ongoing COVID-19 pandemic, we continue to believe the underlying long-term fundamentals of the copper business remain positive, supported by the significant role of copper in the global economy and a challenging long-term supply environment attributable to difficulty in replacing existing large mines' output with new production sources. Future copper prices are expected to be volatile and are likely to be influenced by the ongoing COVID-19 pandemic, demand from China and emerging markets, as well as economic activity in the United States (U.S.) and other industrialized countries, the timing of the development of new supplies of copper and production levels of mines and copper smelters.



This graph presents London PM gold prices from January 2011 through December 2020. Concerns about the global economy related to the COVID-19 pandemic, historically low U.S. interest rates and the anticipated effects of global stimulus efforts have driven increased demand for gold. For the year 2020, London PM gold prices ranged from a low of $1,474 per ounce to a record high of $2,067 per ounce, averaged $1,770 per ounce and closed at $1,888 per ounce on December 30, 2020 (there was no London PM gold price quote on December 31, 2020). The London PM gold price was $1,864 per ounce on January 29, 2021.



This graph presents the *Metals Week* Molybdenum Dealer Oxide weekly average price from January 2011 through December 2020. Molybdenum prices were negatively impacted by economic uncertainty associated with the COVID-19 pandemic in early 2020, but began to improve in the second half of 2020 as a result of increases in spot sale activity in Europe and China. For the year 2020, the weekly average price for molybdenum ranged from a low of $7.01 per pound to a high of $10.79 per pound, averaged $8.69 per pound and was $9.86 per pound on December 31, 2020. The *Metals Week* Molybdenum Dealer Oxide weekly average price was $10.38 per pound on January 29, 2021.

CRITICAL ACCOUNTING ESTIMATES

MD&A is based on our consolidated financial statements, which have been prepared in conformity with generally accepted accounting principles (GAAP) in the U.S. The preparation of these statements requires that we make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. We base these estimates on historical experience and on assumptions that we consider reasonable under the circumstances; however, reported results could differ from those based on the current estimates under different assumptions or conditions. The areas requiring the use of management's estimates are also discussed in Note 1 under the subheading "Use of Estimates." Management has reviewed the following discussion of its development and selection of critical accounting estimates with the Audit Committee of our Board of Directors (the Board).

Taxes

In preparing our consolidated financial statements, we estimate the actual amount of income taxes currently payable or receivable as well as deferred income tax assets and liabilities attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred income tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which these temporary differences are expected to be recovered or settled. The effect on deferred income tax assets and liabilities of a change in tax rates or laws is recognized in income in the period in which such changes are enacted.

Our operations are in multiple jurisdictions where uncertainties arise in the application of complex tax regulations. Some of these tax regimes are defined by contractual agreements with the local government, while others are defined by general tax laws and regulations. We and our subsidiaries are subject to reviews of our income tax filings and other tax payments, and disputes can arise with the taxing authorities over the interpretation of our contracts or laws. Final taxes paid may be dependent upon many factors, including negotiations with taxing authorities. In certain jurisdictions, we pay a portion of the disputed amount before formally appealing an assessment. Such payment is recorded as a receivable if we believe the amount is collectible.

A valuation allowance is provided for those deferred income tax assets for which the weight of available evidence suggests that the related benefits will not be realized. In determining the amount of the valuation allowance, we consider estimated future taxable income or loss as well as feasible tax planning strategies in each jurisdiction. If we determine that we will not realize all or a portion of our deferred income tax assets, we will increase our valuation allowance. Conversely, if we determine that we will ultimately be able to realize all or a portion of the related benefits for which a valuation allowance has been provided, all or a portion of the related valuation allowance will be reduced.

Our valuation allowances totaled $4.7 billion at December 31, 2020, which covered all of our U.S. foreign tax credits, U.S. federal net operating losses, foreign net operating losses, and substantially all of our U.S. state net operating losses. Refer to Note 11 for further discussion.

Environmental Obligations

Our current and historical operating activities are subject to various national, state and local environmental laws and regulations that govern the protection of the environment, and compliance with those laws requires significant expenditures. Environmental expenditures are charged to expense or capitalized, depending upon their future economic benefits. The guidance provided by U.S. GAAP requires that liabilities for contingencies be recorded when it is probable that obligations have been incurred, and the cost can be reasonably estimated. At December 31, 2020, environmental obligations recorded in our consolidated balance sheet totaled $1.6 billion, which reflect obligations for environmental liabilities attributed to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) or analogous state programs and for estimated future costs associated with environmental matters. Refer to Notes 1 and 12 for further discussion of environmental obligations, including a summary of changes in our estimated environmental obligations for the three years ended December 31, 2020.

Accounting for environmental obligations represents a critical accounting estimate because (i) changes to environmental laws and regulations and/or circumstances affecting our operations could result in significant changes to our estimates, which could have a significant impact on our results of operations, (ii) we will not incur most of these costs for a number of years, requiring us to make estimates over a long period, (iii) calculating the discounted cash flows for certain of our environmental obligations requires management to estimate projected cash flows and make long-term assumptions about inflation rates and (iv) changes in estimates used in determining our environmental obligations could have a significant impact on our results of operations.

We perform a comprehensive annual review of our environmental obligations and also review changes in facts and circumstances associated with these obligations at least quarterly. Judgments and estimates are based upon currently available facts, existing technology, presently enacted laws and regulations, remediation experience, whether or not we are a potentially responsible party (PRP), the ability of other PRPs to pay their allocated portions and take into consideration reasonably possible outcomes. Our cost estimates can change substantially as additional information becomes available regarding the nature or extent of site contamination, updated cost assumptions (including increases and decreases to cost estimates), changes in the anticipated scope and timing of remediation activities, the settlement of environmental matters, required remediation methods and actions by or against governmental agencies or private parties.

Asset Retirement Obligations

We record the fair value of our estimated asset retirement obligations (AROs) associated with tangible long-lived assets in the period incurred. Fair value is measured as the present value of cash flow estimates after considering inflation and a market risk premium. Our cost estimates are reflected on a third-party cost basis and comply with our legal obligation to retire tangible long-lived assets in the period incurred. These cost estimates may differ from financial assurance cost estimates for reclamation activities because of a variety of factors, including obtaining updated cost estimates for reclamation activities, the timing of reclamation activities, changes in scope and the exclusion of certain costs not considered reclamation and closure costs. At December 31, 2020, AROs recorded in our consolidated balance sheet totaled $2.5 billion, including $0.4 billion associated with our remaining oil and gas

operations. Refer to Notes 1 and 12 for further discussion of reclamation and closure costs, including a summary of changes in our AROs for the three years ended December 31, 2020.

Generally, ARO activities are specified by regulations or in permits issued by the relevant governing authority, and management's judgment is required to estimate the extent and timing of expenditures. Accounting for AROs represents a critical accounting estimate because (i) we will not incur most of these costs for a number of years, requiring us to make estimates over a long period, (ii) reclamation and closure laws and regulations could change in the future and/or circumstances affecting our operations could change, either of which could result in significant changes to our current plans, (iii) the methods used or required to plug and abandon non-producing oil and gas wellbores, remove platforms, tanks, production equipment and flow lines, and restore the wellsite could change, (iv) calculating the fair value of our AROs requires management to estimate projected cash flows, make long-term assumptions about inflation rates, determine our credit-adjusted, risk-free interest rates and determine market risk premiums that are appropriate for our operations and (v) given the magnitude of our estimated reclamation, mine closure and wellsite abandonment and restoration costs, changes in any or all of these estimates could have a significant impact on our results of operations.

Mineral Reserves

Recoverable proven and probable reserves are the part of a mineral deposit that can be economically and legally extracted or produced at the time of the reserve determination. The determination of reserves involves numerous uncertainties with respect to the ultimate geology of the ore bodies, including quantities, grades and recovery rates. Estimating the quantity and grade of mineral reserves requires us to determine the size, shape and depth of our ore bodies by analyzing geological data, such as samplings of drill holes, tunnels and other underground workings. In addition to the geology of our mines, assumptions are required to determine the economic feasibility of mining these reserves, including estimates of future commodity prices and demand, the mining methods we use and the related costs incurred to develop and mine our reserves. Our estimates of recoverable proven and probable mineral reserves are prepared by and are the responsibility of our employees. These estimates are reviewed and verified regularly by independent experts in mining, geology and reserve determination.

Our consolidated estimated recoverable proven and probable reserves shown below were assessed using long-term prices of $2.50 per pound for copper, $1,200 per ounce of gold and $10 per pound of molybdenum. The following table summarizes changes in our estimated consolidated recoverable proven and probable copper, gold and molybdenum reserves during 2020 and 2019:

	Copper[a] (billion pounds)	Gold (million ounces)	Molybdenum (billion pounds)
Consolidated reserves at December 31, 2018	119.6	30.8	3.78
Net revisions	(0.4)	(0.3)	(0.11)
Production	(3.2)	(0.9)	(0.09)
Consolidated reserves at December 31, 2019	116.0	29.6	3.58
Net additions	0.4	0.2	0.21
Production	(3.2)	(0.9)	(0.08)
Consolidated reserves at December 31, 2020	113.2	28.9	3.71

a. Includes estimated recoverable metals contained in stockpiles. See below for additional discussion of recoverable copper in stockpiles.

Refer to Note 17 and "Risk Factors" contained in Part I, Item 1A. of our annual report on Form 10-K for the year ended December 31, 2020, for further information regarding, and risks associated with, our estimated recoverable proven and probable mineral reserves.

As discussed in Note 1, we depreciate our life-of-mine mining and milling assets and values assigned to proven and probable mineral reserves using the unit-of-production (UOP) method based on our estimated recoverable proven and probable mineral reserves. Because the economic assumptions used to estimate mineral reserves may change from period to period and additional geological data is generated during the course of operations, estimates of reserves may change, which could have a significant impact on our results of operations, including changes to prospective depreciation rates and impairments of long-lived asset carrying values. Based on projected copper sales volumes, if estimated copper reserves at our mines were 10 percent higher at December 31, 2020, we estimate that our annual depreciation, depletion and amortization (DD&A) expense for 2021 would decrease by $84 million ($44 million to net income attributable to common stock), and a 10 percent decrease in copper reserves

would increase DD&A expense by $103 million ($53 million to net income attributable to common stock). We perform annual assessments of our existing assets in connection with the review of mine operating and development plans. If it is determined that assigned asset lives do not reflect the expected remaining period of benefit, any change could affect prospective DD&A rates.

As discussed below and in Note 1, we review and evaluate our long-lived assets for impairment when events or changes in circumstances indicate that the related carrying amount of such assets may not be recoverable, and changes to our estimates of recoverable proven and probable mineral reserves could have an impact on our assessment of asset recoverability.

Recoverable Copper in Stockpiles
We record, as inventory, applicable costs for copper contained in mill and leach stockpiles that are expected to be processed in the future based on proven processing technologies. Mill and leach stockpiles are evaluated periodically to ensure that they are stated at the lower of weighted-average cost or net realizable value (refer to Note 4 and “Consolidated Results” for further discussion of inventory adjustments recorded for the three years ended December 31, 2020). Accounting for recoverable copper from mill and leach stockpiles represents a critical accounting estimate because (i) it is impracticable to determine copper contained in mill and leach stockpiles by physical count, thus requiring management to employ reasonable estimation methods and (ii) recovery rates from leach stockpiles can vary significantly. Refer to Note 1 for further discussion of our accounting policy for recoverable copper in stockpiles.

At December 31, 2020, estimated consolidated recoverable copper was 1.7 billion pounds in leach stockpiles (with a carrying value of $2.0 billion) and 0.3 billion pounds in mill stockpiles (with a carrying value of $0.4 billion).

Impairment of Long-Lived Assets
As discussed in Note 1, we assess the carrying values of our long-lived mining assets when events or changes in circumstances indicate that the related carrying amounts of such assets may not be recoverable. In evaluating our long-lived mining assets for recoverability, we use estimates of pre-tax undiscounted future cash flows of our mines. Estimates of future cash flows are derived from current business plans, which are developed using near-term metal price forecasts reflective of the current price environment and management’s projections for long-term average metal prices. In addition to near- and long-term metal price assumptions, other key assumptions include estimates of commodity-based and other input costs; proven and probable mineral reserves estimates, including the timing and cost to develop and produce the reserves; value beyond proven and probable mineral reserve estimates (refer to Note 1); and the use of appropriate discount rates in the measurement of fair value. We believe our estimates and models used to determine fair value are similar to what a market participant would use. As quoted market prices are unavailable for our individual mining operations, fair value is determined through the use of after-tax discounted estimated future cash flows.

For the two years ended December 31, 2020, our evaluation of our long-lived mining assets did not result in any material impairments.

In addition to decreases in future metal price assumptions, other events that could result in future impairment of our long-lived mining assets include, but are not limited to, decreases in estimated recoverable proven and probable mineral reserves and any event that might otherwise have a material adverse effect on mine site production levels or costs. Refer to “Risk Factors” contained in Part I, Item 1A. of our annual report on Form 10-K for the year ended December 31, 2020.

CONSOLIDATED RESULTS

SUMMARY FINANCIAL DATA	Years Ended December 31, 2020		2019	
	(in millions, except per share amounts)			
Revenues[a,b]	$ 14,198	[c]	$ 14,402	[d]
Operating income[a,e,f,g]	$ 2,437	[h]	$ 1,091	
Net income (loss) from continuing operations[i,j,k]	$ 865	[c,l]	$ (192)	[m,n,o]
Net income (loss) attributable to common stock	$ 599		$ (239)	
Diluted net income (loss) per share attributable to common stock	$ 0.41		$ (0.17)	
Diluted weighted-average common shares outstanding	1,461		1,451	
Operating cash flows[p]	$ 3,017		$ 1,482	
Capital expenditures	$ 1,961		$ 2,652	
At December 31:				
Cash and cash equivalents	$ 3,657		$ 2,020	
Total debt, including current portion	$ 9,711		$ 9,826	

a. Refer to Note 16 for a summary of revenues and operating income by operating division.

b. Includes adjustments to embedded derivatives for provisionally priced concentrate and cathode sales (refer to Note 14).

c. Includes net charges totaling $62 million ($24 million to net income attributable to common stock or $0.02 per share), primarily associated with Cerro Verde tax matters and asset impairments, partly offset by net credits primarily associated with the sale of royalty assets. These net (charges) credits were recorded in revenues ($(7) million), production and delivery ($(48) million), interest expense ($(55) million) and in other expenses, net ($48 million).

d. Includes charges totaling $166 million ($91 million to net loss attributable to common stock or $0.06 per share), primarily associated with an unfavorable Indonesia Supreme Court ruling related to certain disputed PT-FI export duties (refer to Note 12).

e. Includes net gains on sales of assets totaling $473 million ($337 million to net income attributable to common stock or $0.23 per share) in 2020 and $417 million ($339 million to net loss attributable to common stock or $0.23 per share) in 2019. Refer to Note 2 and “Net Gain on Sales of Assets” below for further discussion.

f. The year 2020 includes net charges for adjustments to environmental obligations and related litigation reserves of $113 million ($113 million to net income attributable to common stock or $0.08 per share), primarily associated with a framework for the resolution of all current and future potential talc-related litigation ($132 million), partly offset by net favorable adjustments to environmental reserves ($19 million). The year 2019 includes net charges for adjustments to environmental obligations and related litigation reserves of $68 million ($68 million to net loss attributable to common stock or $0.05 per share).

g. Includes unfavorable metals inventory adjustments totaling $96 million ($94 million to net income attributable to common stock or $0.06 per share) for the year 2020 and $179 million ($144 million to net loss attributable to common stock or $0.10 per share) for the year 2019.

h. Includes charges totaling $258 million ($178 million to net income attributable to common stock or $0.12 per share) associated with (i) idle facility costs (Cerro Verde), contract cancellation and other charges directly related to the COVID-19 pandemic and (ii) our April 2020 revised operating plans (including employee separation costs) recorded in production and delivery ($202 million), depreciation, depletion and amortization ($32 million), selling, general and administrative ($16 million), and mining exploration and research ($8 million).

i. Includes after-tax net losses on early extinguishment and exchanges of debt totaling $100 million ($0.07 per share) in 2020 and $26 million ($0.02 per share) in 2019. Refer to Note 8 for further discussion.

j. Includes net tax credits (charges) of $15 million ($27 million net of noncontrolling interests or $0.02 per share) in 2020 and $(1) million ($34 million net of noncontrolling interests or $0.02 per share) in 2019. Refer to “Income Taxes” below for further discussion.

k. We defer recognizing profits on intercompany sales until final sales to third parties occur. Refer to “Operations - Smelting & Refining” for a summary of net impacts from changes in these deferrals.

l. Includes charges at PT-FI totaling $65 million ($47 million to net income attributable to common stock or $0.03 per share) associated with historical contested tax audits ($50 million) and currency exchange adjustments to value added tax receivables ($15 million). These charges were recorded in interest expense, net ($35 million) and other expenses, net ($30 million).

m. Includes net charges associated with disputed Cerro Verde royalties for prior years of $7 million to net loss attributable to common stock (less than $0.01 per share) in 2019. Net charges for the year 2019 consist of charges to production and delivery costs ($6 million) and interest expense ($10 million). Refer to Note 12 for further discussion.

n. Includes charges at PT-FI of $294 million ($288 million to net loss attributable to common stock or $0.20 per share) consisting of $234 million associated with PT-FI's historical contested tax disputes, $32 million for a currency exchange

adjustment to value-added tax receivables and $28 million for an adjustment to the settlement of the historical surface water tax matters with the local regional tax authority in Papua, Indonesia.

o. Includes net charges totaling $59 million ($26 million to net loss attributable to common stock or $0.02 per share), primarily associated with weather-related issues at El Abra, adjustments to Cerro Verde's deferred profit sharing and mining asset impairments, partly offset by net credits mostly for asset retirement obligation adjustments.

p. Working capital and other sources totaled $665 million in 2020 and $349 million in 2019.

	Years Ended December 31,	
	2020	2019
SUMMARY OPERATING DATA		
Copper (millions of recoverable pounds)		
Production	3,206	3,247
Sales, excluding purchases	3,202	3,292
Average realized price per pound	$ 2.95	$ 2.73
Site production and delivery costs per pound[a]	$ 1.88	$ 2.15
Unit net cash costs per pound[a]	$ 1.48	$ 1.74
Gold (thousands of recoverable ounces)		
Production	857	882
Sales, excluding purchases	855	991
Average realized price per ounce	$ 1,832	$ 1,415
Molybdenum (millions of recoverable pounds)		
Production	76	90
Sales, excluding purchases	80	90
Average realized price per pound	$ 10.20	$ 12.61

a. Reflects per pound weighted-average production and delivery costs and unit net cash costs (net of by-product credits) for all copper mines, before net noncash and other costs. For reconciliations of the per pound unit costs by operating division to production and delivery costs applicable to sales reported in our consolidated financial statements, refer to "Product Revenues and Production Costs."

Revenues

Consolidated revenues totaled $14.2 billion in 2020 and $14.4 billion in 2019. Our revenues primarily include the sale of copper concentrate, copper cathode, copper rod, gold in concentrate and molybdenum. Following is a summary of changes in our consolidated revenues from 2019 to 2020 (in millions):

Consolidated revenues - 2019	$	14,402
Mining operations:		
Lower sales volumes:		
Copper		(246)
Gold		(193)
Molybdenum		(124)
Higher (lower) averaged realized prices:		
Copper		704
Gold		356
Molybdenum		(194)
Adjustments for prior year provisionally priced copper sales		(160)
Lower revenues from sales of purchased copper		(239)
Lower cobalt revenues		(301)
Lower Atlantic Copper revenues		(31)
Lower treatment and refining charges		42
Lower royalties and export duties		77
Other, including intercompany eliminations		105
Consolidated revenues - 2020	$	14,198

Sales Volumes. Copper sales volumes were slightly lower in 2020, compared to 2019, primarily reflecting lower mining rates in South America associated with COVID-19 restrictions and our April 2020 revised operating plans, partly offset by higher ore grades in Indonesia. Lower gold sales volumes in 2020, compared to 2019, primarily

reflect lower mining and milling rates associated with the ramp-up of underground mining in Indonesia, partly offset by higher ore grades.

Lower molybdenum sales volumes in 2020, compared with 2019, primarily reflect lower by-product production from Cerro Verde associated with lower mining rates as a result of COVID-19 restrictions.

Refer to “Operations” for further discussion of sales volumes at our mining operations.

Realized Prices. Our consolidated revenues can vary significantly as a result of fluctuations in the market prices of copper, gold and molybdenum. In 2020, our average realized prices were 8 percent higher for copper, 29 percent higher for gold and 19 percent lower for molybdenum, compared with 2019.

Average realized copper prices include net favorable (unfavorable) adjustments to current year provisionally priced copper sales (i.e., provisionally priced sales for the years 2020 and 2019) totaling $361 million for 2020 and $(24) million for 2019. Refer to Note 14 for a summary of total adjustments to prior period and current period provisionally priced sales. As discussed below and in “Disclosures About Market Risks-Commodity Price Risk”, substantially all of our copper concentrate and cathode sales contracts provide final copper pricing in a specified future month (generally one to four months from the shipment date). We record revenues and invoice customers at the time of shipment based on then-current LME prices, which results in an embedded derivative on provisionally priced concentrate and cathode sales that is adjusted to fair value through earnings each period, using the period-end forward prices, until final pricing on the date of settlement. To the extent final prices are higher or lower than what was recorded on a provisional basis, an increase or decrease to revenues is recorded each reporting period until the date of final pricing. Accordingly, in times of rising copper prices, our revenues benefit from adjustments to the final pricing of provisionally priced sales pursuant to contracts entered into in prior periods; in times of falling copper prices, the opposite occurs. Average realized prices in 2020 also included reductions totaling $24 million related to forward sales contracts (refer to Note 14).

Prior Year Provisionally Priced Copper Sales. Net (unfavorable) favorable adjustments to prior years’ provisionally priced copper sales (i.e., provisionally priced copper sales at December 31, 2019 and 2018) recorded in consolidated revenues totaled $(102) million in 2020 and $58 million in 2019. Refer to “Disclosures About Market Risks-Commodity Price Risk” for further discussion of our provisionally priced copper sales, and to Note 14 for a summary of total adjustments to prior period and current period provisionally priced copper sales.

Cobalt Revenues. Lower cobalt revenues in 2020, compared with 2019, primarily reflect the sale of our cobalt refinery and related cobalt cathode precursor business in fourth-quarter 2019.

Purchased Copper. We purchase copper cathode primarily for processing by our Rod & Refining operations. Purchased copper volumes totaled 290 million pounds in 2020 and 379 million pounds in 2019.

Atlantic Copper Revenues. Atlantic Copper revenues totaled $2.0 billion in 2020 and $2.1 billion in 2019. Lower Atlantic Copper revenues in 2020, compared with 2019, primarily reflect lower gold sales volumes.

Treatment and Refining Charges. Revenues from our concentrate sales are recorded net of treatment charges (*i.e.,* fees paid to smelters that are generally negotiated annually), which will vary with the sales volumes and the price of copper.

Royalties and Export Duties. Royalties are primarily for sales from PT-FI and vary with the volume of metal sold and the prices of copper and gold. PT-FI will continue to pay export duties until development progress for the new smelter in Indonesia exceeds 50 percent. The year 2019 included charges totaling $166 million, primarily associated with an unfavorable Indonesia Supreme Court ruling related to certain disputed PT-FI export duties (refer to Note 12 for further discussion). Refer to Note 13 for a summary of PT-FI’s royalties and export duties.

Production and Delivery Costs

Consolidated production and delivery costs totaled $10.0 billion in 2020, compared with $11.5 billion in 2019. Lower consolidated production and delivery costs in 2020 primarily reflect lower mining and milling rates related to (i) the ramp-up of underground mining at PT-FI, (ii) our April 2020 revised operating plans in North America and South America and (iii) COVID-19 restrictions at our Cerro Verde mine in South America. Refer to Note 16 for details of production and delivery costs by operating segment.

Charges in 2020 include $202 million associated with the COVID-19 pandemic and revised operating plans (including employee separation costs).

Mining Unit Site Production and Delivery Costs

Site production and delivery costs for our copper mining operations primarily include labor, energy and commodity-based inputs, such as sulphuric acid, reagents, liners, tires and explosives. Consolidated unit site production and delivery costs (before net noncash and other costs) for our copper mines averaged $1.88 per pound of copper in 2020 and $2.15 per pound in 2019. Consolidated site production and delivery costs per pound of copper exclude certain charges associated with the COVID-19 pandemic and implementation of our April 2020 revised operating plans totaling $0.06 per pound of copper in 2020. Lower consolidated unit site production and delivery costs in 2020, compared with 2019, primarily reflect lower costs in Indonesia, North America and South America (for the same reasons discussed in the paragraph above). Refer to “Operations – Unit Net Cash Costs” for further discussion of unit net cash costs associated with our operating divisions, and to “Product Revenues and Production Costs” for reconciliations of per pound costs by operating division to production and delivery costs applicable to sales reported in our consolidated financial statements.

Our copper mining operations require significant amounts of energy, principally diesel, electricity, coal and natural gas, most of which is obtained from third parties under long-term contracts. Our take-or-pay contractual obligations for electricity totaled approximately $301 million at December 31, 2020. We do not have take-or-pay contractual obligations for other energy commodities. Energy represented approximately 16 percent of our copper mine site operating costs in 2020, including purchases of approximately 180 million gallons of diesel fuel; 7,500 gigawatt hours of electricity at our North America and South America copper mining operations (we generate all of our power at our Indonesia mining operation); 700 thousand metric tons of coal for our coal power plant in Indonesia; and 1 million MMBtu (million British thermal units) of natural gas at certain of our North America mines. Based on current cost estimates, energy will also approximate 18 percent of our copper mine site operating costs for 2021.

Depreciation, Depletion and Amortization

Depreciation will vary under the UOP method as a result of changes in sales volumes and the related UOP rates at our mining operations. Consolidated DD&A totaled $1.5 billion in 2020 and $1.4 billion in 2019. Higher DD&A in 2020, compared with 2019, primarily relates to assets placed in service associated with the ramp-up of underground mining at PT-FI.

Metals Inventory Adjustments

Unfavorable net realizable value metals inventory adjustments totaled $96 million in 2020 and $179 million in 2019. Metals inventory adjustments in 2020 were related to volatility in copper and molybdenum prices. Metals inventory adjustments in 2019 were mostly related to volatility in copper and cobalt prices.

Selling, General and Administrative expenses

Selling, general and administrative expenses totaled $370 million in 2020 and $394 million in 2019. During second-quarter 2020, we implemented a series of actions to reduce administrative and centralized support costs in conjunction with our April 2020 revised operating plans, including a temporary reduction in certain employee benefits, furloughs and an employee separation program, and reductions in third party service costs, facilities costs, travel and other expenses. As part of the cost savings initiatives, the Board approved a 25 percent reduction in the salary of each of our Chief Executive Officer (CEO) and Chief Financial Officer (CFO) through the end of 2020. Our CEO and CFO also agreed to forgo substantially all of their reduced cash salary during 2020, which was substituted with an award of restricted stock units that vested at the end of 2020.

Mining Exploration and Research Expenses

Consolidated exploration and research expenses for our mining operations totaled $50 million in 2020 and $104 million in 2019. Lower consolidated exploration and research expenses in 2020, compared to 2019, reflect a significant reduction in exploration and research activities associated with our April 2020 revised operating plans. Exploration spending is expected to approximate $34 million in 2021, consistent with 2020.

Environmental Obligations and Shutdown Costs

Environmental obligation costs reflect net revisions to our long-term environmental obligations, which vary from period to period because of changes to environmental laws and regulations, the settlement of environmental matters and/or circumstances affecting our operations that could result in significant changes in our estimates (refer to “Critical Accounting Estimates – Environmental Obligations” for further discussion). Shutdown costs include care-

and-maintenance costs and any litigation, remediation or related expenditures associated with closed facilities or operations.

Net charges for environmental obligations and shutdown costs totaled $159 million in 2020 and $105 million in 2019. The year 2020 includes talc-related litigation charges of $132 million, primarily associated with a framework for the resolution of all current and future potential talc-related litigation, partly offset by $19 million of net favorable adjustments to environmental reserves. Refer to Note 12 for environmental obligations and litigation matters.

Net Gain on Sales of Assets

Net gain on sales of assets totaled $473 million in 2020, primarily associated with the sale of our interests in the Kisanfu undeveloped exploration project located in the Democratic Republic of Congo (DRC), and $417 million in 2019, primarily including $343 million associated with the sale of our interest in the lower zone of the Timok exploration project in Serbia and $59 million associated with the sale of our cobalt refinery in Kokkola, Finland, and related cobalt cathode precursor business.

Refer to Note 2 for further discussion of dispositions.

Interest Expense, Net

Consolidated interest costs (before capitalization and excluding interest expense associated with international tax matters) totaled $655 million in 2020 and $675 million in 2019. Refer to Note 8 for further discussion of our 2020 debt transactions. Interest expense associated with PT-FI's historical contested tax disputes totaled $35 million in 2020 and $78 million in 2019. Interest expense associated with South America tax matters totaled $61 million in 2020 and $10 million in 2019.

Capitalized interest varies with the level of expenditures for our development projects and average interest rates on our borrowings, and totaled $147 million in 2020 and $149 million in 2019. Refer to "Operations" and "Capital Resources and Liquidity – Investing Activities" for further discussion of current development projects.

Other Income (Expense), Net

Other income (expense), net, totaled $59 million in 2020 and $(138) million in 2019. The year 2020 included the sale of royalty interests and other net credits. The year 2019 included charges at PT-FI totaling $188 million associated with historical contested tax disputes (refer to Note 11) and a currency exchange adjustment to value-added tax receivables.

Income Taxes

Following is a summary of the approximate amounts used in the calculation of our consolidated income tax provision from continuing operations for the years ended December 31 (in millions, except percentages):

	2020			2019		
	Income (Loss)[a]	Effective Tax Rate	Income Tax (Provision) Benefit	Income (Loss)[a]	Effective Tax Rate	Income Tax (Provision) Benefit
U.S.[b]	$ (532)	11%	$ 60 [c]	$ (277)	N/A	$ — [d,e]
South America	466	51%	(239) [f]	497	48%	(241)
Indonesia	1,342	45%	(608) [g]	340	44%	(149) [h]
Gain on sale of Kisanfu	486	N/A	(135)	—	N/A	—
PT-FI historical contested tax disputes[i]	(44)	5%	2	(201)	(39)%	(78)
PT-FI export duty matter	—	N/A	—	(155) [j]	31%	48
Adjustment to deferred taxes	—	N/A	—	—	N/A	(49) [k]
Cerro Verde royalty dispute	—	N/A	—	(16)	N/A	2 [l]
Eliminations and other	79	N/A	(24)	118	N/A	(43)
Consolidated	$ 1,797	53% [m]	$ (944)	$ 306	(167)%	$ (510)

a. Represents income (loss) from continuing operations by geographic location before income taxes and equity in affiliated companies' net earnings.

b. In addition to our North America mining operations, the U.S. jurisdiction reflects corporate-level expenses, which include interest expense associated with senior notes, general and administrative expenses, and environmental obligations and shutdown costs.

c. Includes tax credits of $53 million associated with the reversal of the tax charge discussed in footnote e below and $6 million associated with the removal of a valuation allowance on deferred tax assets.

d. Includes tax credits of $29 million associated with adjustments to the calculation of transition tax related to U.S. tax reform and $24 million associated with state law changes and the settlement of state income tax examinations.

e. Includes a tax charge of $53 million associated with the sale of our interest in the lower zone of the Timok exploration project in Serbia.

f. Includes tax charges at Cerro Verde of $15 million ($8 million net of noncontrolling interest) primarily associated with adjustments to profit sharing for prior years.

g. Includes tax charges of $21 million ($17 million net of noncontrolling interests) associated with establishing a tax reserve related to the treatment of prior year contractor support costs and $8 million ($7 million net of noncontrolling interest) associated with an unfavorable 2012 Indonesia Supreme Court ruling.

h. Includes a tax charge of $5 million ($4 million net of noncontrolling interests) primarily for non-deductible penalties related to PT-FI's surface water tax settlement.

i. Refer to Note 11 for further discussion of a framework for resolution of these historical contested tax disputes.

j. Refer to Note 12 for further discussion of the unfavorable Indonesia Supreme Court ruling related to certain disputed PT-FI export duties.

k. Includes net tax charges totaling $49 million ($15 million net of noncontrolling interests) primarily to adjust deferred taxes on historical balance sheet items in accordance with tax accounting principles.

l. Refer to Note 12 for a summary of charges related to Cerro Verde's disputed royalties for prior years.

m. Our consolidated effective income tax rate is a function of the combined effective tax rates for the jurisdictions in which we operate, excluding the U.S. jurisdiction.

Assuming achievement of current sales volume and cost estimates and average prices of $3.50 per pound for copper, $1,850 per ounce for gold and $9.00 per pound for molybdenum for 2021, we estimate our consolidated effective tax rate for the year 2021 would approximate 35 percent. Changes in projected sales volumes and average prices during 2021 would incur tax impacts at estimated effective rates of 38 percent for Indonesia, 39 percent for Peru and 0 percent for the U.S.

Variations in the relative proportions of jurisdictional income result in fluctuations to our consolidated effective income tax rate. Because of our U.S. tax position, we do not record a financial statement impact for income or losses generated in the U.S.

Refer to Note 11 for further discussion of income taxes.

OPERATIONS

During 2020, we announced our commitment to the Copper Mark. The Copper Mark is a new, comprehensive assurance framework that demonstrates the industry's responsible production practices and contribution to the United Nations Sustainable Development Goals. It is the first and only framework developed specifically for the copper industry and enables each site to demonstrate to customers, investors and other stakeholders their responsible production performance. Four of our sites were awarded the Copper Mark in 2020 (Cerro Verde, El Abra, Miami and the Atlantic Copper smelter). We have future plans to validate all of our remaining copper operating sites against the Copper Mark requirements.

During 2020, we continued to advance innovation initiatives designed to enhance productivity, expand margins and reduce the capital intensity of our business through the utilization of new technology applications in combination with a more interactive operating structure. We were successful in implementing and embedding many of these initiatives across our operations by utilizing data science, machine learning and integrated cross-functional agile teams to identify opportunities and drive improved overall performance.

North America Copper Mines

We operate seven open-pit copper mines in North America – Morenci, Bagdad, Safford (including Lone Star), Sierrita and Miami in Arizona, and Chino and Tyrone in New Mexico. All of the North America mining operations are wholly owned, except for Morenci. We record our 72 percent undivided joint venture interest in Morenci using the proportionate consolidation method.

The North America copper mines include open-pit mining, sulfide ore concentrating, leaching and solution extraction/electrowinning (SX/EW) operations. A majority of the copper produced at our North America copper mines

is cast into copper rod by our Rod & Refining segment. The remainder of our North America copper production is sold as copper cathode or copper concentrate, a portion of which is shipped to Atlantic Copper (our wholly owned smelter). Molybdenum concentrate, gold and silver are also produced by certain of our North America copper mines.

Operating and Development Activities. Our North America operating sites continue to focus on strong execution of operating plans. Production from the Lone Star ore body at Safford where we completed development in 2020 continues to ramp-up on schedule and is expected to exceed 200 million pounds of copper for the year 2021. Our plan is to advance studies for potential expansions and long-term development options for the large-scale sulfide resources at Lone Star.

After shutting down mining activities in accordance with our April 2020 revised operating plans, in January 2021, we restarted mining activities at the Chino mine at a reduced rate of approximately 100 million pounds of copper per year (approximately 50 percent of capacity).

We have substantial resources in the U.S., primarily associated with existing mining operations, and will continue to assess options for further growth.

Operating Data. Following is summary operating data for the North America copper mines for the years ended December 31:

	2020	2019
Operating Data, Net of Joint Venture Interests		
Copper (millions of recoverable pounds)		
Production	1,418	1,457
Sales, excluding purchases	1,422	1,442
Average realized price per pound	$ 2.82 [a]	$ 2.74
Molybdenum (millions of recoverable pounds)		
Production[b]	33	32
100% Operating Data		
Leach operations		
Leach ore placed in stockpiles (metric tons per day)	714,300	750,900
Average copper ore grade (percent)	0.27	0.23
Copper production (millions of recoverable pounds)	1,047	993
Mill operations		
Ore milled (metric tons per day)	279,700	326,100
Average ore grade (percent):		
Copper	0.35	0.34
Molybdenum	0.02	0.02
Copper recovery rate (percent)	84.1	87.0
Copper production (millions of recoverable pounds)	647	748

a. Includes reductions to average realized prices of $0.02 per pound of copper related to forward sales contracts covering 150 million pounds of copper sales for May and June 2020 at a fixed price of $2.34 per pound. There are no remaining forward sales contracts.

b. Refer to “Consolidated Results” for our consolidated molybdenum sales volumes, which include sales of molybdenum produced at the North America copper mines.

Copper sales volumes from our North America copper mines totaled 1.4 billion pounds in 2020 and 2019. North America copper sales are estimated to approximate 1.5 billion pounds in 2021. Refer to “Outlook” for projected molybdenum sales volumes.

Unit Net Cash Costs. Unit net cash costs per pound of copper is a measure intended to provide investors with information about the cash-generating capacity of our mining operations expressed on a basis relating to the primary metal product for our respective operations. We use this measure for the same purpose and for monitoring operating performance by our mining operations. This information differs from measures of performance determined in accordance with U.S. GAAP and should not be considered in isolation or as a substitute for measures of performance determined in accordance with U.S. GAAP. This measure is presented by other metals mining companies, although our measure may not be comparable to similarly titled measures reported by other companies.

Gross Profit per Pound of Copper and Molybdenum

The following table summarizes unit net cash costs and gross profit per pound of copper at our North America copper mines for the two years ended December 31, 2020. Refer to "Product Revenues and Production Costs" for an explanation of the "by-product" and "co-product" methods and a reconciliation of unit net cash costs per pound to production and delivery costs applicable to sales reported in our consolidated financial statements.

	2020			2019		
	By-Product Method	Co-Product Method		By-Product Method	Co-Product Method	
		Copper	Molybdenum[a]		Copper	Molybdenum[a]
Revenues, excluding adjustments	$ 2.82 [b]	$ 2.82	$ 8.62	$ 2.74	$ 2.74	$ 11.51
Site production and delivery, before net noncash and other costs shown below	1.90	1.78	6.84	2.05	1.88	9.29
By-product credits	(0.19)	—	—	(0.24)	—	—
Treatment charges	0.10	0.10	—	0.11	0.11	—
Unit net cash costs	1.81	1.88	6.84	1.92	1.99	9.29
DD&A	0.25	0.23	0.56	0.24	0.21	0.72
Metals inventory adjustments	0.03	0.03	—	0.02	0.02	—
Noncash and other costs, net	0.10 [c]	0.10	0.09	0.08	0.07	0.29
Total unit costs	2.19	2.24	7.49	2.26	2.29	10.30
Revenue adjustments, primarily for pricing on prior period open sales	(0.02)	(0.02)	—	—	—	—
Gross profit per pound	$ 0.61	$ 0.56	$ 1.13	$ 0.48	$ 0.45	$ 1.21
Copper sales (millions of recoverable pounds)	1,420	1,420		1,441	1,441	
Molybdenum sales (millions of recoverable pounds)[a]			33			32

a. Reflects sales of molybdenum produced by certain of the North America copper mines to our molybdenum sales company at market-based pricing.

b. Includes reductions to average realized prices of $0.02 per pound of copper related to forward sales contracts covering 150 million pounds of copper sales for May and June 2020 at a fixed price of $2.34 per pound. There are no remaining forward sales contracts.

c. Includes charges totaling $0.02 per pound of copper, primarily associated with our April 2020 revised operating plans (including employee separation costs) and the COVID-19 pandemic (including health and safety costs).

Our North America copper mines have varying cost structures because of differences in ore grades and characteristics, processing costs, by-product credits and other factors. During 2020, average unit net cash costs (net of by-product credits) for the North America copper mines ranged from $1.61 per pound to $2.28 per pound at the individual mines and averaged $1.81 per pound. Lower average unit net cash costs (net of by-product credits) of $1.81 in 2020, compared with $1.92 per pound in 2019, primarily reflect the impact of our April 2020 revised operating plans, partly offset by lower by-product credits because of lower molybdenum prices.

Average unit net cash costs (net of by-product credits) for our North America copper mines are expected to approximate $1.86 per pound of copper in 2021, based on achievement of current sales volume and cost estimates and assuming an average molybdenum price of $9.00 per pound for the year 2021. The impact of price changes during 2021 on North America's average unit net cash costs for the year 2021 would approximate $0.05 per pound for each $2 per pound change in the average price of molybdenum.

South America Mining

We operate two copper mines in South America – Cerro Verde in Peru (in which we own a 53.56 percent interest) and El Abra in Chile (in which we own a 51 percent interest), which are consolidated in our financial statements.

South America mining includes open-pit mining, sulfide ore concentrating, leaching and SX/EW operations. Production from our South America mines is sold as copper concentrate or cathode under long-term contracts. Our South America mines also sell a portion of their copper concentrate production to Atlantic Copper. In addition to copper, the Cerro Verde mine produces molybdenum concentrate and silver.

Operating and Development Activities. During fourth-quarter 2020, Cerro Verde continued to increase milling rates to an average of 373,200 metric tons of ore per day while operating consistent with our April 2020 revised operating plans and under strict COVID-19 restrictions and protocols. We expect Cerro Verde's mill rates to average approximately 360,000 metric tons of ore per day in 2021 with the potential to ramp-up to pre-COVID-19 levels approximating 400,000 metric tons of ore per day as COVID-19 restrictions are lifted.

El Abra plans to increase operating rates during 2021 to pre-COVID-19 levels, subject to ongoing monitoring of public health conditions in Chile. Incremental copper production associated with increasing El Abra's stacking rates from 65,000 metric tons of ore per day to over 100,000 metric tons of ore per day, approximates 70 million pounds per year beginning in 2022.

We continue to evaluate a large-scale expansion at El Abra to process additional sulfide material and to achieve higher recoveries. El Abra's large sulfide resource could potentially support a major mill project similar to facilities constructed at Cerro Verde. Technical and economic studies continue to be evaluated to determine the optimal scope and timing for the project in parallel with extending the life of the current leaching operation.

Operating Data. Following is summary operating data for our South America mining operations for the years ended December 31.

	2020	2019
Copper (millions of recoverable pounds)		
Production	979	1,183
Sales	976	1,183
Average realized price per pound	$ 3.05	$ 2.71
Molybdenum (millions of recoverable pounds)		
Production[a]	19	29
Leach operations		
Leach ore placed in stockpiles (metric tons per day)	160,300	205,900
Average copper ore grade (percent)	0.35	0.37
Copper production (millions of recoverable pounds)	241	268
Mill operations		
Ore milled (metric tons per day)	331,600 [b]	393,100
Average ore grade (percent):		
Copper	0.34	0.36
Molybdenum	0.01	0.02
Copper recovery rate (percent)	84.3	83.5
Copper production (millions of recoverable pounds)	738	916

a. Refer to “Consolidated Results” for our consolidated molybdenum sales volumes, which include sales of molybdenum produced at Cerro Verde.

b. Cerro Verde mill operations were negatively impacted by COVID-19 restrictions.

Lower consolidated copper sales volumes from South America of 1.0 billion pounds in 2020, compared with 1.2 billion pounds in 2019, primarily reflect lower ore grades and mining rates associated with COVID-19 protocols at Cerro Verde and our April 2020 revised operating plans at El Abra, partly offset by higher recovery rates.

Copper sales from South America mines are expected to approximate 1.0 billion pounds in 2021, consistent with the year 2020. Refer to “Outlook” for projected molybdenum sales volumes.

Unit Net Cash Costs. Unit net cash costs per pound of copper is a measure intended to provide investors with information about the cash-generating capacity of our mining operations expressed on a basis relating to the primary metal product for our respective operations. We use this measure for the same purpose and for monitoring operating performance by our mining operations. This information differs from measures of performance determined in accordance with U.S. GAAP and should not be considered in isolation or as a substitute for measures of performance determined in accordance with U.S. GAAP. This measure is presented by other metals mining companies, although our measure may not be comparable to similarly titled measures reported by other companies.

Gross Profit per Pound of Copper

The following table summarizes unit net cash costs and gross profit per pound of copper at our South America mining operations for the two years ended December 31, 2020. Unit net cash costs per pound of copper are reflected under the by-product and co-product methods as the South America mining operations also had sales of molybdenum and silver. Refer to "Product Revenues and Production Costs" for an explanation of the "by-product" and "co-product" methods and a reconciliation of unit net cash costs per pound to production and delivery costs applicable to sales reported in our consolidated financial statements.

	2020		2019	
	By-Product Method	Co-Product Method	By-Product Method	Co-Product Method
Revenues, excluding adjustments	$ 3.05	$ 3.05	$ 2.71	$ 2.71
Site production and delivery, before net noncash and other costs shown below	1.86	1.74	1.85	1.68
By-product credits	(0.17)	—	(0.27)	—
Treatment charges	0.15	0.15	0.18	0.18
Royalty on metals	0.01	0.01	0.01	0.01
Unit net cash costs	1.85	1.90	1.77	1.87
DD&A	0.43	0.41	0.40	0.36
Noncash and other costs, net	0.13 [a]	0.12	0.08	0.07
Total unit costs	2.41	2.43	2.25	2.30
Revenue adjustments, primarily for pricing on prior period open sales	(0.07)	(0.07)	0.03	0.03
Gross profit per pound	$ 0.57	$ 0.55	$ 0.49	$ 0.44
Copper sales (millions of recoverable pounds)	976	976	1,183	1,183

a. Includes charges totaling $0.09 per pound of copper, primarily associated with idle facility (Cerro Verde) and contract cancellation costs related to the COVID-19 pandemic, and employee separation costs associated with our April 2020 revised operating plans.

Our South America mines have varying cost structures because of differences in ore grades and characteristics, processing costs, by-product credits and other factors. Higher average unit net cash costs (net of by-product credits) of $1.85 per pound of copper in 2020, compared with $1.77 per pound in 2019, primarily reflected lower sales volumes and by-product credits, partly offset by lower mining rates.

Revenues from Cerro Verde's concentrate sales are recorded net of treatment charges, which will vary with Cerro Verde's sales volumes and the price of copper.

Because certain assets are depreciated on a straight-line basis, South America's unit depreciation rate may vary with asset additions and the level of copper production and sales. DD&A per pound of copper under the by-product method was $0.43 in 2020, compared with $0.40 in 2019, primarily reflecting lower sales volumes.

Revenue adjustments primarily result from changes in prices on provisionally priced copper sales recognized in prior periods. Refer to "Consolidated Results - Revenues" for further discussion of adjustments to prior period provisionally priced copper sales.

Average unit net cash costs (net of by-product credits) for our South America mines are expected to approximate $1.92 per pound of copper in 2021, based on current sales volume and cost estimates and assuming average prices of $9.00 per pound of molybdenum for the year 2021.

Indonesia Mining

PT-FI's assets include one of the world's largest copper and gold deposits at the Grasberg minerals district in Papua, Indonesia. PT-FI produces copper concentrate that contains significant quantities of gold and silver. We have a 48.76 percent interest in PT-FI and manage its mining operations. As further discussed in Note 2, under the terms of the shareholders agreement, our economic interest in PT-FI approximates 81 percent through 2022. PT-FI's results are consolidated in our financial statements.

Substantially all of PT-FI's copper concentrate is sold under long-term contracts. During 2020, 50 percent of PT-FI's copper concentrate was sold to PT Smelting (PT-FI's 25-percent-owned smelter and refinery in Gresik, Indonesia).

As noted below, PT-FI is discussing the potential expansion of the capacity at PT Smelting, which is expected to result in an increase in PT-FI's ownership interest in PT Smelting.

Operating and Development Activities. The ramp-up of underground production at the Grasberg minerals district in Indonesia continues to advance on schedule. During 2020, a total of 206 new drawbells were added at the Grasberg Block Cave and DMLZ underground mines, bringing cumulative open drawbells to over 370. Combined average production from the Grasberg Block Cave and DMLZ mines approximated 85,000 metric tons of ore per day during fourth-quarter 2020 (including approximately 95,000 metric tons of ore per day during the month of December). According to the current ramp-up schedule, average production rates at the Grasberg Block Cave and DMLZ are expected to continue to accelerate, with combined average production rates expected to reach approximately 172,000 metric tons of ore per day in 2022 and 200,000 metric tons of ore per day in 2023. PT-FI expects production for the year 2021 to approximate 1.4 billion pounds of copper and 1.4 million ounces of gold, which is nearly double 2020 levels.

The successful completion of this ramp-up is expected to enable PT-FI to generate average annual production for the next several years of 1.55 billion pounds of copper and 1.6 million ounces of gold at an attractive unit net cash cost, providing significant margins and cash flows.

PT-FI's estimated annual capital spending on underground mine development projects is expected to average approximately $0.9 billion per year for the two-year period 2021 through 2022, net of scheduled contributions from PT Indonesia Asahan Aluminium (Persero) (PT Inalum, also known as MIND ID). In accordance with applicable accounting guidance, aggregate costs (before scheduled contributions from PT Inalum), which are expected to average $1.1 billion per year for the two-year period 2021 through 2022, will be reflected as an investing activity in FCX's cash flow statement, and contributions from PT Inalum will be reflected as a financing activity.

Indonesia Smelter. In connection with the extension of PT-FI's mining rights from 2031 to 2041, PT-FI committed to construct a new smelter in Indonesia by December 21, 2023 (an extension of which has been requested as a result of the COVID-19 pandemic). A potential site for the new smelter has been selected in East Java, and ground preparation is advancing. Engineering and front-end engineering and design for the selected process technology are in progress.

As a result of COVID-19 mitigation measures, there have been disruptions to work and travel schedules of international contractors and restrictions on access to the proposed physical site of the new smelter in East Java. PT-FI continues to discuss with the Indonesia government a deferred schedule for the new smelter as well as other alternatives in light of the ongoing COVID-19 pandemic and volatile global economic conditions. On January 7, 2021, the Indonesia government levied an administrative fine of $149 million on PT-FI for failing to achieve physical development progress on the new smelter as of July 31, 2020. PT-FI does not believe an administrative fine is warranted. Refer to Note 12 and Item 1A. "Risk Factors" for further discussion.

PT-FI and PT Inalum have been discussing with the Indonesia government alternatives to PT-FI's commitment to build a new smelter. In connection with exploring alternatives to its commitment to develop additional smelter capacity in Indonesia, PT-FI has advanced discussions with the majority owner of PT Smelting regarding an expansion of the smelter to increase smelter concentrate treatment capacity by approximately 30 percent (300,000 metric tons of concentrate per year). Commercial and financial arrangements for this potential project are being advanced and engineering is in progress. The initial estimate for the cost of the expansion of PT Smelting is $250 million, which is expected to be funded by PT-FI as a convertible loan.

An expansion of PT Smelting is expected to reduce PT-FI's smelter development commitment from 2.0 million metric tons of concentrate per year to 1.7 million metric tons per year.

While PT-FI continues to evaluate the new greenfield smelter project in East Java, it is also advancing discussions in parallel with a third party to develop the new smelter capacity at an alternate location in partnership with PT-FI.

The preliminary capital cost estimate for the new smelter in East Java approximates $3 billion, pending completion of final engineering. PT-FI had capitalized costs for the new smelter totaling $216 million as of December 31, 2020. Estimated related capital expenditures for 2021 approximate $0.1 billion. PT-FI plans to arrange financing for the project and debt service will be shared by PT-FI's shareholders according to their respective equity ownership percentages. As a result, our future distributions from PT-FI will incorporate approximately 49 percent of the smelter debt service.

Operating Data. Following is summary operating data for our Indonesia mining operations for the years ended December 31.

	2020	2019
Operating Data		
Copper (millions of recoverable pounds)		
Production	809	607
Sales	804	667
Average realized price per pound	$ 3.08	$ 2.72
Gold (thousands of recoverable ounces)		
Production	848	863
Sales	842	973
Average realized price per ounce	$ 1,832	$ 1,416
100% Operating Data		
Ore milled (metric tons per day):		
Grasberg Block Cave underground mine[a]	30,800	8,600
DMLZ underground mine[a]	28,600	9,800
DOZ underground mine[a]	20,900	25,500
Big Gossan underground mine[a]	7,000	6,100
Grasberg open pit[b]	400	60,100
Total	87,700	110,100
Average ore grade:		
Copper (percent)	1.32	0.84
Gold (grams per metric ton)	1.10	0.93
Recovery rates (percent):		
Copper	91.9	88.4
Gold	78.1	75.0
Production (recoverable):		
Copper (millions of pounds)	809	607
Gold (thousands of ounces)	848	863

a. Reflects ore extracted, including ore from development activities that result in metal production.

b. Includes ore from related stockpiles.

Higher consolidated copper sales of 0.8 billion pounds in 2020, compared with 0.7 billion pounds in 2019, primarily reflect higher copper ore grades, partly offset by lower mining rates as underground mining ramps up. Lower consolidated gold sales of 0.8 million ounces of gold in 2020, compared with 1.0 million ounces of gold in 2019, primarily reflect lower mining rates as underground mining ramps up, partly offset by higher gold ore grades.

Consolidated sales volumes from PT-FI are expected to approximate 1.3 billion pounds of copper and 1.3 million ounces of gold in 2021.

Unit Net Cash Costs. Unit net cash costs per pound of copper is a measure intended to provide investors with information about the cash-generating capacity of our mining operations expressed on a basis relating to the primary metal product for our respective operations. We use this measure for the same purpose and for monitoring operating performance by our mining operations. This information differs from measures of performance determined in accordance with U.S. GAAP and should not be considered in isolation or as a substitute for measures of performance determined in accordance with U.S. GAAP. This measure is presented by other metal mining companies, although our measure may not be comparable to similarly titled measures reported by other companies.

Gross Profit per Pound of Copper and per Ounce of Gold

The following table summarizes the unit net cash costs and gross profit per pound of copper and per ounce of gold at our Indonesia mining operations for the two years ended December 31, 2020. Refer to "Product Revenues and Production Costs" for an explanation of "by-product" and "co-product" methods and a reconciliation of unit net cash costs per pound to production and delivery costs applicable to sales reported in our consolidated financial statements.

	2020			2019		
	By-Product Method	Co-Product Method		By-Product Method	Co-Product Method	
		Copper	Gold		Copper	Gold
Revenues, excluding adjustments	$ 3.08	$ 3.08	$ 1,832	$ 2.72	$ 2.72	$ 1,416
Site production and delivery, before net noncash and other costs shown below	1.88	1.13	674	2.91	1.63	849
Gold and silver credits	(2.03)	—	—	(2.13)	—	—
Treatment charges	0.27	0.17	98	0.26	0.14	75
Export duties	0.12	0.07	41	0.08	0.05	25
Royalty on metals	0.19	0.11	72	0.16	0.09	49
Unit net cash costs	0.43	1.48	885	1.28	1.91	998
DD&A	0.72	0.43	259	0.61	0.34	178
Metals inventory adjustments	—	—	—	0.01	0.01	—
Noncash and other costs, net	0.11 [a]	0.07	41	0.37 [b]	0.20	110
Total unit costs	1.26	1.98	1,185	2.27	2.46	1,286
Revenue adjustments, primarily for pricing on prior period open sales	(0.03)	(0.03)	5	0.03	0.03	2
PT Smelting intercompany loss	(0.01)	(0.01)	(5)	(0.02)	(0.02)	(8)
Gross profit per pound/ounce	$ 1.78	$ 1.06	$ 647	$ 0.46	$ 0.27	$ 124
Copper sales (millions of recoverable pounds)	804	804		667	667	
Gold sales (thousands of recoverable ounces)			842			973

a. Includes COVID-19 related costs (including one-time incremental employee benefits and health and safety costs) totaling $0.02 per pound of copper.

b. Includes charges in revenues totaling $0.25 per pound of copper primarily associated with an unfavorable Indonesia Supreme Court ruling related to certain disputed PT-FI export duties, partly offset by adjustments to prior year treatment charges totaling $0.03 per pound of copper. Also includes charges of $0.04 per pound of copper associated with adjustments to the settlement of the historical surface water tax disputes with the local regional tax authority in Papua, Indonesia.

A significant portion of PT-FI's costs are fixed and unit costs vary depending on volumes and other factors. PT-FI's unit net cash costs (including gold and silver credits) of $0.43 per pound of copper in 2020, were lower than unit net cash credits of $1.28 per pound in 2019, primarily reflecting higher copper sales volumes and lower mining costs.

Treatment charges vary with the volume of metals sold and the price of copper, and royalties vary with the volume of metals sold and the prices of copper and gold.

PT-FI's export duties totaled $93 million in 2020 and $56 million in 2019, and PT-FI's royalties totaled $153 million in 2020 and $107 million in 2019. PT-FI will continue to pay export duties until development progress for the new smelter in Indonesia exceeds 50 percent. Refer to Note 13 for further discussion of PT-FI's export duties and royalties.

Because certain assets are depreciated on a straight-line basis, PT-FI's unit depreciation rate may vary with asset additions and the level of copper production and sales. DD&A per pound of copper under they by-product method was $0.72 in 2020, compared with $0.61 in 2019, primarily reflecting underground development assets placed in service.

Revenue adjustments primarily result from changes in prices on provisionally priced copper sales recognized in prior periods. Refer to "Consolidated Results - Revenues" for further discussion of adjustments to prior period provisionally priced copper sales.

PT Smelting intercompany loss represents the change in the deferral of 25 percent of PT-FI's profit on sales to PT Smelting. Refer to "Operations - Smelting & Refining" below for further discussion.

Assuming an average gold price of $1,850 per ounce for 2021 and achievement of current sales volume and cost estimates, unit net cash costs (including gold and silver credits) for PT-FI are expected to approximate $0.06 per pound of copper for the year 2021. The impact of price changes during 2021 on PT-FI's average unit net cash costs would approximate $0.09 per pound for each $100 per ounce change in the average price of gold.

PT-FI's projected sales volumes and unit net cash costs for the year 2021 are dependent on a number of factors, including continued progress of the ramp-up of underground mining, operational performance, timing of shipments and the Indonesia government's extension of PT-FI's export permit. In March 2020, PT-FI received a one-year extension of its export license through March 15, 2021. Refer to Note 12 and Item 1A. "Risk Factors" for a discussion of the administrative fine levied by the Indonesia government on PT-FI for failing to achieve physical development progress on the new smelter and ongoing discussions with the Indonesia government regarding a deferred schedule for the completion of the new smelter project as well as other alternatives in light of the ongoing COVID-19 pandemic and volatile global economic conditions

Molybdenum Mines
We have two wholly owned molybdenum mines in Colorado – the Henderson underground mine and the Climax open-pit mine. The Henderson and Climax mines produce high-purity, chemical-grade molybdenum concentrate, which is typically further processed into value-added molybdenum chemical products. The majority of the molybdenum concentrate produced at the Henderson and Climax mines, as well as from our North America and South America copper mines, is processed at our own conversion facilities.

Operating and Development Activities. Production from the Molybdenum mines totaled 24 million pounds of molybdenum in 2020 and 29 million pounds in 2019. The decrease in 2020, compared with 2019, primarily reflected lower operating rates pursuant to our April 2020 revised operating plans in response to market conditions. Refer to "Consolidated Results" for our consolidated molybdenum operating data, which includes sales of molybdenum produced at our Molybdenum mines, and from our North America and South America copper mines, and refer to "Outlook" for projected consolidated molybdenum sales volumes.

Unit Net Cash Costs Per Pound of Molybdenum. Unit net cash costs per pound of molybdenum is a measure intended to provide investors with information about the cash-generating capacity of our mining operations expressed on a basis relating to the primary metal product for our respective operations. We use this measure for the same purpose and for monitoring operating performance by our mining operations. This information differs from measures of performance determined in accordance with U.S. GAAP and should not be considered in isolation or as a substitute for measures of performance determined in accordance with U.S. GAAP. This measure is presented by other metals mining companies, although our measure may not be comparable to similarly titled measures reported by other companies.

Unit net cash costs for our Molybdenum mines of $9.50 per pound of molybdenum in 2020 were lower than $10.80 per pound in 2019, primarily reflecting lower mining and input costs associated with our April 2020 revised operating plans. Average unit net cash costs for our Molybdenum mines do not include noncash and other costs, which include charges totaling $0.29 per pound of molybdenum primarily associated with our April 2020 revised operating plans (including employee separation costs) and contract cancellation costs related to the COVID-19 pandemic. Based on current sales volume and cost estimates, average unit net cash costs for the Molybdenum mines are expected to approximate $9.80 per pound of molybdenum for the year 2021. Refer to "Product Revenues and Production Costs" for a reconciliation of unit net cash costs per pound to production and delivery costs applicable to sales reported in our consolidated financial statements.

Smelting & Refining
We wholly own and operate a smelter in Arizona (Miami smelter), a refinery in Texas (El Paso refinery) and a smelter and refinery in Spain (Atlantic Copper). Additionally, PT-FI owns 25 percent of a smelter and refinery in Gresik, Indonesia (PT Smelting), which is expected to increase in connection with the potential expansion of PT Smelting. See "Indonesia Smelter" for additional information regarding the potential PT Smelting expansion. Treatment charges for smelting and refining copper concentrate consist of a base rate per pound of copper and per ounce of gold and are generally fixed. Treatment charges represent a cost to our mining operations and income to Atlantic Copper and PT Smelting. Thus, higher treatment charges benefit our smelter operations and adversely affect our mining operations. Our North America copper mines are less significantly affected by changes in

treatment charges because these operations are largely integrated with our Miami smelter and El Paso refinery. Through this form of downstream integration, we are assured placement of a significant portion of our concentrate production.

During 2019, we incurred charges totaling $38 million for a maintenance turnaround at the Miami smelter. The next major maintenance turnaround at the Miami smelter is scheduled for first-quarter 2021, for which we expect to incur charges of approximately $60 million.

Atlantic Copper smelts and refines copper concentrate and markets refined copper and precious metals in slimes. Following is an allocation of Atlantic Copper's concentrate purchases from unaffiliated third parties and our copper mining operations for the two years ended December 31, 2020:

	2020	2019
Third parties	79 %	73 %
North America copper mines	10	22
South America mining	7	2
Indonesia mining	4	3
	100 %	100 %

During 2019, we incurred charges totaling $16 million for a short-term maintenance turnaround at the Atlantic Copper smelter. The next major maintenance turnaround at the Atlantic Copper smelter is scheduled for second-quarter 2022.

Atlantic Copper has take-or-pay contractual obligations for the procurement of copper concentrate totaling $2.9 billion at December 31, 2020, that provide for deliveries of specified volumes at market-based prices.

PT-FI's contract with PT Smelting provides for PT-FI to supply 100 percent of the copper concentrate requirements (subject to a minimum or maximum treatment charge rate) necessary for PT Smelting to produce 205,000 metric tons of copper annually on a priority basis. PT-FI may also sell copper concentrate to PT Smelting at market rates for quantities in excess of 205,000 metric tons of copper annually. PT-FI supplied 74 percent of PT Smelting's concentrate requirements in 2020 and 90 percent in 2019. PT Smelting processed 50 percent of PT-FI's concentrate production in 2020 and 64 percent of such production in 2019 .

PT Smelting produced 276,900 metric tons of copper anode from its smelter and 273,000 metric tons of copper cathode from its refinery in 2020; and 246,100 metric tons of copper anode from its smelter and 241,200 metric tons of copper cathode from its refinery in 2019.

In January 2021, PT Smelting received a six-month extension of its anodes slimes export license, which currently expires July 18, 2021.

PT Smelting's maintenance turnarounds (which range from two weeks to a month to complete) typically are expected to occur approximately every two years, with short-term maintenance turnarounds in the interim. PT Smelting completed a 30-day maintenance turnaround during December 2020, and the next major turnaround is scheduled for the second half of 2022.

We defer recognizing profits on sales from our mining operations to Atlantic Copper and on 25 percent of PT-FI's sales to PT Smelting until final sales to third parties occur. Changes in these deferrals attributable to variability in intercompany volumes resulted in net (reductions) additions to operating income totaling $(7) million ($1 million to net income attributable to common stock) in 2020 and $(22) million ($(18) million to net loss attributable to common stock) in 2019. Our net deferred profits on our inventories at Atlantic Copper and PT Smelting to be recognized in future periods' net income attributable to common stock totaled $54 million at December 31, 2020. Quarterly variations in ore grades, the timing of intercompany shipments and changes in product prices will result in variability in our net deferred profits and quarterly earnings. We currently expect first-quarter 2021 results to reflect an increase in net deferred profits, totaling an approximate $50 million reduction to net income, associated with an anticipated increase in sales to Atlantic Copper as a result of the major maintenance turnaround at the Miami smelter noted above, which will be recognized in future periods as Atlantic Copper sells final refined products to third parties.

CAPITAL RESOURCES AND LIQUIDITY

During second-quarter 2020, we announced revised operating plans in response to the global COVID-19 pandemic and resulting negative impact on the global economy. The revised operating plans allowed us to maximize cash flow and protect liquidity and to preserve asset values in an uncertain economic environment.

Our consolidated operating cash flows vary with sales volumes; prices realized from copper, gold and molybdenum sales; production costs; income taxes; other working capital changes; and other factors. A large component of our production costs are related to energy. See “Consolidated Results” for further discussion of our energy requirements and related costs. We believe that we have a high-quality portfolio of long-lived copper assets positioned to generate long-term value. We recently completed the Lone Star copper leach project at our Safford operation in southeastern Arizona, and PT-FI has several projects in the Grasberg minerals district related to the development of its large-scale, long-lived, high-grade underground ore bodies. We are also evaluating other opportunities to enhance net present values, and we continue to consider future development of our copper resources, the timing of which will be dependent on market conditions. We believe that our cash generating capability and financial condition, together with our credit facility, will be adequate to meet our operating, investing and financing needs.

Subject to future commodity prices for copper, gold, and molybdenum, we expect estimated consolidated operating cash flows of $5.5 billion in 2021, plus available cash, to be sufficient to fund our capital expenditures of $2.3 billion in 2021, as well as projected spending on the new smelter in Indonesia and other cash requirements for the year, including common stock dividends and approximately $0.6 billion of noncontrolling interest distributions. Refer to “Outlook” for further discussion of projected operating cash flows and capital expenditures for 2021.

At December 31, 2020, we had $7.2 billion in liquidity, comprised of $3.7 billion in consolidated cash and $3.5 billion of availability under our revolving credit facility.

In connection with our financing activities in 2019 and 2020, we issued a total of $4.0 billion in new senior notes and used most of the net proceeds to purchase and redeem outstanding senior notes. As a result, we have extended our debt maturities and strengthened our financial flexibility. We have no significant scheduled debt maturities in 2021.

In February 2021, the Board reinstated a cash dividend on our common stock at an annual rate of $0.30 per share. The Board intends to declare a quarterly dividend of $0.075 per share, with the initial quarterly dividend expected to be paid on May 3, 2021. The Board also adopted a new financial policy for the allocation of cash flows aligned with our strategic objectives of maintaining a strong balance sheet, increasing cash returns to shareholders and advancing opportunities for future growth. Under the new policy, up to 50 percent of available cash flows generated after planned capital spending and distributions to noncontrolling interests would be allocated to shareholder returns and the balance to debt reduction and investments in value enhancing growth projects. The new payout policy will be implemented following achievement of a net debt (total consolidated debt less total consolidated cash and cash equivalents) target in the range of $3 billion to $4 billion, excluding project debt for additional smelter capacity in Indonesia. Under current market conditions and with continued strong execution of our plans, we currently expect to reach this target in early 2022 (refer to “Cautionary Statement”).

Cash

Following is a summary of the U.S. and international components of consolidated cash and cash equivalents available to the parent company, net of noncontrolling interests’ share, taxes and other costs at December 31, 2020 (in billions):

Cash at domestic companies	$	2.9
Cash at international operations		0.8
Total consolidated cash and cash equivalents		3.7
Noncontrolling interests’ share		(0.4)
Cash, net of noncontrolling interests’ share	$	3.3
Withholding taxes		— [a]
Net cash available	$	3.3

a. Rounds to less than $0.1 billion.

Cash held at our international operations is generally used to support our foreign operations’ capital expenditures, operating expenses, debt repayments, working capital or other cash needs. Management believes that sufficient

liquidity is available in the U.S. from cash balances and availability from our revolving credit facility. We have not elected to permanently reinvest earnings from our foreign subsidiaries, and we have recorded deferred tax liabilities for foreign earnings that are available to be repatriated to the U.S. From time to time, our foreign subsidiaries distribute earnings to the U.S. through dividends that are subject to applicable withholding taxes and noncontrolling interests' share.

Debt

At December 31, 2020, consolidated debt totaled $9.7 billion, with a related weighted-average interest rate of 4.6 percent. We had no borrowings, $10 million in letters of credit issued and approximately $3.5 billion available under our revolving credit facility at December 31, 2020. Refer to "Financing Activities" below and Note 8 for further discussion of debt.

In December 2020, Cerro Verde prepaid $0.3 billion on its Term Loan that was scheduled to mature in December 2021. The remaining balance of $0.5 billion matures in June 2022 (refer to Note 8).

In June 2020, we amended our revolving credit facility to provide additional flexibility on certain financial covenants. The key changes under the amendment include a suspension of the total leverage ratio through June 30, 2021, and a reduction in the interest expense coverage ratio to a minimum of 2.0x through December 31, 2021. We also agreed to a minimum liquidity covenant of $1 billion (consisting of consolidated unrestricted cash and availability under the revolving credit facility) applicable to each quarter through June 30, 2021, and additional restrictions on priority debt and liens, and on the payment of dividends through December 31, 2021. At December 31, 2020, we were in compliance with our revolving credit facility covenants.

As further discussed in Note 10, in February 2021, the Board reinstated a cash dividend on our common stock. Prior to the Board's declaration of the initial quarterly dividend, we will deliver a covenant reversion notice, at which time the financial covenants and other restrictions, including the dividend restriction, will revert to the limits applicable prior to the June 2020 amendment.

During 2020, we completed the sale of $2.8 billion of senior notes and used most of the net proceeds to purchase and redeem senior notes maturing in 2021, 2022, 2023 and 2024. The remaining net proceeds were used for general corporate purposes.

In August 2019, we completed the sale of $1.2 billion of senior notes and used the net proceeds to fund the make-whole redemption of all of our outstanding senior notes maturing in 2023, and the concurrent tender offers to purchase a portion of our senior notes maturing in 2021 and 2022.

For additional information regarding our debt arrangements, refer to Note 8.

Operating Activities

We generated consolidated operating cash flows of $3.0 billion in 2020 (including $0.7 billion from working capital and other sources) and $1.5 billion in 2019 (including $0.3 billion from working capital and other sources).

Higher operating cash flows for 2020, compared with 2019, primarily reflect higher copper prices, lower production and delivery costs associated with lower mining rates, and cost reductions associated with our April 2020 revised operating plans.

Investing Activities

Capital Expenditures. Capital expenditures, including capitalized interest, totaled $2.0 billion for the year 2020, including $1.2 billion for major projects primarily associated with underground development activities in the Grasberg minerals district and the now complete Lone Star copper leach project. Capital expenditures, including capitalized interest, totaled $2.7 billion for the year 2019, including $1.5 billion for major projects.

A large portion of the capital expenditures relate to projects that are expected to add significant production and cash flow in future periods, enabling us to continue to generate operating cash flows exceeding capital expenditures in future years. Refer to "Outlook" for further discussion of projected capital expenditures for 2021.

Proceeds from Sales of Assets. Proceeds from sales of assets totaled $0.7 billion for the year 2020, primarily related to the sale of Kisanfu, our undeveloped exploration project in the DRC ($550 million), contingent consideration associated with the 2016 sale of the Tenke Fungurume Mining assets in the DRC ($60 million), the

collection of proceeds related to the 2019 sale of the Timok exploration assets in Serbia ($45 million) and the sale of royalty assets ($31 million).

Proceeds from sales of assets totaled $0.6 billion for the year 2019, primarily associated with sales of (i) our interest in the lower zone of the Timok exploration project in Serbia, (ii) our cobalt refinery in Kokkola, Finland, and related cobalt cathode precursor business and (iii) interests in oil and gas properties, including $50 million in contingent consideration associated with the 2016 sale of onshore California oil and gas properties.
Refer to Note 2 for further discussion of acquisitions and dispositions.

Financing Activities
Debt Transactions. Net repayments of debt in 2020 totaled $0.2 billion, primarily reflecting the repayment of $0.3 billion under Cerro Verde's Term Loan.

Net repayments of debt in 2019 totaled $1.3 billion, primarily consisting of the redemption of $1.0 billion aggregate principal amount of our senior notes maturing in 2020 and the repayment of $200 million under the Cerro Verde Term Loan. Additionally, during 2019, we issued $1.2 billion in new senior notes and used the net proceeds to redeem and purchase senior notes maturing in 2021, 2022 and 2023.

Refer to Note 8 for further discussion of debt transactions.

Cash Dividends and Distributions Paid. We paid dividends on our common stock totaling $73 million in 2020 (associated with the $0.05 per share common stock cash dividend declared in December 2019) and $291 million in 2019.

As further discussed in Note 10, in February 2021, the Board reinstated a cash dividend on our common stock and also adopted a new financial policy for the allocation of cash flows aligned with our strategic objectives of maintaining a strong balance sheet, increasing cash returns to shareholders and advancing opportunities for future growth. The declaration and payment of future dividends is at the discretion of the Board and will be assessed on an ongoing basis, taking into account our financial results, cash requirements, future prospects, global economic conditions, and other factors deemed relevant by the Board.

There were no cash dividends or distributions paid to noncontrolling interests in 2020 and $82 million in 2019. These payments will vary based on the operating results and cash requirements of our consolidated subsidiaries.

Contributions from Noncontrolling Interests. We received equity contributions from PT Inalum for their share of capital spending on PT-FI underground mine development projects and costs for the new smelter in Indonesia totaling $156 million in 2020 and $165 million in 2019.

CONTINGENCIES

Environmental
The cost of complying with environmental laws is a fundamental and substantial cost of our business. At December 31, 2020, we had $1.6 billion recorded in our consolidated balance sheet for environmental obligations attributed to CERCLA or analogous state programs and for estimated future costs associated with environmental obligations that are considered probable based on specific facts and circumstances.

We incurred environmental capital expenditures and other environmental costs (including our joint venture partners' shares) to comply with applicable environmental laws and regulations that affect our operations totaling $0.3 billion in 2020 and $0.4 billion in 2019. For 2021, we expect to incur approximately $0.4 billion of aggregate environmental capital expenditures and other environmental costs. The timing and amount of estimated payments could change as a result of changes in regulatory requirements, changes in scope and timing of reclamation and plug and abandonment activities, the settlement of environmental matters and the rate at which actual spending occurs on continuing matters.

In August 2020, the co-conveners of the Global Tailings Review, which included the International Council on Mining and Metals (ICMM), an industry group of which we are a founding member, published the first Global Industry Standard on Tailings Management (the Tailings Standard). The Tailings Standard includes 77 requirements across 6 key areas including the design, construction, operation and monitoring of tailings facilities, management and governance, emergency response and long-term recovery, and public disclosure. ICMM has committed that

members will implement the Tailings Standard within three years for certain facilities and within five years for all others. ICMM members have prepared a guidance document focused on practices that drive safe tailings management and prepared a conformance protocol document to be used by companies on demonstrating implementation of the Tailings Standard; both documents are expected to be published in early 2021. As a member of ICMM, which has endorsed the Tailings Standard, we are moving toward implementation and have begun undertaking an extensive, multi-year analysis of our tailings facilities to ensure conformance with the Tailings Standard. We are assessing the costs of complying with the new Tailings Standard.

Refer to Note 12 and “Risk Factors” contained in Part I, Item 1A. of our annual report on Form 10-K for the year ended December 31, 2020, for further information about environmental regulation, including significant environmental matters.

Asset Retirement Obligations
We recognize AROs as liabilities when incurred, with the initial measurement at fair value. These obligations, which are initially estimated based on discounted cash flow estimates, are accreted to full value over time through charges to cost of sales. Mine reclamation costs for disturbances are recorded as an ARO and as a related asset retirement cost (ARC) (included in property, plant, equipment and mine development costs) in the period of disturbance. Oil and gas plugging and abandonment costs are recognized as an ARO and as a related ARC (included in oil and gas properties) in the period in which the well is drilled or acquired. For non-operating properties without reserves, changes to the ARO are recorded in earnings. Our cost estimates are reflected on a third-party cost basis and comply with our legal obligation to retire tangible, long-lived assets. At December 31, 2020, we had $2.5 billion recorded in our consolidated balance sheet for AROs, including $0.4 billion related to our oil and gas properties. Spending on AROs totaled $156 million in 2020 and $170 million in 2019 (including $38 million in 2020 and $77 million in 2019 for our oil and gas operations). For 2021, we expect to incur approximately $0.3 billion in aggregate ARO payments (including $0.1 billion for our oil and gas operations). Refer to Note 12 for further discussion.

Litigation and Other Contingencies
Refer to Notes 2 and 12, and “Legal Proceedings” contained in Part I, Item 3. of our annual report on Form 10-K for the year ended December 31, 2020, for further discussion of contingencies associated with legal proceedings and other matters.

DISCLOSURES ABOUT MARKET RISKS

Commodity Price Risk
Our consolidated revenues from our mining operations include the sale of copper concentrate, copper cathode, copper rod, gold, molybdenum and other metals by our North America and South America mines, the sale of copper concentrate (which also contains significant quantities of gold and silver) by our Indonesia mining operations, the sale of molybdenum in various forms by our molybdenum operations, and the sale of copper cathode, copper anode and gold in anode and slimes by Atlantic Copper. Our financial results will vary with fluctuations in the market prices of the commodities we produce, primarily copper and gold, and to a lesser extent molybdenum and silver. For projected sensitivities of our operating cash flow to changes in commodity prices, refer to “Outlook.” World market prices for these commodities have fluctuated historically and are affected by numerous factors beyond our control. Refer to “Risk Factors” contained in Part I, Item 1A. of our annual report on Form 10-K for the year ended December 31, 2020, for further discussion of financial risks associated with fluctuations in the market prices of the commodities we sell.

During 2020, our mined copper was sold 51 percent in concentrate, 28 percent as cathode and 21 percent as rod from North America operations. Substantially all of our copper concentrate and cathode sales contracts provide final copper pricing in a specified future month (generally one to four months from the shipment date) based primarily on quoted LME monthly average copper settlement prices. We receive market prices based on prices in the specified future period, which results in price fluctuations recorded through revenues until the date of settlement. We record revenues and invoice customers at the time of shipment based on then-current LME prices, which results in an embedded derivative on our provisionally priced concentrate and cathode sales that is adjusted to fair value through earnings each period, using the period-end forward prices, until final pricing on the date of settlement. To the extent final prices are higher or lower than what was recorded on a provisional basis, an increase or decrease to revenues is recorded each reporting period until the date of final pricing. Accordingly, in times of rising copper prices, our revenues benefit from adjustments to the final pricing of provisionally priced sales pursuant to contracts entered into in prior periods; in times of falling copper prices, the opposite occurs.

Following are the (unfavorable) favorable impacts of net adjustments to the prior years' provisionally priced copper sales for the years ended December 31 (in millions, except per share amounts):

	2020	2019
Revenues	$ (102)	$ 58
Net income attributable to common stock	$ (42)	$ 24
Net income per share attributable to common stock	$ (0.03)	$ 0.02

At December 31, 2020, we had provisionally priced copper sales at our copper mining operations totaling 320 million pounds of copper (net of intercompany sales and noncontrolling interests) recorded at an average price of $3.52 per pound, subject to final pricing over the next several months. We estimate that each $0.05 change in the price realized from the December 31, 2020, provisional price recorded would have an approximate $10 million effect on 2021 net income attributable to common stock. The LME copper settlement price closed at $3.57 per pound on January 29, 2021.

Foreign Currency Exchange Risk

The functional currency for most of our operations is the U.S. dollar. Substantially all of our revenues and a significant portion of our costs are denominated in U.S. dollars; however, some costs and certain asset and liability accounts are denominated in local currencies, including the Indonesia rupiah, Australian dollar, Peruvian sol, Chilean peso and euro. We recognized foreign currency translation gains on balances denominated in foreign currencies totaling $34 million in 2020 and $24 million in 2019. Generally, our operating results are positively affected when the U.S. dollar strengthens in relation to those foreign currencies and are adversely affected when the U.S. dollar weakens in relation to those foreign currencies.

Following is a summary of estimated annual payments and the impact of changes in foreign currency rates on our annual operating costs:

	Exchange Rate per $1 at December 31,		Estimated Annual Payments		10% Change in Exchange Rate (in millions of U.S. dollars)[a]	
	2020	2019	(in local currency)	(in millions of U.S. dollars)[b]	Increase	Decrease
Indonesia						
Rupiah	14,034	13,832	11.9 trillion	$ 848	$ (77)	$ 94
Australian dollar	1.30	1.43	195 million	$ 150	$ (14)	$ 17
South America						
Peruvian sol	3.62	3.32	2.1 billion	$ 573	$ (52)	$ 64
Chilean peso	711	749	175 billion	$ 246	$ (22)	$ 27
Atlantic Copper						
Euro	0.82	0.89	138 million	$ 169	$ (15)	$ 19

a. Reflects the estimated impact on annual operating costs assuming a 10 percent increase or decrease in the exchange rate reported at December 31, 2020.

b. Based on exchange rates at December 31, 2020.

Interest Rate Risk

At December 31, 2020, we had total debt maturities based on principal amounts of $9.8 billion, of which approximately 6 percent was variable-rate debt with interest rates primarily based on the London Interbank Offered Rate. The table below presents average interest rates for our scheduled maturities of principal for our outstanding debt and the related fair values at December 31, 2020 (in millions, except percentages):

	2021	2022	2023	2024	2025	Thereafter	Fair Value
Fixed-rate debt	$ 4	$ 524	$ 996	$ 730	$ —	$ 6,963	$ 10,428
Average interest rate	— %	3.6 %	3.9 %	4.6 %	— %	5.1 %	4.9 %
Variable-rate debt	$ 32	$ 529	$ —	$ —	$ —	$ 8	$ 566
Average interest rate	1.2 %	2.0 %	— %	— %	— %	3.8 %	2.0 %

NEW ACCOUNTING STANDARDS

Refer to Note 1 for discussion of a recently adopted accounting standard.

PRODUCT REVENUES AND PRODUCTION COSTS

Mining Product Revenues and Unit Net Cash Costs

Unit net cash costs per pound of copper and molybdenum are measures intended to provide investors with information about the cash-generating capacity of our mining operations expressed on a basis relating to the primary metal product for the respective operations. We use this measure for the same purpose and for monitoring operating performance by our mining operations. This information differs from measures of performance determined in accordance with U.S. GAAP and should not be considered in isolation or as a substitute for measures of performance determined in accordance with U.S. GAAP. These measures are presented by other metals mining companies, although our measures may not be comparable to similarly titled measures reported by other companies.

We present gross profit per pound of copper in the following tables using both a “by-product” method and a “co-product” method. We use the by-product method in our presentation of gross profit per pound of copper because (i) the majority of our revenues are copper revenues, (ii) we mine ore, which contains copper, gold, molybdenum and other metals, (iii) it is not possible to specifically assign all of our costs to revenues from the copper, gold, molybdenum and other metals we produce, (iv) it is the method used to compare mining operations in certain industry publications and (v) it is the method used by our management and the Board to monitor operations and to compare mining operations in certain industry publications. In the co-product method presentations, shared costs are allocated to the different products based on their relative revenue values, which will vary to the extent our metals sales volumes and realized prices change.

We show revenue adjustments for prior period open sales as separate line items. Because these adjustments do not result from current period sales, these amounts have been reflected separately from revenues on current period sales. Noncash and other costs, which are removed from site production and delivery costs in the calculation of unit net cash costs, consist of items such as stock-based compensation costs, start-up costs, inventory adjustments, long-lived asset impairments, restructuring and/or unusual charges. As discussed above, gold, molybdenum and other metal revenues at copper mines are reflected as credits against site production and delivery costs in the by-product method. The following schedules are presentations under both the by-product and co-product methods together with reconciliations to amounts reported in our consolidated financial statements.

North America Copper Mines Product Revenues, Production Costs and Unit Net Cash Costs

Year Ended December 31, 2020

(In millions)	By-Product Method	Co-Product Method			
		Copper	Molybdenum[a]	Other[b]	Total
Revenues, excluding adjustments	$ 4,005 [c]	$ 4,005	$ 281	$ 83	$ 4,369
Site production and delivery, before net noncash and other costs shown below	2,700	2,529	223	44	2,796
By-product credits	(268)	—	—	—	—
Treatment charges	139	136	—	3	139
Net cash costs	2,571	2,665	223	47	2,935
DD&A	355	330	18	7	355
Metals inventory adjustments	52	49	—	3	52
Noncash and other costs, net	138 [d]	133	3	2	138
Total costs	3,116	3,177	244	59	3,480
Other revenue adjustments, primarily for pricing on prior period open sales	(22)	(22)	—	—	(22)
Gross profit	$ 867	$ 806	$ 37	$ 24	$ 867
Copper sales (millions of recoverable pounds)	1,420	1,420			
Molybdenum sales (millions of recoverable pounds)[a]			33		
Gross profit per pound of copper/molybdenum:					
Revenues, excluding adjustments	$ 2.82 [c]	$ 2.82	$ 8.62		
Site production and delivery, before net noncash and other costs shown below	1.90	1.78	6.84		
By-product credits	(0.19)	—	—		
Treatment charges	0.10	0.10	—		
Unit net cash costs	1.81	1.88	6.84		
DD&A	0.25	0.23	0.56		
Metals inventory adjustments	0.03	0.03	—		
Noncash and other costs, net	0.10 [d]	0.10	0.09		
Total unit costs	2.19	2.24	7.49		
Other revenue adjustments, primarily for pricing on prior period open sales	(0.02)	(0.02)	—		
Gross profit per pound	$ 0.61	$ 0.56	$ 1.13		

Reconciliation to Amounts Reported

	Revenues	Production and Delivery	DD&A	Metals Inventory Adjustments
Totals presented above	$ 4,369	$ 2,796	$ 355	$ 52
Treatment charges	(15)	124	—	—
Noncash and other costs, net	—	138	—	—
Other revenue adjustments, primarily for pricing on prior period open sales	(22)	—	—	—
Eliminations and other	32	42	—	—
North America copper mines	4,364	3,100	355	52
Other mining[e]	13,642	10,595	1,103	16
Corporate, other & eliminations	(3,808)	(3,664)	70	28
As reported in our consolidated financial statements	$ 14,198	$ 10,031	$ 1,528	$ 96

a. Reflects sales of molybdenum produced by certain of the North America copper mines to our molybdenum sales company at market-based pricing.

b. Includes gold and silver product revenues and production costs.

c. Includes reductions to revenues and average realized prices totaling $24 million ($0.02 per pound of copper) related to forward sales contracts covering 150 million pounds of copper sales for May and June 2020 at a fixed price of $2.34 per pound.

d. Includes charges totaling $32 million ($0.02 per pound of copper) primarily associated with our April 2020 revised operating plans (including employee separation costs) and the COVID-19 pandemic (including health and safety costs).

e. Represents the combined total for our other mining operations as presented in Note 16.

North America Copper Mines Product Revenues, Production Costs and Unit Net Cash Costs

Year Ended December 31, 2019

(In millions)	By-Product Method	Co-Product Method			
		Copper	Molybdenum[a]	Other[b]	Total
Revenues, excluding adjustments	$ 3,950	$ 3,950	$ 370	$ 84	$ 4,404
Site production and delivery, before net noncash and other costs shown below	2,957	2,711	299	53	3,063
By-product credits	(348)	—	—	—	—
Treatment charges	161	155	—	6	161
Net cash costs	2,770	2,866	299	59	3,224
DD&A	348	318	23	7	348
Metals inventory adjustments	30	30	—	—	30
Noncash and other costs, net	110	98	9	3	110
Total costs	3,258	3,312	331	69	3,712
Other revenue adjustments, primarily for pricing on prior period open sales	4	4	—	—	4
Gross profit	$ 696	$ 642	$ 39	$ 15	$ 696
Copper sales (millions of recoverable pounds)	1,441	1,441			
Molybdenum sales (millions of recoverable pounds)[a]			32		
Gross profit per pound of copper/molybdenum:					
Revenues, excluding adjustments	$ 2.74	$ 2.74	$ 11.51		
Site production and delivery, before net noncash and other costs shown below	2.05	1.88	9.29		
By-product credits	(0.24)	—	—		
Treatment charges	0.11	0.11	—		
Unit net cash costs	1.92	1.99	9.29		
DD&A	0.24	0.21	0.72		
Metals inventory adjustments	0.02	0.02	—		
Noncash and other costs, net	0.08	0.07	0.29		
Total unit costs	2.26	2.29	10.30		
Other revenue adjustments, primarily for pricing on prior period open sales	—	—	—		
Gross profit per pound	$ 0.48	$ 0.45	$ 1.21		

Reconciliation to Amounts Reported

	Revenues	Production and Delivery	DD&A	Metals Inventory Adjustments
Totals presented above	$ 4,404	$ 3,063	$ 348	$ 30
Treatment charges	(60)	101	—	—
Noncash and other costs, net	—	110	—	—
Other revenue adjustments, primarily for pricing on prior period open sales	4	—	—	—
Eliminations and other	38	45	1	—
North America copper mines	4,386	3,319	349	30
Other mining[c]	13,054	11,126	979	57
Corporate, other & eliminations	(3,038)	(2,911)	84	92
As reported in our consolidated financial statements	$ 14,402	$ 11,534	$ 1,412	$ 179

a. Reflects sales of molybdenum produced by certain of the North America copper mines to our molybdenum sales company at market-based pricing.

b. Includes gold and silver product revenues and production costs.

c. Represents the combined total for our other mining operations as presented in Note 16.

South America Mining Product Revenues, Production Costs and Unit Net Cash Costs

Year Ended December 31, 2020

(In millions)	By-Product Method	Co-Product Method		
		Copper	Other[a]	Total
Revenues, excluding adjustments	$ 2,976	$ 2,976	$ 209	$ 3,185
Site production and delivery, before net noncash and other costs shown below	1,816	1,701	158	1,859
By-product credits	(166)	—	—	—
Treatment charges	152	152	—	152
Royalty on metals	6	6	—	6
Net cash costs	1,808	1,859	158	2,017
DD&A	421	391	30	421
Metals inventory adjustments	3	3	—	3
Noncash and other costs, net	122 [b]	115	7	122
Total costs	2,354	2,368	195	2,563
Other revenue adjustments, primarily for pricing on prior period open sales	(70)	(70)	—	(70)
Gross profit	$ 552	$ 538	$ 14	$ 552
Copper sales (millions of recoverable pounds)	976	976		
Gross profit per pound of copper:				
Revenues, excluding adjustments	$ 3.05	$ 3.05		
Site production and delivery, before net noncash and other costs shown below	1.86	1.74		
By-product credits	(0.17)	—		
Treatment charges	0.15	0.15		
Royalty on metals	0.01	0.01		
Unit net cash costs	1.85	1.90		
DD&A	0.43	0.41		
Metals inventory adjustments	—	—		
Noncash and other costs, net	0.13 [b]	0.12		
Total unit costs	2.41	2.43		
Other revenue adjustments, primarily for pricing on prior period open sales	(0.07)	(0.07)		
Gross profit per pound	$ 0.57	$ 0.55		

Reconciliation to Amounts Reported

	Revenues	Production and Delivery	DD&A	Metals Inventory Adjustments
Totals presented above	$ 3,185	$ 1,859	$ 421	$ 3
Treatment charges	(152)	—	—	—
Royalty on metals	(6)	—	—	—
Noncash and other costs, net	—	122	—	—
Other revenue adjustments, primarily for pricing on prior period open sales	(70)	—	—	—
Eliminations and other	(2)	(3)	—	—
South America mining	2,955	1,978	421	3
Other mining[c]	15,051	11,717	1,037	65
Corporate, other & eliminations	(3,808)	(3,664)	70	28
As reported in our consolidated financial statements	$ 14,198	$ 10,031	$ 1,528	$ 96

a. Includes silver sales of 3.4 million ounces ($21.86 per ounce average realized price). Also reflects sales of molybdenum produced by Cerro Verde to our molybdenum sales company at market-based pricing.

b. Includes charges totaling $91 million ($0.09 per pound of copper) primarily associated with idle facility (Cerro Verde) and contract cancellation costs related to the COVID-19 pandemic, and employee separation costs associated with our April 2020 revised operating plans.

c. Represents the combined total for our other mining operations as presented in Note 16.

South America Mining Product Revenues, Production Costs and Unit Net Cash Costs

Year Ended December 31, 2019 (In millions)	By-Product Method	Co-Product Method		
		Copper	Other[a]	Total
Revenues, excluding adjustments	$ 3,213	$ 3,213	$ 358	$ 3,571
Site production and delivery, before net noncash and other costs shown below	2,185	1,991	245	2,236
By-product credits	(307)	—	—	—
Treatment charges	212	212	—	212
Royalty on metals	7	6	1	7
Net cash costs	2,097	2,209	246	2,455
DD&A	474	427	47	474
Metals inventory adjustments	2	2	—	2
Noncash and other costs, net	94	90	4	94
Total costs	2,667	2,728	297	3,025
Other revenue adjustments, primarily for pricing on prior period open sales	37	37	—	37
Gross profit	$ 583	$ 522	$ 61	$ 583
Copper sales (millions of recoverable pounds)	1,183	1,183		
Gross profit per pound of copper:				
Revenues, excluding adjustments	$ 2.71	$ 2.71		
Site production and delivery, before net noncash and other costs shown below	1.85	1.68		
By-product credits	(0.27)	—		
Treatment charges	0.18	0.18		
Royalty on metals	0.01	0.01		
Unit net cash costs	1.77	1.87		
DD&A	0.40	0.36		
Metals inventory adjustments	—	—		
Noncash and other costs, net	0.08	0.07		
Total unit costs	2.25	2.30		
Other revenue adjustments, primarily for pricing on prior period open sales	0.03	0.03		
Gross profit per pound	$ 0.49	$ 0.44		

Reconciliation to Amounts Reported

	Revenues	Production and Delivery	DD&A	Metals Inventory Adjustments
Totals presented above	$ 3,571	$ 2,236	$ 474	$ 2
Treatment charges	(212)	—	—	—
Royalty on metals	(7)	—	—	—
Noncash and other costs, net	—	94	—	—
Other revenue adjustments, primarily for pricing on prior period open sales	37	—	—	—
Eliminations and other	(1)	(4)	—	—
South America mining	3,388	2,326	474	2
Other mining[b]	14,052	12,119	854	85
Corporate, other & eliminations	(3,038)	(2,911)	84	92
As reported in our consolidated financial statements	$ 14,402	$ 11,534	$ 1,412	$ 179

a. Includes silver sales of 4.7 million ounces ($16.57 per ounce average realized price). Also reflects sales of molybdenum produced by Cerro Verde to our molybdenum sales company at market-based pricing.

b. Represents the combined total for our other mining operations as presented in Note 16.

Indonesia Mining Product Revenues, Production Costs and Unit Net Cash Costs

Year Ended December 31, 2020

(In millions)	By-Product Method	Co-Product Method			
		Copper	Gold	Silver[a]	Total
Revenues, excluding adjustments	$ 2,475	$ 2,475	$ 1,545	$ 81	$ 4,101
Site production and delivery, before net noncash and other costs shown below	1,508	910	568	30	1,508
Gold and silver credits	(1,630)	—	—	—	—
Treatment charges	219	132	83	4	219
Export duties	93	56	35	2	93
Royalty on metals	153	90	60	3	153
Net cash costs	343	1,188	746	39	1,973
DD&A	580	350	219	11	580
Noncash and other costs, net	93 [b]	56	35	2	93
Total costs	1,016	1,594	1,000	52	2,646
Other revenue adjustments, primarily for pricing on prior period open sales	(20)	(20)	4	—	(16)
PT Smelting intercompany loss	(11)	(7)	(4)	—	(11)
Gross profit	$ 1,428	$ 854	$ 545	$ 29	$ 1,428
Copper sales (millions of recoverable pounds)	804	804			
Gold sales (thousands of recoverable ounces)			842		
Gross profit per pound of copper/per ounce of gold:					
Revenues, excluding adjustments	$ 3.08	$ 3.08	$ 1,832		
Site production and delivery, before net noncash and other costs shown below	1.88	1.13	674		
Gold and silver credits	(2.03)	—	—		
Treatment charges	0.27	0.17	98		
Export duties	0.12	0.07	41		
Royalty on metals	0.19	0.11	72		
Unit net cash costs	0.43	1.48	885		
DD&A	0.72	0.43	259		
Noncash and other costs, net	0.11 [b]	0.07	41		
Total unit costs	1.26	1.98	1,185		
Other revenue adjustments, primarily for pricing on prior period open sales	(0.03)	(0.03)	5		
PT Smelting intercompany loss	(0.01)	(0.01)	(5)		
Gross profit per pound/ounce	$ 1.78	$ 1.06	$ 647		

Reconciliation to Amounts Reported

	Revenues	Production and Delivery	DD&A
Totals presented above	$ 4,101	$ 1,508	$ 580
Treatment charges	(219)	—	—
Export duties	(93)	—	—
Royalty on metals	(153)	—	—
Noncash and other costs, net	(6)	87	—
Other revenue adjustments, primarily for pricing on prior period open sales	(16)	—	—
PT Smelting intercompany loss	—	11	—
Indonesia mining	3,614	1,606	580
Other mining[c]	14,392	12,089	878
Corporate, other & eliminations	(3,808)	(3,664)	70
As reported in our consolidated financial statements	$ 14,198	$ 10,031	$ 1,528

a. Includes silver sales of 3.6 million ounces ($22.40 per ounce average realized price).

b. Includes COVID-19 related costs (including one-time incremental employee benefits and health and safety costs) of $14 million ($0.02 per pound of copper).

c. Represents the combined total for our other mining operations as presented in Note 16.

Indonesia Mining Product Revenues, Production Costs and Unit Net Cash Costs

Year Ended December 31, 2019

(In millions)	By-Product Method	Co-Product Method			
		Copper	Gold	Silver[a]	Total
Revenues, excluding adjustments	$ 1,814	$ 1,814	$ 1,378	$ 40	$ 3,232
Site production and delivery, before net noncash and other costs shown below	1,938	1,088	826	24	1,938
Gold and silver credits	(1,419)	—	—	—	—
Treatment charges	171	96	73	2	171
Export duties	56	31	24	1	56
Royalty on metals	107	58	48	1	107
Net cash costs	853	1,273	971	28	2,272
DD&A	406	228	173	5	406
Metals inventory adjustments	5	5	—	—	5
Noncash and other costs, net	246 [b]	136	107	3	246
Total costs	1,510	1,642	1,251	36	2,929
Other revenue adjustments, primarily for pricing on prior period open sales	18	18	1	—	19
PT Smelting intercompany loss	(17)	(10)	(7)	—	(17)
Gross profit	$ 305	$ 180	$ 121	$ 4	$ 305
Copper sales (millions of recoverable pounds)	667	667			
Gold sales (thousands of recoverable ounces)			973		
Gross profit per pound of copper/per ounce of gold:					
Revenues, excluding adjustments	$ 2.72	$ 2.72	$ 1,416		
Site production and delivery, before net noncash and other costs shown below	2.91	1.63	849		
Gold and silver credits	(2.13)	—	—		
Treatment charges	0.26	0.14	75		
Export duties	0.08	0.05	25		
Royalty on metals	0.16	0.09	49		
Unit net cash costs	1.28	1.91	998		
DD&A	0.61	0.34	178		
Metals inventory adjustments	0.01	0.01	—		
Noncash and other costs, net	0.37 [b]	0.20	110		
Total unit costs	2.27	2.46	1,286		
Other revenue adjustments, primarily for pricing on prior period open sales	0.03	0.03	2		
PT Smelting intercompany loss	(0.02)	(0.02)	(8)		
Gross profit per pound/ounce	$ 0.46	$ 0.27	$ 124		

Reconciliation to Amounts Reported

	Revenues	Production and Delivery	DD&A	Metals Inventory Adjustments
Totals presented above	$ 3,232	$ 1,938	$ 406	$ 5
Treatment charges	(171)	—	—	—
Export duties	(56)	—	—	—
Royalty on metals	(107)	—	—	—
Noncash and other costs, net	(146)	100	—	—
Other revenue adjustments, primarily for pricing on prior period open sales	19	—	—	—
PT Smelting intercompany loss	—	17	—	—
Indonesia mining	2,771	2,055	406	5
Other mining[c]	14,669	12,390	922	82
Corporate, other & eliminations	(3,038)	(2,911)	84	92
As reported in our consolidated financial statements	$ 14,402	$ 11,534	$ 1,412	$ 179

a. Includes silver sales of 2.5 million ounces ($16.15 per ounce average realized price).

b. Includes charges in revenues totaling $166 million ($0.25 per pound of copper), primarily associated with an unfavorable Indonesia Supreme Court ruling related to certain disputed PT-FI export duties, partly offset by adjustments to prior year treatment charges totaling $20 million ($0.03 per pound of copper). Also includes charges of $28 million ($0.04 per pound of copper) associated with adjustments to the settlement of the historical surface water tax disputes with the local regional tax authority in Papua, Indonesia.

c. Represents the combined total for our other mining operations as presented in Note 16.

Molybdenum Mines Product Revenues, Production Costs and Unit Net Cash Costs

(In millions)	Years Ended December 31, 2020	2019
Revenues, excluding adjustments[a]	$ 243	$ 369
Site production and delivery, before net noncash and other costs shown below	211	293
Treatment charges and other	21	25
Net cash costs	232	318
DD&A	57	62
Metals inventory adjustments	10	50
Noncash and other costs, net	19 [b]	6
Total costs	318	436
Gross loss	$ (75)	$ (67)
Molybdenum sales (millions of recoverable pounds)[a]	24	29
Gross loss per pound of molybdenum:		
Revenues, excluding adjustments[a]	$ 9.94	$ 12.51
Site production and delivery, before net noncash and other costs shown below	8.65	9.95
Treatment charges and other	0.85	0.85
Unit net cash costs	9.50	10.80
DD&A	2.34	2.11
Metals inventory adjustments	0.42	1.69
Noncash and other costs, net	0.75 [b]	0.20
Total unit costs	13.01	14.80
Gross loss	$ (3.07)	$ (2.29)

Reconciliation to Amounts Reported

Year Ended December 31, 2020	Revenues	Production and Delivery	DD&A	Metals Inventory Adjustments
Totals presented above	$ 243	$ 211	$ 57	$ 10
Treatment charges and other	(21)	—	—	—
Noncash and other costs, net	—	19	—	—
Molybdenum mines	222	230	57	10
Other mining[c]	17,784	13,465	1,401	58
Corporate, other & eliminations	(3,808)	(3,664)	70	28
As reported in our consolidated financial statements	$ 14,198	$ 10,031	$ 1,528	$ 96
Year Ended December 31, 2019				
Totals presented above	$ 369	$ 293	$ 62	$ 50
Treatment charges and other	(25)	—	—	—
Noncash and other costs, net	—	6	—	—
Molybdenum mines	344	299	62	50
Other mining[c]	17,096	14,146	1,266	37
Corporate, other & eliminations	(3,038)	(2,911)	84	92
As reported in our consolidated financial statements	$ 14,402	$ 11,534	$ 1,412	$ 179

a. Reflects sales of the Molybdenum mines' production to the molybdenum sales company at market-based pricing. On a consolidated basis, realizations are based on the actual contract terms for sales to third parties; as a result, our consolidated average realized price per pound of molybdenum will differ from the amounts reported in this table.

b. Includes charges totaling $7 million ($0.29 per pound of molybdenum) primarily associated with contract cancellation costs related to the COVID-19 pandemic and employee separation costs associated with April 2020 revised operating plans.

c. Represents the combined total for our other mining operations as presented in Note 16. Also includes amounts associated with the molybdenum sales company, which includes sales of molybdenum produced by the Molybdenum mines and by certain of the North America and South America copper mines.

GUARANTOR SUMMARIZED FINANCIAL INFORMATION

All of the senior notes issued by Freeport-McMoRan Inc. (FCX) are fully and unconditionally guaranteed on a senior basis jointly and severally by Freeport-McMoRan Oil & Gas LLC (FM O&G LLC), as guarantor, which is a 100-percent-owned subsidiary of FCX Oil & Gas LLC (FM O&G) and FCX. The guarantee is an unsecured obligation of the guarantor and ranks equal in right of payment with all existing and future indebtedness of FM O&G LLC, including indebtedness under our revolving credit facility. The guarantee ranks senior in right of payment with all of FM O&G LLC's future subordinated obligations and is effectively subordinated in right of payment to any debt of FM O&G LLC's subsidiaries. The indentures provide that FM O&G LLC's guarantee obligations may be released or terminated upon: (i) the sale of all or substantially all of the equity interests or assets of FM O&G LLC to a third party that is not our subsidiary or our affiliate; (ii) FM O&G LLC no longer having any obligations under any FM O&G senior notes or any refinancing thereof and no longer being a co-borrower or guarantor of any of our obligations under the revolving credit facility or any other senior debt or, in each case, any refinancing thereof; or (iii) the discharge of our obligations under the indentures in accordance with their terms.

The following summarized financial data includes information regarding FCX, as issuer, FM O&G LLC, as guarantor, and all our other non-guarantor subsidiaries at December 31, 2020, and 2019, and for the year ended December 31, 2020.

	FCX Issuer	FM O&G LLC Guarantor	Non-guarantor Subsidiaries	Eliminations	Consolidated FCX
December 31, 2020					
Current assets	$ 65	$ 697	$ 9,287	$ (746)	$ 9,303
Noncurrent assets	785	6	32,806	(756)	32,841
Current liabilities	187	31	3,964	(765)	3,417
Noncurrent liabilities	9,433	11,208	15,075	(15,657)	20,059
December 31, 2019					
Current assets	$ 154	$ 657	$ 7,778	$ (674)	$ 7,915
Noncurrent assets	1,620	22	32,692	(1,440)	32,894
Current liabilities	323	42	3,550	(706)	3,209
Noncurrent liabilities	9,180	10,892	15,975	(15,895)	20,152
Year Ended December 31, 2020					
Revenues	$ —	$ 26	$ 14,172	$ —	$ 14,198
Operating (loss) income	(30)	(10)	2,489	(12)	2,437
Net income (loss)	599 [a]	(302) [a]	865	(297)	865

a. Net income (loss) equals net income (loss) attributable to common stockholders because net income attributable to noncontrolling interests is zero for issuer and guarantor.

CAUTIONARY STATEMENT

Our discussion and analysis 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, or expectations relating to ore grades and milling rates; business outlook; production and sales volumes; unit net cash costs; cash flows; capital expenditures; liquidity; operating costs; operating plans; our financial policy; our expectations regarding PT-FI's ramp-up of underground mining activities and future cash flows through 2022; PT-FI's development, financing, construction and completion of a new smelter in Indonesia and possible expansion of the smelter at PT Smelting; our commitments to deliver responsibly produced copper, including plans to implement and validate all of our operating sites under specific frameworks; improvements in operating procedures and technology; exploration efforts and results; development and production activities, rates and costs; tax rates; export quotas and duties; the impact of copper, gold and molybdenum price changes; the impact of deferred intercompany profits on earnings; mineralization and reserve estimates; execution of the settlement agreements associated with the Louisiana coastal erosion cases and talc-related litigation; descriptions of our objectives, strategies, plans, goals or targets, including our net debt target, anticipated improvements in energy efficiency at certain operating sites, and environmental, social and governance (ESG) targets; and future dividend payments, share purchases and sales, including under the Board's financial policy. The words "anticipates," "may," "can," "plans," "believes," "estimates," "expects," "projects," "targets," "intends," "likely," "will," "should," "could," "to be," "potential," "assumptions," "guidance," "future" and any similar expressions are intended to identify those assertions as forward-looking statements. The declaration and payment of future dividends is at the discretion of the Board and will depend on our financial results, cash requirements, future prospects, global economic conditions, and other factors deemed relevant by the Board. In accordance with the June 2020 amendment to the revolving credit facility, we are currently restricted from declaring or paying common stock dividends through December 31, 2021. Prior to the Board's declaration of the initial quarterly dividend, we will deliver a covenant reversion notice, which would eliminate the restriction on the declaration or payment of common stock dividends.

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, changes in our credit rating; changes in our cash requirements, financial position, financing plans or investment plans; changes in general market, economic, tax, regulatory or industry conditions; the duration and scope of and uncertainties associated with the COVID-19 pandemic, and the impact thereof on commodity prices, our business and the global economy and any related actions taken by governments and businesses; our ability to contain and mitigate the risk of spread or major outbreak of COVID-19 at our operating sites, including at PT-FI's remote operating site in Papua; supply of and demand for, and prices of, copper, gold and molybdenum; mine sequencing; changes in mine plans or operational modifications, delays, deferrals or cancellations; production rates; timing of shipments; results of feasibility studies; potential inventory adjustments; potential impairment of long-lived mining assets; the potential effects of violence in Indonesia generally and in the province of Papua; the Indonesia government's extension of PT-FI's export license after March 15, 2021; risks associated with underground mining; satisfaction of requirements in accordance with PT-FI's special mining license to extend mining rights from 2031 through 2041; the Indonesia government's approval of a deferred schedule for completion of the new smelter in Indonesia; expected results from improvements in operating procedures and technology, including innovation initiatives; industry risks; regulatory changes; political and social risks; labor relations, including labor-related work stoppages; weather- and climate-related risks; environmental risks; our plans and ability to implement ESG practices; litigation; cybersecurity incidents; changes in general market, economic and industry conditions; financial condition of our customers, suppliers, vendors, partners and affiliates, particularly during weak economic conditions and extended periods of volatile commodity prices; reductions in liquidity and access to capital; our ability to comply with our responsible production commitments under specific frameworks and any changes to such frameworks; and other factors described in more detail in Part I, Item 1A. "Risk Factors" of our annual report on Form 10-K for the year ended December 31, 2020.

Investors are cautioned that many of the assumptions upon which our forward-looking statements are based are likely to change after the forward-looking statements are made, including for example commodity prices, which we cannot control, and production volumes and costs, some aspects of which we may not be able to control. Further, we may make changes to our business plans that could affect our results. We caution investors that we do not intend to update forward-looking statements more frequently than quarterly notwithstanding any changes in our assumptions, changes in business plans, actual experience or other changes, and we undertake no obligation to update any forward-looking statements.

This annual report on Form 10-K for the year ended December 31, 2020, also contains the financial measure unit net cash costs per pound of copper and molybdenum, which is not recognized under U.S. GAAP. Refer to "Operations – Unit Net Cash Costs" for further discussion of unit net cash costs associated with our operating divisions, and to "Product Revenues and Production Costs" for reconciliations of per pound costs by operating division to production and delivery costs applicable to sales reported in our consolidated financial statements.

Item 8. Financial Statements and Supplementary Data.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Freeport-McMoRan Inc.'s (the Company's) management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rule 13a-15(f) or 15d-15(f) under the Securities Exchange Act of 1934 as a process designed by, or under the supervision of, the Company's principal executive and principal financial officers and effected by the Company's Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that:

- Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the Company's assets;

- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and

- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management, including our principal executive officer and principal financial officer, assessed the effectiveness of our internal control over financial reporting as of the end of the fiscal year covered by this annual report on Form 10-K. In making this assessment, our management used the criteria set forth in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). Based on its assessment, management concluded that, as of December 31, 2020, our Company's internal control over financial reporting is effective based on the COSO criteria.

Ernst & Young LLP, an independent registered public accounting firm, who audited the Company's consolidated financial statements included in this Form 10-K, has issued an attestation report on the Company's internal control over financial reporting, which is included herein.

/s/ Richard C. Adkerson	/s/ Kathleen L. Quirk
Richard C. Adkerson	Kathleen L. Quirk
Chairman of the Board and	President and Chief Financial Officer
Chief Executive Officer	

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
Freeport-McMoRan Inc.

Opinion on Internal Control over Financial Reporting

We have audited Freeport-McMoRan Inc.'s internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Freeport-McMoRan Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of Freeport-McMoRan Inc. as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive income (loss), equity and cash flows for each of the three years in the period ended December 31, 2020, and the related notes and our report dated February 16, 2021 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

Phoenix, Arizona
February 16, 2021

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
Freeport-McMoRan Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Freeport-McMoRan Inc. (the Company) as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive income (loss), equity and cash flows for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company’s internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 16, 2021 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Uncertain tax positions

Description of the Matter	As discussed in Note 12 to the consolidated financial statements, the Company’s operations are in certain taxing jurisdictions where uncertainties arise in the application of complex income tax regulations. The Company has disclosed uncertain tax positions related to income tax assessments in Indonesia and Peru totaling $1.7 billion, including penalties and interest, which have not been recorded at December 31, 2020. The Company recognizes a liability for income tax assessments when it is more likely than not that it will not sustain the benefit taken or expected to be taken in the tax return.

Because of the complexity of tax laws, regulations and contractual agreements with the applicable government, auditing the recognition and measurement of uncertain tax positions requires a high degree of auditor judgment and increased extent of effort, including the involvement of our tax professionals.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's accounting process for uncertain tax positions. This included testing controls over management's review of the technical merits of tax positions and disputed tax assessments, including the process to measure the financial statement impact of these tax matters.

Our audit procedures included, among others, evaluating the Company's accounting for these tax positions by using our knowledge of and experience with the application of respective tax laws by the relevant tax authorities, or our understanding of the contractual arrangements with the applicable government, if the position is governed by a contract. We analyzed the Company's assumptions and data used to determine the tax assessments and tested the accuracy of the calculations. We involved our tax professionals located in the respective jurisdictions to assess the technical merits of the Company's tax positions and to evaluate the application of relevant tax laws in the Company's recognition determination. We assessed the Company's correspondence with the relevant tax authorities and evaluated third-party tax or legal opinions obtained by the Company. We also evaluated the adequacy of the Company's disclosures included in Note 12 in relation to these tax matters.

Environmental obligations

Description of the Matter

As discussed in Note 12 to the consolidated financial statements, the Company is subject to national, state and local environmental laws and regulations governing the protection of the environment, including restoration and reclamation of environmental contamination. Liabilities for environmental contingencies are recorded when it is probable that a liability has been incurred and the amount can be reasonably estimated. At December 31, 2020, the Company's consolidated environmental obligations totaled $1.6 billion.

Auditing management's accounting for environmental obligations was challenging, as significant judgment is required by the Company to evaluate whether an environmental loss has been incurred and to estimate the future costs to remediate the environmental matters. The significant judgment was primarily due to the inherent estimation uncertainty relating to the amount of future costs. Such uncertainties involve assumptions regarding the nature and extent of contamination at each site, the nature and extent of required cleanup efforts under existing environmental regulations, the duration and effectiveness of the chosen remedial strategy, and allocation of costs among other potentially responsible parties. Actual costs incurred in future periods could differ from amounts estimated.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's identification and measurement of the environmental loss contingencies. For example, we tested controls over management's review of the environmental loss contingency calculations and management's assessment to evaluate key judgments and estimates affecting the environmental loss contingencies.

To test the Company's identification and measurement of the environmental loss contingencies, among other procedures, we inspected correspondence with regulatory agencies, obtained external legal counsel confirmation letters, and inspected environmental studies. Additionally, we assessed the appropriateness of the Company's models and tested the significant assumptions discussed above along with the underlying data used by the Company in its analyses. We utilized our environmental specialists to search for new or contrary evidence related to the Company's sites and to assist in evaluating the reasonableness of estimated future costs by comparing the estimated future costs to environmental permits, third party observable data such as vendor quotes, and to historical costs incurred for similar activities.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2002.

Phoenix, Arizona
February 16, 2021

Freeport-McMoRan Inc.
CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31,		
	2020	2019	2018
	(In millions, except per share amounts)		
Revenues	$ 14,198	$ 14,402	$ 18,628
Cost of sales:			
Production and delivery	10,031	11,534	11,708
Depreciation, depletion and amortization	1,528	1,412	1,754
Metals inventory adjustments	96	179	4
Total cost of sales	11,655	13,125	13,466
Selling, general and administrative expenses	370	394	422
Mining exploration and research expenses	50	104	105
Environmental obligations and shutdown costs	159	105	89
Net gain on sales of assets	(473)	(417)	(208)
Total costs and expenses	11,761	13,311	13,874
Operating income	2,437	1,091	4,754
Interest expense, net	(598)	(620)	(945)
Net (loss) gain on early extinguishment of debt	(101)	(27)	7
Other income (expense), net	59	(138)	76
Income from continuing operations before income taxes and equity in affiliated companies' net earnings	1,797	306	3,892
Provision for income taxes	(944)	(510)	(991)
Equity in affiliated companies' net earnings	12	12	8
Net income (loss) from continuing operations	865	(192)	2,909
Net gain (loss) from discontinued operations	—	3	(15)
Net income (loss)	865	(189)	2,894
Net income attributable to noncontrolling interests	(266)	(50)	(292)
Net income (loss) attributable to common stockholders	$ 599	$ (239)	$ 2,602
Basic net income (loss) per share attributable to common stockholders:			
Continuing operations	$ 0.41	$ (0.17)	$ 1.80
Discontinued operations	—	—	(0.01)
	$ 0.41	$ (0.17)	$ 1.79
Diluted net income (loss) per share attributable to common stockholders:			
Continuing operations	$ 0.41	$ (0.17)	$ 1.79
Discontinued operations	—	—	(0.01)
	$ 0.41	$ (0.17)	$ 1.78
Weighted-average common shares outstanding:			
Basic	1,453	1,451	1,449
Diluted	1,461	1,451	1,458
Dividends declared per share of common stock	$ —	$ 0.20	$ 0.20

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements.

Freeport-McMoRan Inc.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	Years Ended December 31,		
	2020	2019	2018
		(In millions)	
Net income (loss)	$ 865	$ (189)	$ 2,894
Other comprehensive income (loss), net of taxes:			
Defined benefit plans:			
Actuarial gains (losses) arising during the period, net of taxes	46	(116)	(77)
Prior service costs arising during the period	—	—	(4)
Amortization or curtailment of unrecognized amounts included in net periodic benefit costs	45	47	48
Foreign exchange (losses) gains	(1)	1	(1)
Other comprehensive income (loss)	90	(68)	(34)
Total comprehensive income (loss)	955	(257)	2,860
Total comprehensive income attributable to noncontrolling interests	(263)	(53)	(291)
Total comprehensive income (loss) attributable to common stockholders	$ 692	$ (310)	$ 2,569

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements.

Freeport-McMoRan Inc.
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2020	2019	2018
		(In millions)	
Cash flow from operating activities:			
Net income (loss)	$ 865	$ (189)	$ 2,894
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation, depletion and amortization	1,528	1,412	1,754
Metals inventory adjustments	96	179	4
Net gain on sales of assets	(473)	(417)	(208)
Stock-based compensation	99	63	76
Net charges for environmental and asset retirement obligations, including accretion	181	221	262
Payments for environmental and asset retirement obligations	(216)	(244)	(239)
Charge associated with framework for global settlement of talc-related litigation	130	—	—
Net charges for defined pension and postretirement plans	65	108	81
Pension plan contributions	(121)	(75)	(75)
Net loss (gain) on early extinguishment of debt	101	27	(7)
Deferred income taxes	181	29	100
Dividends received from PT Smelting	3	40	—
(Credits) charges for PT Freeport Indonesia (PT-FI) surface water tax, withholding tax and environmental matters	(19)	30	162
Payments for PT-FI surface water tax, withholding tax and environmental matters	(14)	(67)	—
Charges for Cerro Verde royalty dispute	32	65	371
Payments for Cerro Verde royalty dispute	(139)	(187)	(56)
U.S. tax reform benefit	—	—	(123)
Change in PT-FI statutory tax rate	—	—	(504)
Other, net	53	138	27
Changes in working capital and other:			
Accounts receivable	132	119	649
Inventories	42	259	(537)
Other current assets	(27)	60	(28)
Accounts payable and accrued liabilities	115	(60)	(106)
Accrued income taxes and timing of other tax payments	403	(29)	(634)
Net cash provided by operating activities	3,017	1,482	3,863
Cash flow from investing activities:			
Capital expenditures:			
North America copper mines	(428)	(877)	(601)
South America	(183)	(256)	(237)
Indonesia	(1,266)	(1,369)	(1,001)
Molybdenum mines	(19)	(19)	(9)
Other	(65)	(131)	(123)
Acquisition of PT Rio Tinto Indonesia	—	—	(3,500)
Proceeds from sales of:			
Kisanfu exploration project	550	—	—
Timok exploration project and a portion of Freeport Cobalt	—	452	—
PT Indonesia Papua Metal Dan Mineral	—	—	457
Other assets	154	109	93
Other, net	(7)	(12)	(97)
Net cash used in investing activities	(1,264)	(2,103)	(5,018)
Cash flow from financing activities:			
Proceeds from debt	3,531	1,879	632
Repayments of debt	(3,724)	(3,197)	(2,717)
Proceeds from sale of PT-FI shares	—	—	3,500
Cash dividends and distributions paid:			
Common stock	(73)	(291)	(218)
Noncontrolling interests	—	(82)	(278)
Contributions from noncontrolling interests	156	165	—
Other, net	(18)	(30)	(19)
Net cash (used in) provided by financing activities	(128)	(1,556)	900
Net increase (decrease) in cash, cash equivalents, restricted cash and restricted cash equivalents	1,625	(2,177)	(255)
Cash, cash equivalents, restricted cash and restricted cash equivalents at beginning of year	2,278	4,455	4,710
Cash, cash equivalents, restricted cash and restricted cash equivalents at end of year	$ 3,903	$ 2,278	$ 4,455

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements.

Freeport-McMoRan Inc.
CONSOLIDATED BALANCE SHEETS

	December 31, 2020	December 31, 2019
	(In millions, except par value)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 3,657	$ 2,020
Trade accounts receivable	892	741
Income and other tax receivables	520	426
Inventories:		
Materials and supplies, net	1,594	1,649
Mill and leach stockpiles	1,014	1,143
Product	1,285	1,281
Other current assets	341	655
Total current assets	9,303	7,915
Property, plant, equipment and mine development costs, net	29,818	29,584
Long-term mill and leach stockpiles	1,463	1,425
Other assets	1,560	1,885
Total assets	$ 42,144	$ 40,809
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable and accrued liabilities	$ 2,708	$ 2,576
Current portion of environmental and asset retirement obligations	351	436
Accrued income taxes	324	119
Current portion of debt	34	5
Dividends payable	—	73
Total current liabilities	3,417	3,209
Long-term debt, less current portion	9,677	9,821
Deferred income taxes	4,408	4,210
Environmental and asset retirement obligations, less current portion	3,705	3,630
Other liabilities	2,269	2,491
Total liabilities	23,476	23,361
Equity:		
Stockholders' equity:		
Common stock, par value $0.10, 1,590 shares and 1,582 shares issued, respectively	159	158
Capital in excess of par value	26,037	25,830
Accumulated deficit	(11,681)	(12,280)
Accumulated other comprehensive loss	(583)	(676)
Common stock held in treasury – 132 shares and 131 shares, respectively, at cost	(3,758)	(3,734)
Total stockholders' equity	10,174	9,298
Noncontrolling interests	8,494	8,150
Total equity	18,668	17,448
Total liabilities and equity	$ 42,144	$ 40,809

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements.

Freeport-McMoRan Inc.
CONSOLIDATED STATEMENTS OF EQUITY

	Stockholders' Equity									
	Common Stock				Accumu-lated Other Compre-hensive Loss	Common Stock Held in Treasury		Total Stock-holders' Equity	Non-controlling Interests	Total Equity
	Number of Shares	At Par Value	Capital in Excess of Par Value	Accumulated Deficit		Number of Shares	At Cost			
	(In millions)									
Balance at January 1, 2018	1,578	$ 158	$ 26,751	$ (14,722)	$ (487)	130	$(3,723)	$ 7,977	$ 3,319	$ 11,296
Exercised and issued stock-based awards	1	—	8	—	—	—	—	8	—	8
Stock-based compensation, including the tender of shares	—	—	70	—	—	—	(4)	66	—	66
Dividends	—	—	(291)	—	—	—	—	(291)	(278)	(569)
Adoption of new accounting standard for reclassification of income taxes	—	—	—	79	(79)	—	—	—	—	—
Sale of interest in PT-FI	—	—	(525)	—	(6)	—	—	(531)	4,762	4,231
Net income attributable to common stockholders	—	—	—	2,602	—	—	—	2,602	—	2,602
Net income attributable to noncontrolling interests	—	—	—	—	—	—	—	—	292	292
Other comprehensive loss	—	—	—	—	(33)	—	—	(33)	(1)	(34)
Balance at December 31, 2018	1,579	158	26,013	(12,041)	(605)	130	(3,727)	9,798	8,094	17,892
Exercised and issued stock-based awards	3	—	1	—	—	—	—	1	—	1
Stock-based compensation, including the tender of shares	—	—	50	—	—	1	(7)	43	1	44
Dividends	—	—	(291)	—	—	—	—	(291)	(73)	(364)
Changes in noncontrolling interests	—	—	(1)	—	—	—	—	(1)	(11)	(12)
Contributions from noncontrolling interests	—	—	80	—	—	—	—	80	86	166
Adjustment for deferred taxes	—	—	(22)	—	—	—	—	(22)	—	(22)
Net loss attributable to common stockholders	—	—	—	(239)	—	—	—	(239)	—	(239)
Net income attributable to noncontrolling interests	—	—	—	—	—	—	—	—	50	50
Other comprehensive (loss) income	—	—	—	—	(71)	—	—	(71)	3	(68)
Balance at December 31, 2019	1,582	158	25,830	(12,280)	(676)	131	(3,734)	9,298	8,150	17,448
Exercised and issued stock-based awards	8	1	57	—	—	—	—	58	—	58
Stock-based compensation, including the tender of shares	—	—	74	—	—	1	(24)	50	—	50
Change in ownership interests	—	—	—	—	—	—	—	—	1	1
Contributions from noncontrolling interests	—	—	76	—	—	—	—	76	80	156
Net income attributable to common stockholders	—	—	—	599	—	—	—	599	—	599
Net income attributable to noncontrolling interests	—	—	—	—	—	—	—	—	266	266
Other comprehensive income (loss)	—	—	—	—	93	—	—	93	(3)	90
Balance at December 31, 2020	1,590	$ 159	$ 26,037	$ (11,681)	$ (583)	132	$(3,758)	$ 10,174	$ 8,494	$ 18,668

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements.

Freeport-McMoRan Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation. The consolidated financial statements of Freeport-McMoRan Inc. (FCX) include the accounts of those subsidiaries where it directly or indirectly has more than 50 percent of the voting rights and/or has control over the subsidiary. As of December 31, 2020, the most significant entities that FCX consolidates include its 48.76 percent-owned subsidiary PT Freeport Indonesia (PT-FI), and the following wholly owned subsidiaries: Freeport Minerals Corporation (FMC) and Atlantic Copper, S.L.U. (Atlantic Copper). Refer to Notes 2 and 3 for further discussion, including FCX's conclusion to consolidate PT-FI.

FCX's unincorporated joint ventures are reflected using the proportionate consolidation method (refer to Note 3 for further discussion). Investments in unconsolidated companies owned 20 percent or more are recorded using the equity method. Investments in unconsolidated companies owned less than 20 percent, and for which FCX does not exercise significant influence, are recorded at (i) fair value for those that have a readily determinable fair value or (ii) cost, less any impairment, for those that do not have a readily determinable fair value. All significant intercompany transactions have been eliminated. Dollar amounts in tables are stated in millions, except per share amounts.

Business Segments. FCX has organized its mining operations into four primary divisions – North America copper mines, South America mining, Indonesia mining and Molybdenum mines, and operating segments that meet certain thresholds are reportable segments. FCX's reportable segments include the Morenci, Cerro Verde and Grasberg (Indonesia mining) copper mines, the Rod & Refining operations and Atlantic Copper Smelting & Refining. Refer to Note 16 for further discussion.

Use of Estimates. The preparation of FCX's financial statements in conformity with accounting principles generally accepted in the United States (U.S.) requires management to make estimates and assumptions that affect the amounts reported in these financial statements and accompanying notes. The more significant areas requiring the use of management estimates include minerals reserve estimation; asset lives for depreciation, depletion and amortization; environmental obligations; asset retirement obligations; estimates of recoverable copper in mill and leach stockpiles; deferred taxes and valuation allowances; reserves for contingencies and litigation; asset acquisitions and impairment, including estimates used to derive future cash flows associated with those assets; pension benefits; and valuation of derivative instruments. Actual results could differ from those estimates.

Functional Currency. The functional currency for the majority of FCX's foreign operations is the U.S. dollar. For foreign subsidiaries whose functional currency is the U.S. dollar, monetary assets and liabilities denominated in the local currency are translated at current exchange rates, and non-monetary assets and liabilities, such as inventories, property, plant, equipment and mine development costs, are translated at historical rates. Gains and losses resulting from translation of such account balances are included in other (expense) income, net, as are gains and losses from foreign currency transactions. Foreign currency gains totaled $34 million in 2020, $24 million in 2019 and $14 million in 2018.

Cash Equivalents. Highly liquid investments purchased with maturities of three months or less are considered cash equivalents.

Restricted Cash and Restricted Cash Equivalents. FCX's restricted cash and restricted cash equivalents are primarily related to PT-FI's commitment for the development of a new smelter in Indonesia; and guarantees and commitments for certain mine closure and reclamation obligations. Restricted cash and restricted cash equivalents are classified as a current or long-term asset based on the timing and nature of when or how the cash is expected to be used or when the restrictions are expected to lapse. Restricted cash and restricted cash equivalents are comprised of bank deposits and money market funds.

Inventories. Inventories include materials and supplies, mill and leach stockpiles, and product inventories. Inventories are stated at the lower of weighted-average cost or net realizable value (NRV).

Mill and Leach Stockpiles. Mill and leach stockpiles are work-in-process inventories for FCX's mining operations. Mill and leach stockpiles contain ore that has been extracted from an ore body and is available for metal recovery. Mill stockpiles contain sulfide ores, and recovery of metal is through milling, concentrating and smelting and refining or, alternatively, by concentrate leaching. Leach stockpiles contain oxide ores and certain secondary sulfide ores and recovery of metal is through exposure to acidic solutions that dissolve contained copper and deliver it in solution to extraction processing facilities (*i.e.,* solution extraction and electrowinning (SX/EW)). The recorded cost of mill and leach stockpiles includes mining and haulage costs incurred to deliver ore to stockpiles, depreciation, depletion, amortization and site overhead costs. Material is removed from the stockpiles at a weighted-average cost per pound.

Because it is impracticable to determine copper contained in mill and leach stockpiles by physical count, reasonable estimation methods are employed. The quantity of material delivered to mill and leach stockpiles is based on surveyed volumes of mined material and daily production records. Sampling and assaying of blasthole cuttings determine the estimated copper grade of the material delivered to mill and leach stockpiles.

Expected copper recovery rates for mill stockpiles are determined by metallurgical testing. The recoverable copper in mill stockpiles, once entered into the production process, can be produced into copper concentrate almost immediately.

Expected copper recovery rates for leach stockpiles are determined using small-scale laboratory tests, small- to large-scale column testing (which simulates the production process), historical trends and other factors, including mineralogy of the ore and rock type. Total copper recovery in leach stockpiles can vary significantly from a low percentage to more than 90 percent depending on several variables, including processing methodology, processing variables, mineralogy and particle size of the rock. For newly placed material on active stockpiles, as much as 80 percent of the total copper recovery may occur during the first year, and the remaining copper may be recovered over many years.

Processes and recovery rates for mill and leach stockpiles are monitored regularly, and recovery rate estimates are adjusted periodically as additional information becomes available and as related technology changes. Adjustments to recovery rates will typically result in a future impact to the value of the material removed from the stockpiles at a revised weighted-average cost per pound of recoverable copper.

Product. Product inventories include raw materials, work-in-process and finished goods. Raw materials are primarily unprocessed concentrate at Atlantic Copper's smelting and refining operations. Work-in-process inventories are primarily copper concentrate at various stages of conversion into anode and cathode at Atlantic Copper's operations. Atlantic Copper's in-process inventories are valued at the weighted-average cost of the material fed to the smelting and refining process plus in-process conversion costs. Finished goods for mining operations represent salable products (*e.g.*, copper and molybdenum concentrate, copper anode, copper cathode, copper rod, copper wire, molybdenum oxide, and high-purity molybdenum chemicals and other metallurgical products). Finished goods are valued based on the weighted-average cost of source material plus applicable conversion costs relating to associated process facilities. Costs of finished goods and work-in-process (*i.e.*, not raw materials) inventories include labor and benefits, supplies, energy, depreciation, depletion, amortization, site overhead costs and other necessary costs associated with the extraction and processing of ore, such as mining, milling, smelting, leaching, SX/EW, refining, roasting and chemical processing. Corporate general and administrative costs are not included in inventory costs.

Property, Plant, Equipment and Mine Development Costs. Property, plant, equipment and mine development costs are carried at cost. Mineral exploration costs, as well as drilling and other costs incurred for the purpose of converting mineral resources to proven and probable reserves or identifying new mineral resources at development or production stage properties, are charged to expense as incurred. Development costs are capitalized beginning after proven and probable mineral reserves have been established. Development costs include costs incurred resulting from mine pre-production activities undertaken to gain access to proven and probable reserves, including shafts, adits, drifts, ramps, permanent excavations, infrastructure and removal of overburden. For underground mines certain costs related to panel development, such as undercutting and drawpoint development, are also capitalized as mine development costs until production reaches sustained design capacity for the mine. After reaching design capacity, the mine transitions to the production phase and panel development costs are allocated to

inventory and then included as a component of cost of goods sold. Additionally, interest expense allocable to the cost of developing mining properties and to constructing new facilities is capitalized until assets are ready for their intended use.

Expenditures for replacements and improvements are capitalized. Costs related to periodic scheduled maintenance (*i.e.*, turnarounds) are charged to expense as incurred. Depreciation for mining and milling life-of-mine assets, infrastructure and other common costs is determined using the unit-of-production (UOP) method based on total estimated recoverable proven and probable copper reserves (for primary copper mines) and proven and probable molybdenum reserves (for primary molybdenum mines). Development costs and acquisition costs for proven and probable mineral reserves that relate to a specific ore body are depreciated using the UOP method based on estimated recoverable proven and probable mineral reserves for the ore body benefited. Depreciation, depletion and amortization using the UOP method is recorded upon extraction of the recoverable copper or molybdenum from the ore body or production of finished goods (as applicable), at which time it is allocated to inventory cost and then included as a component of cost of goods sold. Other assets are depreciated on a straight-line basis over estimated useful lives for the related assets of up to 50 years for buildings and 3 to 50 years for machinery and equipment, and mobile equipment.

Included in property, plant, equipment and mine development costs is value beyond proven and probable mineral reserves (VBPP), primarily resulting from FCX's acquisition of FMC in 2007. The concept of VBPP may be interpreted differently by different mining companies. FCX's VBPP is attributable to (i) mineralized material, which includes measured and indicated amounts, that FCX believes could be brought into production with the establishment or modification of required permits and should market conditions and technical assessments warrant, (ii) inferred mineral resources and (iii) exploration potential.

Carrying amounts assigned to VBPP are not charged to expense until the VBPP becomes associated with additional proven and probable mineral reserves and the reserves are produced or the VBPP is determined to be impaired. Additions to proven and probable mineral reserves for properties with VBPP will carry with them the value assigned to VBPP at the date acquired, less any impairment amounts. Refer to Note 5 for further discussion.

Impairment of Long-Lived Mining Assets. FCX assesses the carrying values of its long-lived mining assets for impairment when events or changes in circumstances indicate that the related carrying amounts of such assets may not be recoverable. In evaluating long-lived mining assets for recoverability, estimates of pre-tax undiscounted future cash flows of FCX's individual mines are used. An impairment is considered to exist if total estimated undiscounted future cash flows are less than the carrying amount of the asset. Once it is determined that an impairment exists, an impairment loss is measured as the amount by which the asset carrying value exceeds its fair value. The estimated undiscounted cash flows used to assess recoverability of long-lived assets and to measure the fair value of FCX's mining operations are derived from current business plans, which are developed using near-term price forecasts reflective of the current price environment and management's projections for long-term average metal prices. In addition to near- and long-term metal price assumptions, other key assumptions include estimates of commodity-based and other input costs; proven and probable mineral reserves estimates, including the timing and cost to develop and produce the reserves; VBPP estimates; and the use of appropriate discount rates in the measurement of fair value. FCX believes its estimates and models used to determine fair value are similar to what a market participant would use. As quoted market prices are unavailable for FCX's individual mining operations, fair value is determined through the use of after-tax discounted estimated future cash flows (*i.e.*, Level 3 measurement).

Deferred Mining Costs. Stripping costs (*i.e.*, the costs of removing overburden and waste material to access mineral deposits) incurred during the production phase of an open-pit mine are considered variable production costs and are included as a component of inventory produced during the period in which stripping costs are incurred. Major development expenditures, including stripping costs to prepare unique and identifiable areas outside the current mining area for future production that are considered to be pre-production mine development, are capitalized and amortized using the UOP method based on estimated recoverable proven and probable reserves for the ore body benefited. However, where a second or subsequent pit or major expansion is considered to be a continuation of existing mining activities, stripping costs are accounted for as a current production cost and a component of the associated inventory.

Environmental Obligations. Environmental expenditures are charged to expense or capitalized, depending upon their future economic benefits. Accruals for such expenditures are recorded when it is probable that obligations have been incurred and the costs can be reasonably estimated. Environmental obligations attributed to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) or analogous state programs are considered probable when a claim is asserted, or is probable of assertion, and FCX, or any of its subsidiaries, have been associated with the site. Other environmental remediation obligations are considered probable based on specific facts and circumstances. FCX's estimates of these costs are based on an evaluation of various factors, including currently available facts, existing technology, presently enacted laws and regulations, remediation experience, whether or not FCX is a potentially responsible party (PRP) and the ability of other PRPs to pay their allocated portions. With the exception of those obligations assumed in the acquisition of FMC that were initially recorded at estimated fair values (refer to Note 12 for further discussion), environmental obligations are recorded on an undiscounted basis. Where the available information is sufficient to estimate the amount of the obligation, that estimate has been used. Where the information is only sufficient to establish a range of probable liability and no point within the range is more likely than any other, the lower end of the range has been used. Possible recoveries of some of these costs from other parties are not recognized in the consolidated financial statements until they become probable. Legal costs associated with environmental remediation (such as fees to third-party legal firms for work relating to determining the extent and type of remedial actions and the allocation of costs among PRPs) are included as part of the estimated obligation.

Environmental obligations assumed in the acquisition of FMC, which were initially recorded at fair value and estimated on a discounted basis, are accreted to full value over time through charges to interest expense. Adjustments arising from changes in amounts and timing of estimated costs and settlements may result in increases and decreases in these obligations and are calculated in the same manner as they were initially estimated. Unless these adjustments qualify for capitalization, changes in environmental obligations are charged to operating income when they occur.

FCX performs a comprehensive review of its environmental obligations annually and also reviews changes in facts and circumstances associated with these obligations at least quarterly.

Asset Retirement Obligations. FCX records the fair value of estimated asset retirement obligations (AROs) associated with tangible long-lived assets in the period incurred. Retirement obligations associated with long-lived assets are those for which there is a legal obligation to settle under existing or enacted law, statute, written or oral contract or by legal construction. These obligations, which are initially estimated based on discounted cash flow estimates, are accreted to full value over time through charges to cost of sales. In addition, asset retirement costs (ARCs) are capitalized as part of the related asset's carrying value and are depreciated over the asset's respective useful life.

For mining operations, reclamation costs for disturbances are recognized as an ARO and as a related ARC in the period of the disturbance and depreciated primarily on a UOP basis. FCX's AROs for mining operations consist primarily of costs associated with mine reclamation and closure activities. These activities, which are site specific, generally include costs for earthwork, revegetation, water treatment and demolition.

For oil and gas properties, the fair value of the legal obligation is recognized as an ARO and as a related ARC in the period in which the well is drilled or acquired and is amortized on a UOP basis together with other capitalized costs. Substantially all of FCX's oil and gas leases require that, upon termination of economic production, the working interest owners plug and abandon non-producing wellbores; remove platforms, tanks, production equipment and flow lines; and restore the wellsite.

For non-operating properties without reserves, changes to the ARO are recorded in earnings.

At least annually, FCX reviews its ARO estimates for changes in the projected timing of certain reclamation and closure/restoration costs, changes in cost estimates and additional AROs incurred during the period. Refer to Note 12 for further discussion.

Revenue Recognition. FCX recognizes revenue for all of its products upon transfer of control in an amount that reflects the consideration it expects to receive in exchange for those products. Transfer of control is in accordance with the terms of customer contracts, which is generally upon shipment or delivery of the product. While payment terms vary by contract, terms generally include payment to be made within 30 days, but not longer than 60 days. Certain of FCX's concentrate and cathode sales contracts also provide for provisional pricing, which is accounted for as an embedded derivative (refer to Note 14 for further discussion). For provisionally priced sales, 90 percent to 100 percent of the provisional payment is collected upon shipment or within 20 days, and final balances are settled in a contractually specified future month (generally one to four months from the shipment date) based on quoted monthly average copper settlement prices on the London Metal Exchange (LME) or the Commodity Exchange Inc. (COMEX), and quoted monthly average London Bullion Market Association (London) PM gold prices.

FCX's product revenues are also recorded net of treatment charges, royalties and export duties. Moreover, because a portion of the metals contained in copper concentrate is unrecoverable as a result of the smelting process, FCX's revenues from concentrate sales are also recorded net of allowances based on the quantity and value of these unrecoverable metals. These allowances are a negotiated term of FCX's contracts and vary by customer. Treatment and refining charges represent payments or price adjustments to smelters and refiners that are generally fixed. Refer to Note 16 for a summary of revenue by product type.

Gold sales are priced according to individual contract terms, generally the average London PM gold price for a specified month near the month of shipment.

The majority of FCX's molybdenum sales are priced based on the average published *Metals Week* price, plus conversion premiums for products that undergo additional processing, such as ferromolybdenum and molybdenum chemical products, for the month prior to the month of shipment.

Stock-Based Compensation. Compensation costs for share-based payments to employees are measured at fair value and charged to expense over the requisite service period for awards that are expected to vest. The fair value of stock options is determined using the Black-Scholes-Merton option valuation model. The fair value for stock-settled restricted stock units (RSUs) is based on FCX's stock price on the date of grant. Shares of common stock are issued at the vesting date for stock-settled RSUs. The fair value of performance share units (PSUs) are determined using FCX's stock price and a Monte-Carlo simulation model. The fair value for liability-classified awards (*i.e.*, cash-settled RSUs) is remeasured each reporting period using FCX's stock price. FCX has elected to recognize compensation costs for stock option awards that vest over several years on a straight-line basis over the vesting period, and for RSUs on the graded-vesting method over the vesting period. Refer to Note 10 for further discussion.

Earnings Per Share. FCX calculates its basic net income (loss) per share of common stock under the two-class method and calculates its diluted net income (loss) per share of common stock using the more dilutive of the two-class method or the treasury-stock method. Basic net income (loss) per share of common stock was computed by dividing net income (loss) attributable to common stockholders (after deducting accumulated dividends and undistributed earnings to participating securities) by the weighted-average shares of common stock outstanding during the year. Diluted net income (loss) per share of common stock was calculated by including the basic weighted-average shares of common stock outstanding adjusted for the effects of all potential dilutive shares of common stock, unless their effect would be anti-dilutive.

Reconciliations of net income (loss) and weighted-average shares of common stock outstanding for purposes of calculating basic and diluted net income (loss) per share for the years ended December 31 follow:

	2020	2019	2018
Net income (loss) from continuing operations	$ 865	$ (192)	$ 2,909
Net income from continuing operations attributable to noncontrolling interests	(266)	(50)	(292)
Accumulated dividends and undistributed earnings allocated to participating securities	(3)	(3)	(4)
Net income (loss) from continuing operations attributable to common stockholders	596	(245)	2,613
Net income (loss) from discontinued operations	—	3	(15)
Net income (loss) attributable to common stockholders	$ 596	$ (242)	$ 2,598
Basic weighted-average shares of common stock outstanding (millions)	1,453	1,451	1,449
Add shares issuable upon exercise or vesting of dilutive stock options and RSUs (millions)	8	— [a]	9 [a]
Diluted weighted-average shares of common stock outstanding (millions)	1,461	1,451	1,458
Basic net income (loss) per share attributable to common stockholders:			
Continuing operations	$ 0.41	$ (0.17)	$ 1.80
Discontinued operations	—	—	(0.01)
	$ 0.41	$ (0.17)	$ 1.79
Diluted net income (loss) per share attributable to common stockholders:			
Continuing operations	$ 0.41	$ (0.17)	$ 1.79
Discontinued operations	—	—	(0.01)
	$ 0.41	$ (0.17)	$ 1.78

a. Excludes approximately 11 million shares of common stock in 2019 and 1 million in 2018 associated with outstanding stock options with exercise prices less than the average market price of FCX's common stock and RSUs that were anti-dilutive.

Outstanding stock options with exercise prices greater than the average market price of FCX's common stock during the year are excluded from the computation of diluted net income (loss) per share of common stock. Stock options for 31 million shares of common stock in 2020, 42 million shares in 2019 and 37 million shares in 2018 were excluded.

New Accounting Standards. In June 2016, the Financial Accounting Standards Board issued an Accounting Standards Update (ASU) that requires entities to estimate all expected credit losses for most financial assets held at the reporting date based on an expected loss model, which requires consideration of historical experience, current conditions, and reasonable and supportable forecasts. FCX adopted this ASU effective January 1, 2020, and the adoption of this ASU did not have a material impact on its consolidated financial statements.

Reclassifications. For comparative purposes, certain prior year amounts have been reclassified to conform with the current year presentation. The reclassifications relate to a revision to FCX's presentation of business segments to remove a business segment that no longer qualifies as a reportable segment (refer to Note 16), as well as, reclassification of certain costs from selling, general and administrative expenses to production and delivery in the consolidated statements of operations in 2019 ($20 million) and 2018 ($21 million).

Subsequent Events. FCX evaluated events after December 31, 2020, and through the date the financial statements were issued, and determined any events or transactions occurring during this period that would require recognition or disclosure are appropriately addressed in these financial statements.

NOTE 2. ACQUISITIONS AND DISPOSITIONS

PT-FI Divestment. On December 21, 2018, FCX completed the transaction with the Indonesia government regarding PT-FI's long-term mining rights and share ownership.

Pursuant to the previously announced divestment agreement and related documents, PT Indonesia Asahan Aluminium (Persero) (PT Inalum, also known as MIND ID), an Indonesia state-owned enterprise, acquired for cash consideration of $3.85 billion all of Rio Tinto plc's (Rio Tinto) interests associated with its joint venture with PT-FI (the former Rio Tinto Joint Venture) and 100 percent of FCX's interests in PT Indonesia Papua Metal Dan Mineral (PTI - formerly known as PT Indocopper Investama), which at the time owned 9.36 percent of PT-FI. Of the $3.85 billion in cash consideration, Rio Tinto received $3.5 billion and FCX received $350 million. In addition, Rio Tinto paid FCX $107 million for its share of the 2018 joint venture cash flows.

In connection with the transaction, an aggregate 40 percent share ownership in PT-FI was issued to PT Inalum and PTI (which is expected to be owned by PT Inalum and the provincial/regional government in Papua). Based on a subscription of PT Inalum's rights to acquire for cash consideration of $3.5 billion all of Rio Tinto's interests in the former Rio Tinto Joint Venture, PT-FI acquired all of the common stock of the entity (PT Rio Tinto Indonesia) that held Rio Tinto's interest. After the transaction, PT Inalum's (26.24 percent) and PTI's (25.00 percent) collective share ownership of PT-FI totals 51.24 percent and FCX's share ownership totals 48.76 percent. The arrangements provide for FCX and the other pre-transaction PT-FI shareholders (*i.e.*, PT Inalum and PTI) to retain the economics of the revenue and cost sharing arrangements under the former Rio Tinto Joint Venture. As a result, FCX's economic interest in PT-FI is expected to approximate 81 percent from 2019 through 2022.

The divestment agreement provides that FCX will indemnify PT Inalum and PTI from any losses (reduced by receipts) arising from any tax disputes of PT-FI disclosed to PT Inalum in a Jakarta, Indonesia tax court letter limited to PTI's respective percentage share at the time the loss is finally incurred. Any net obligations arising from any tax settlement would be paid on December 21, 2025. As of December 31, 2020, FCX had accrued $42 million (included in other liabilities in the consolidated balance sheet at December 31, 2020) related to this indemnification.

FCX, PT-FI, PTI and PT Inalum entered into a shareholders agreement (the PT-FI Shareholders Agreement), which includes provisions related to the governance and management of PT-FI. FCX considered the terms of the PT-FI Shareholders Agreement and related governance structure, including whether PT Inalum has substantive participating rights, and concluded that it has retained control and would continue to consolidate PT-FI in its financial statements following the transaction. Among other terms, the governance arrangements under the PT-FI Shareholders Agreement transfers control over the management of PT-FI's mining operations to an operating committee, which is controlled by FCX. Additionally, as discussed above, the existing PT-FI shareholders will retain the economics of the revenue and cost sharing arrangements under the former Rio Tinto Joint Venture, so that FCX's economic interest in the project through 2041 will not be significantly affected by the transaction. FCX believes its conclusion to continue to consolidate PT-FI in its financial statements is in accordance with the U.S. Securities and Exchange Commission (SEC) Regulation S-X, Rule 3A-02 (a), which provides for situations in which consolidation of an entity, notwithstanding the lack of majority ownership, is necessary to present fairly the financial position and results of operations of the registrant, because of the existence of a parent-subsidiary relationship by means other than record ownership of voting stock.

Attribution of PT-FI Net Income or Loss. FCX has concluded that the attribution of PT-FI's net income or loss from December 21, 2018 (the date of the divestment transaction), through December 31, 2022 (the Initial Period), should be based on the economics replacement agreement, as previously discussed. The economics replacement agreement entitles FCX to approximately 81 percent of PT-FI dividends paid during the Initial Period, with the remaining 19 percent paid to the noncontrolling interests. PT-FI's net income for 2020 totaled $765 million, of which $621 million was attributed to FCX. PT-FI's net loss for 2019 totaled $203 million, of which $165 million was attributed to FCX. PT-FI's cumulative net income since December 21, 2018, through December 31, 2020, totaled $425 million, of which $346 million was attributed to FCX. PT-FI has not paid dividends during the Initial Period.

The above-described attribution of PT-FI's net income or loss applies only through the Initial Period. Beginning January 1, 2023, the attribution of PT-FI's net income or loss will be based on equity ownership percentages (48.76 percent for FCX, 26.24 percent for PT Inalum and 25.00 percent for PTI). For all of its other partially owned consolidated subsidiaries, FCX attributes net income or loss based on equity ownership percentages.

Kisanfu Transaction. In December 2020, FCX completed the sale of its interests in the Kisanfu undeveloped project to a wholly owned subsidiary of China Molybdenum Co., Ltd. (CMOC) for $550 million, with after-tax net cash proceeds totaling $415 million. The Kisanfu project, located in the Democratic Republic of Congo, is an undeveloped cobalt and copper resource. As of December 31, 2019, FCX did not have any proven and probable reserves associated with the Kisanfu project. FCX recorded a gain of $486 million in 2020 associated with this transaction.

Cobalt Business. In fourth-quarter 2019, FCX completed the sale of its cobalt refinery in Kokkola, Finland, and related cobalt cathode precursor business (consisting of approximately $271 million of assets and $63 million of liabilities at the time of closing) to Umicore for total cash consideration of approximately $200 million, including approximately $50 million of working capital. Under the terms of the agreement, FCX separated its cobalt business, and Umicore acquired the refinery and cathode precursor business. FCX and the current noncontrolling interest partners in Freeport Cobalt retained the remaining cobalt business, which is a producer of cobalt fine powders, chemicals, catalysts, ceramics and pigments. Lundin Mining Corporation, one of the noncontrolling interest partners, received 30 percent of the proceeds from this transaction. FCX recorded a gain of $59 million in 2019 associated with this transaction.

Timok Transaction. In 2016, FCX sold an interest in the upper zone of the Timok exploration project in Serbia (the 2016 Transaction).

In December 2019, FCX completed the sale of its interest in the lower zone of the Timok exploration project to an affiliate of the purchaser in the 2016 Transaction, for cash consideration of $240 million at closing plus the right to future contingent payments of up to $150 million. These future contingent payments will be based on the future sale of products (as defined in the agreement) from the Timok lower zone. For a period of 12 months after the third anniversary of the initial sale of products from the Timok lower zone, the purchaser can settle, or FCX can demand payment of, such deferred payment obligation, in each case, for a total of $60 million. As these deferred payments are contingent upon future production (the Timok project is still in the exploration phase) and would result in gain recognition, no amounts were recorded upon the closing of the transaction. Subsequent recognition will be based on the gain contingency model, in which the consideration would be recorded in the period in which all contingencies are resolved and the gain is realized. This is expected to be when FCX (i) is provided periodic product sales information by the purchaser or (ii) gives notice to the purchaser or receives notice from the purchaser regarding the settlement of the deferred payments for $60 million. In addition, in lieu of such payment upon achievement of defined development milestones, the purchaser agreed to pay the $107 million contingent consideration provided for in the 2016 Transaction in three installment payments of $45 million by July 31, 2020 (which was collected in 2020), $50 million by December 31, 2021, and $12 million by March 31, 2022. As a result of this transaction, FCX recorded a gain of $343 million, consisting of the cash consideration ($240 million) and the aggregate discounted amount of the three installment payments ($103 million).

Oil and Gas Operations. In 2016, FCX sold the majority of its oil and gas assets held by its wholly owned subsidiary, FCX Oil & Gas LLC (FM O&G). In 2019, FM O&G sold certain property interests for cash consideration of $36 million (before closing adjustments), which resulted in the recognition of a gain of $20 million. In 2018, FM O&G disposed of certain property interests that resulted in the recognition of a gain of $27 million, primarily associated with the abandonment obligations that were assumed by the acquirer.

TF Holdings Limited - Discontinued Operations. In 2016, FCX completed the sale of its 70 percent interest in TF Holdings Limited (TFHL) to COMC for $2.65 billion in cash (before closing adjustments) and contingent consideration of up to $120 million in cash, consisting of $60 million if the average copper price exceeded $3.50 per pound and $60 million if the average cobalt price exceeded $20 per pound, both during the 24-month period ending December 31, 2019.

The contingent consideration was considered a derivative, and the fair value was adjusted through December 31, 2019. FCX realized and collected in January 2020 contingent consideration of $60 million because the average cobalt price exceeded $20 per pound during the 24-month period ending December 31, 2019 (no amount was realized associated with the copper price), and was included in other current assets in the consolidated balance sheet at December 31, 2019. Gains (losses) resulting from changes in the fair value of the contingent consideration derivative totaling $3 million in 2019 and $(17) million in 2018 were included in net income (loss) from discontinued operations and primarily resulted from fluctuations in cobalt and copper prices.

In accordance with accounting guidance, FCX reported the results from TFHL as discontinued operations in the consolidated statements of operations because the disposal represented a strategic shift that had a major effect on operations. The consolidated statements of comprehensive income (loss) were not impacted by discontinued operations as TFHL did not have any other comprehensive income (loss), and the consolidated statements of cash flows are reported on a combined basis without separately presenting discontinued operations.

Net gain (loss) from discontinued operations of $3 million in 2019 and $(15) million in 2018 in the consolidated statements of operations, primarily includes gains (losses) associated with the change in the fair value of contingent consideration.

NOTE 3. OWNERSHIP IN SUBSIDIARIES AND JOINT VENTURES

Ownership in Subsidiaries. FMC produces copper and molybdenum, with mines in North America and South America. At December 31, 2020, FMC's operating mines in North America were Morenci, Bagdad, Safford, Sierrita and Miami located in Arizona; Tyrone and Chino located in New Mexico; and Henderson and Climax located in Colorado. FCX has a 72 percent interest in Morenci (refer to "Joint Ventures – Sumitomo and SMM Morenci, Inc.") and owns 100 percent of the other North America mines. At December 31, 2020, operating mines in South America were Cerro Verde (53.56 percent owned) located in Peru and El Abra (51 percent owned) located in Chile. At December 31, 2020, FMC's net assets totaled $15.0 billion and its accumulated deficit totaled $15.7 billion. FCX had no loans outstanding to FMC at December 31, 2020.

FCX's direct share ownership in PT-FI totaled 81.28 percent through December 21, 2018, and 48.76 percent thereafter. PTI owned 9.36 percent of PT-FI and FCX owned 100 percent of PTI through December 21, 2018. Refer to Note 2 for a discussion of the PT-FI divestment. Refer to "Joint Ventures - Former Rio Tinto Joint Venture" for discussion of PT-FI's unincorporated joint venture. At December 31, 2020, PT-FI's net assets totaled $11.4 billion and its retained earnings totaled $7.2 billion. FCX had $539 million in intercompany loans to PT-FI outstanding at December 31, 2020.

FCX owns 100 percent of the outstanding Atlantic Copper common stock. At December 31, 2020, Atlantic Copper's net assets totaled $145 million and its accumulated deficit totaled $406 million. FCX had $56 million in intercompany loans to Atlantic Copper outstanding at December 31, 2020.

Joint Ventures. FCX has the following unincorporated joint ventures.

Sumitomo and SMM Morenci, Inc. FMC owns a 72 percent undivided interest in Morenci via an unincorporated joint venture. The remaining 28 percent is owned by Sumitomo (15 percent) and SMM Morenci, Inc. (13 percent). Each partner takes in kind its share of Morenci's production. FMC purchased 146 million pounds of Morenci's copper cathode from Sumitomo and SMM Morenci, Inc. at market prices for $409 million during 2020. FMC had receivables from Sumitomo and SMM Morenci, Inc. totaling $15 million at December 31, 2020, and $19 million at December 31, 2019.

Former Rio Tinto Joint Venture. On December 21, 2018, PT-FI acquired Rio Tinto's interest in the joint venture and is consolidating 100 percent of the Indonesia operations (refer to Note 2 for discussion of the PT-FI divestment). Pursuant to Rio Tinto's previous joint venture agreement with PT-FI, Rio Tinto had a 40 percent interest in certain assets and future production exceeding specified annual amounts of copper, gold and silver through 2022 in Block A of PT-FI's former Contract of Work (COW), and, after 2022, a 40 percent interest in all production from Block A.

NOTE 4. INVENTORIES, INCLUDING LONG-TERM MILL AND LEACH STOCKPILES

The components of inventories follow:

	December 31, 2020	December 31, 2019
Current inventories:		
Total materials and supplies, net[a]	$ 1,594	$ 1,649
Mill stockpiles	$ 205	$ 220
Leach stockpiles	809	923
Total current mill and leach stockpiles	$ 1,014	$ 1,143
Raw materials (primarily concentrate)	$ 366	$ 318
Work-in-process	174	124
Finished goods	745	839
Total product	$ 1,285	$ 1,281
Long-term inventories:		
Mill stockpiles	$ 223	$ 181
Leach stockpiles	1,240	1,244
Total long-term mill and leach stockpiles[b]	$ 1,463	$ 1,425

a. Materials and supplies inventory was net of obsolescence reserves totaling $32 million at December 31, 2020, and $24 million at December 31, 2019.

b. Estimated metals in stockpiles not expected to be recovered within the next 12 months.

FCX recorded NRV inventory adjustments to decrease metals inventory carrying values totaling $96 million in 2020, associated with lower market prices for copper ($58 million) and molybdenum ($38 million); $179 million in 2019, associated with lower market prices for molybdenum ($84 million), cobalt ($58 million) and copper ($37 million); and $4 million in 2018. Refer to Note 16 for metals inventory adjustments by business segment.

NOTE 5. PROPERTY, PLANT, EQUIPMENT AND MINE DEVELOPMENT COSTS, NET

The components of net property, plant, equipment and mine development costs follow:

	December 31, 2020	December 31, 2019
Proven and probable mineral reserves	$ 7,142	$ 7,087
VBPP	376	465
Mine development and other	10,686	8,180
Buildings and infrastructure	9,214	8,435
Machinery and equipment	14,235	13,312
Mobile equipment	4,495	4,320
Construction in progress	1,454	4,265
Oil and gas properties	27,281	27,293
Total	74,883	73,357
Accumulated depreciation, depletion, and amortization[a]	(45,065)	(43,773)
Property, plant, equipment and mine development costs, net	$ 29,818	$ 29,584

a. Includes accumulated amortization for oil and gas properties of $27.3 billion at December 31, 2020 and 2019.

FCX recorded $1.6 billion for VBPP in connection with the FMC acquisition in 2007 (excluding $634 million associated with mining operations that were subsequently sold) and transferred $811 million to proven and probable mineral reserves through 2020 (less than $0.1 million in 2020 and none in 2019). Cumulative impairments of and adjustments to VBPP total $497 million, which were primarily recorded in 2008.

Capitalized interest, which primarily related to FCX's mining operations' capital projects, totaled $147 million in 2020, $149 million in 2019 and $96 million in 2018.

During 2020 and 2019, no material impairments of FCX's long-lived mining assets were recorded.

NOTE 6. OTHER ASSETS

The components of other assets follow:

	December 31, 2020	December 31, 2019
Disputed tax assessments:[a]		
PT-FI	$ 143	$ 178
Cerro Verde	190	187
Long-term receivable for taxes[b]	106	290
Intangible assets[c]	401	402
Investments:		
Assurance bond[d]	148	157
PT Smelting[e]	77	80
Fixed income, equity securities and other	70	66
Legally restricted funds[f]	213	196
Contingent consideration associated with sales of assets[g]	96	115
Long-term employee receivables	19	22
Timok transaction receivable (refer to Note 2)	12	58
Other	85	134
Total other assets	$ 1,560	$ 1,885

a. Refer to Note 12 for further discussion.

b. Includes tax overpayments and refunds not expected to be realized within the next 12 months (refer to Note 11).

c. Indefinite-lived intangible assets totaled $215 million at both December 31, 2020, and December 31, 2019. Accumulated amortization of definite-lived intangible assets totaled $32 million at December 31, 2020, and $54 million at December 31, 2019.

d. Relates to PT-FI's commitment for the development of a new smelter in Indonesia (refer to Note 13 for further discussion).

e. PT-FI's 25 percent ownership in PT Smelting (smelter and refinery in Gresik, Indonesia) is recorded using the equity method. Amounts were reduced by unrecognized profits on sales from PT-FI to PT Smelting totaling $39 million at December 31, 2020, and $29 million at December 31, 2019. Trade accounts receivable from PT Smelting totaled $265 million at December 31, 2020, and $261 million at December 31, 2019.

f. Includes $212 million at December 31, 2020, and $196 million at December 31, 2019, held in trusts for AROs related to properties in New Mexico (refer to Note 12 for further discussion).

g. Refer to Note 15 for further discussion.

NOTE 7. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

The components of accounts payable and accrued liabilities follow:

	December 31, 2020	December 31, 2019
Accounts payable	$ 1,473	$ 1,654
Salaries, wages and other compensation	312	249
Accrued interest[a]	243	178
PT-FI contingencies[b]	196	115
Pension, postretirement, postemployment and other employee benefits[c]	91	69
Legal matters	86	88
Accrued taxes, other than income taxes	76	79
Deferred revenue	65	12
Leases[d]	38	44
Other	128	88
Total accounts payable and accrued liabilities	$ 2,708	$ 2,576

a. Third-party interest paid, net of capitalized interest, was $472 million in 2020, $591 million in 2019 and $500 million in 2018.

b. Refer to Note 12 for further discussion.

c. Refer to Note 9 for long-term portion.

d. Refer to Note 13 for further discussion.

NOTE 8. DEBT

FCX's debt at December 31, 2020, included additions of $10 million ($11 million at December 31, 2019) for unamortized fair value adjustments, and is net of reductions of $85 million ($66 million at December 31, 2019) for unamortized net discounts and unamortized debt issuance costs. The components of debt follow:

	December 31,	
	2020	2019
Revolving credit facility	$ —	$ —
Cerro Verde Term Loan	523	826
Senior notes and debentures:		
Issued by FCX:		
4.00% Senior Notes due 2021	—	194
3.55% Senior Notes due 2022	523	1,876
3.875% Senior Notes due 2023	994	1,917
4.55% Senior Notes due 2024	728	846
5.00% Senior Notes due 2027	593	592
4.125% Senior Notes due 2028	691	—
4.375% Senior Notes due 2028	642	—
5.25% Senior Notes due 2029	593	592
4.25% Senior Notes due 2030	592	—
4.625% Senior Notes due 2030	840	—
5.40% Senior Notes due 2034	742	741
5.450% Senior Notes due 2043	1,845	1,844
Issued by FMC:		
$7^1/_8$% Debentures due 2027	115	115
9½% Senior Notes due 2031	124	125
$6^1/_8$% Senior Notes due 2034	117	117
Other	49	41
Total debt	9,711	9,826
Less current portion of debt	(34)	(5)
Long-term debt	$ 9,677	$ 9,821

Revolving Credit Facility. At December 31, 2020, FCX had no borrowings outstanding and $10 million in letters of credit issued under its revolving credit facility, resulting in availability of approximately $3.5 billion, of which approximately $1.5 billion could be used for additional letters of credit. Availability under FCX's revolving credit facility consists of $3.28 billion maturing April 2024 and $220 million maturing April 2023. For PT-FI, $500 million of the revolving credit facility is available.

FCX's revolving credit facility contains customary affirmative covenants and representations, and also contains a number of negative covenants that, among other things, restrict, subject to certain exceptions, the ability of FCX's subsidiaries that are not borrowers or guarantors to incur additional indebtedness (including guarantee obligations) and FCX's or its subsidiaries' abilities to: create liens on assets; enter into sale and leaseback transactions; engage in mergers, liquidations and dissolutions; and sell assets. FCX's revolving credit facility also contains financial ratios governing maximum total leverage and minimum interest expense coverage.

In June 2020, FCX, PT-FI and Freeport-McMoRan Oil & Gas LLC (FM O&G LLC) amended the $3.5 billion, unsecured revolving credit facility. The key changes under the amendment include (i) suspension of the total leverage ratio (ratio of total debt to consolidated earnings before interest, taxes, depreciation and amortization (EBITDA), as defined in the credit agreement) through June 30, 2021, followed by a limit of 5.25x beginning with the quarter ended September 30, 2021, and stepping down to 3.75x beginning January 1, 2022; and (ii) a reduction in the interest expense coverage ratio (ratio of consolidated EBITDA to consolidated cash interest expense, as defined in the credit agreement) to a minimum of 2.00x through December 31, 2021, reverting to 2.25x beginning January 1, 2022. FCX also agreed to a minimum liquidity covenant of $1 billion (consisting of consolidated unrestricted cash and availability under the revolving credit facility) applicable to each quarter through June 30, 2021, and additional restrictions on priority debt and liens, and the payment of common stock dividends through December 31, 2021. At December 31, 2020, FCX was in compliance with all of its covenants.

As further discussed in Note 10, in February 2021, the FCX Board of Directors (the Board) reinstated a cash dividend on FCX's common stock. Prior to the Board's declaration of the initial quarterly dividend, FCX will deliver a covenant reversion notice, at which time the financial covenants and other restrictions, including the dividend restriction, will revert to the limits applicable prior to the June 2020 amendment.

Interest on loans made under the revolving credit facility is, at the option of FCX, determined based on the adjusted London Interbank Offered rate (LIBOR) or the alternate base rate (each as defined in the revolving credit facility) plus a spread to be determined by reference to FCX's credit ratings.

Certain of FCX's debt agreements, including our revolving credit facility, reference LIBOR and other interbank offered rates, which are being phased out and replaced with alternative reference rates. FCX does not expect the transition from LIBOR and other interbank offered rates to have a material impact on its consolidated financial results.

Cerro Verde Term Loan. Repayments of the Cerro Verde Term Loan totaled $305 million in 2020, $200 million in 2019 and $470 million in 2018, with the remaining balance of $525 million due on the maturity date of June 19, 2022. Interest under the Term Loan is based on LIBOR plus a spread based on Cerro Verde's total net debt to EBITDA ratio as defined in the agreement. The interest rate on Cerro Verde's Term Loan was 2.05 percent at December 31, 2020.

FCX recorded net losses of $1 million in 2020, $1 million in 2019 and $3 million in 2018, associated with Cerro Verde's prepayments on its Term Loan.

Cerro Verde Shareholder Loans. In December 2014, Cerro Verde entered into loan agreements with three of its shareholders for borrowings up to $800 million. No amounts were outstanding at December 31, 2020 and 2019, and availability under these agreements totals $200 million at December 31, 2020.

Senior Notes. In July 2020, FCX completed the sale of $650 million of 4.375% Senior Notes due 2028 and $850 million of 4.625% Senior Notes due 2030 for proceeds, net of underwriting fees, totaling $1.485 billion. Interest on these senior notes is payable semiannually on February 1 and August 1 of each year. FCX used $1.4 billion of the net proceeds from this offering to purchase a portion of its outstanding 3.55% Senior Notes due 2022, 3.875% Senior Notes due 2023 and 4.55% Senior Notes due 2024, and the payment of accrued and unpaid interest, premiums, fees and expenses in connection with these transactions. The remaining net proceeds from this offering were used for general corporate purposes.

In March 2020, FCX completed the sale of $700 million of 4.125% Senior Notes due 2028 and $600 million of 4.25% Senior Notes due 2030 for proceeds, net of underwriting fees, totaling $1.285 billion. Interest on these senior notes is payable semiannually on March 1 and September 1 of each year. FCX used a portion of the net proceeds from this offering to purchase a portion of its 4.00% Senior Notes due 2021 and its 3.55% Senior Notes due 2022 and the payment of accrued and unpaid interest, premiums, fees and expenses in connection with these transactions. In April 2020, FCX used the remaining net proceeds to fund the make-whole redemption of all of its remaining 4.00% Senior Notes due 2021 and the payment of accrued and unpaid interest, premiums, fees and expenses in connection with the transaction.

In August 2019, FCX sold $600 million of 5.00% Senior Notes due 2027 and $600 million of 5.25% Senior Notes due 2029 for total net proceeds of $1.187 billion. Interest on these senior notes is payable semiannually on March 1 and September 1 of each year. FCX used the net proceeds from this offering to fund the make-whole redemption of all of its outstanding 6.875% Senior Notes due 2023, and the concurrent tender offers to purchase a portion of its 4.00% Senior Notes due 2021 and its 3.55% Senior Notes due 2022, and the payment of accrued and unpaid interest, premiums, fees and expenses in connection with these transactions.

During 2020, 2019 and 2018, FCX redeemed in full or purchased a portion of the following senior notes.

	Principal Amount	Net Adjustments	Book Value	Redemption/ Tender Value	Loss/(Gain)
Year Ended December 31, 2020					
FCX 4.00% Senior Notes due 2021	$ 195	$ (1)	$ 194	$ 205	$ 11
FCX 3.55% Senior Notes due 2022	1,356	(6)	1,350	1,391	41
FCX 3.875% Senior Notes due 2023	927	(4)	923	964	41
FCX 4.55% Senior Notes due 2024	120	(1)	119	126	7
Total	$ 2,598	$ (12)	$ 2,586	$ 2,686	$ 100
Year Ended December 31, 2019					
FCX 3.100% Senior Notes due 2020	$ 1,000	$ (2)	$ 998	$ 1,003	$ 5
FCX 6.875% Senior Notes due 2023	728	34	762	768	6
FCX 4.00% Senior Notes due 2021	405	(2)	403	418	15
FCX 3.55% Senior Notes due 2022	12	—	12	12	—
Total	$ 2,145	$ 30	$ 2,175	$ 2,201	$ 26
Year Ended December 31, 2018					
FCX 6.75% Senior Notes due 2022	$ 404	$ 22	$ 426	$ 418	$ (8)
FM O&G LLC $6^{7}/_{8}$% Senior Notes due 2023	50	4	54	52	(2)
Total	$ 454	$ 26	$ 480	$ 470	$ (10)

The senior notes listed below are redeemable in whole or in part, at the option of FCX, at a make-whole redemption price prior to the dates stated below, at specified redemption prices beginning on the dates stated below and at 100 percent of principal two years before maturity.

Debt Instrument	Date
5.00% Senior Notes due 2027	September 1, 2022
4.125% Senior Notes due 2028	March 1, 2023
4.375% Senior Notes due 2028	August 1, 2023
5.25% Senior Notes due 2029	September 1, 2024
4.25% Senior Notes due 2030	March 1, 2025
4.625% Senior Notes due 2030	August 1, 2025

The senior notes listed below are redeemable in whole or in part, at the option of FCX, at a make-whole redemption price prior to the dates stated below, and beginning on the dates stated below at 100 percent of principal.

Debt Instrument	Date
3.55% Senior Notes due 2022	December 1, 2021
3.875% Senior Notes due 2023	December 15, 2022
4.55% Senior Notes due 2024	August 14, 2024
5.40% Senior Notes due 2034	May 14, 2034
5.450% Senior Notes due 2043	September 15, 2042

FCX's senior notes contain limitations on liens and rank equally with FCX's other existing and future unsecured and unsubordinated indebtedness.

Guarantees. All of the senior notes issued by FCX are fully and unconditionally guaranteed on a senior basis jointly and severally by FM O&G LLC, as guarantor, which is a 100-percent-owned subsidiary of FM O&G and FCX.

Maturities. Maturities of debt instruments based on the principal amounts and terms outstanding at December 31, 2020, total $36 million in 2021, $1.05 billion in 2022, $1.0 billion in 2023, $730 million in 2024, none in 2025 and 2026 and $7.0 billion thereafter.

NOTE 9. OTHER LIABILITIES, INCLUDING EMPLOYEE BENEFITS

The components of other liabilities follow:

	December 31, 2020	December 31, 2019
Pension, postretirement, postemployment and other employment benefits[a]	$ 1,213	$ 1,318
Cerro Verde royalty dispute	376	502
Provision for tax positions	261	255
Leases[b]	190	204
Other	229	212
Total other liabilities	$ 2,269	$ 2,491

a. Refer to Note 7 for current portion.

b. Refer to Note 13 for further discussion.

Pension Plans. Following is a discussion of FCX's pension plans.

FMC Plans. FMC has U.S. trusteed, non-contributory pension plans covering some U.S. employees and some employees of its international subsidiaries hired before 2007. The applicable FMC plan design determines the manner in which benefits are calculated for any particular group of employees. Benefits are calculated based on final average monthly compensation and years of service or based on a fixed amount for each year of service. Non-bargained FMC employees hired after December 31, 2006, are not eligible to participate in the FMC U.S. pension plan. See below for discussion of a 2020 plan amendment.

FCX's funding policy for these plans provides that contributions to pension trusts shall be at least equal to the minimum funding requirements of the Employee Retirement Income Security Act of 1974, as amended, for U.S. plans; or, in the case of international plans, the minimum legal requirements that may be applicable in the various countries. Additional contributions also may be made from time to time.

FCX's policy for determining asset-mix targets for the FMC plan assets held in a master trust (Master Trust) includes the periodic development of asset allocation studies and review of the liabilities to determine expected long-term rates of return and expected risk for various investment portfolios. FCX's retirement plan administration and investment committee considers these studies in the formal establishment of asset-mix targets defined in the investment policy. FCX's investment objective emphasizes diversification through both the allocation of the Master Trust assets among various asset classes and the selection of investment managers whose various styles are fundamentally complementary to one another and serve to achieve satisfactory rates of return. Diversification, by asset class and by investment manager, is FCX's principal means of reducing volatility and exercising prudent investment judgment. FCX's present target asset allocation approximates 40 percent equity investments (primarily developed market equities), 52 percent fixed income (primarily long-term treasury STRIPS or "separate trading or registered interest and principal securities"; long-term U.S. treasury/agency bonds; global fixed income securities; long-term, high-credit quality corporate bonds; high-yield and emerging markets fixed income securities; and fixed income debt securities) and 8 percent alternative investments (private real estate, real estate investment trusts and private equity).

The expected rate of return on plan assets is evaluated at least annually, taking into consideration asset allocation, historical and expected future performance on the types of assets held in the Master Trust, and the current economic environment. Based on these factors, FCX expects the pension assets will earn an average of 5.25 percent per annum beginning January 1, 2021, which was based on the target asset allocation and long-term capital market return expectations.

For estimation purposes, FCX assumes the long-term asset mix for these plans generally will be consistent with the current mix. Changes in the asset mix could impact the amount of recorded pension costs, the funded status of the plans and the need for future cash contributions. A lower-than-expected return on assets also would decrease plan assets and increase the amount of recorded pension costs in future years. When calculating the expected return on plan assets, FCX uses the market value of assets.

Among the assumptions used to estimate the pension benefit obligation is a discount rate used to calculate the present value of expected future benefit payments for service to date. The discount rate assumption for FCX's U.S. plans is designed to reflect yields on high-quality, fixed-income investments for a given duration. The determination of the discount rate for these plans is based on expected future benefit payments for service to date together with the Mercer Yield Curve - Above Mean. The Mercer Yield Curve - Above Mean is constructed from the bonds in the Mercer Pension Discount Curve that have a yield higher than the regression mean yield curve. The Mercer Yield Curve - Above Mean consists of spot (*i.e.*, zero coupon) interest rates at one-half-year increments for each of the next 30 years and is developed based on pricing and yield information for high-quality corporate bonds. Changes in the discount rate are reflected in FCX's benefit obligation and, therefore, in future pension costs.

SERP Plan. FCX has an unfunded Supplemental Executive Retirement Plan (SERP) for its chief executive officer. The SERP provides for retirement benefits payable in the form of a joint and survivor annuity, life annuity or an equivalent lump sum, which is determined on January 1 of the year in which the participant completed 25 years of credited service. The annuity will equal a percentage of the participant's highest average compensation for any consecutive three-year period during the five years immediately preceding the completion of 25 years of credited service. The SERP benefit will be reduced by the value of all benefits from current and former retirement plans (qualified and nonqualified) sponsored by FCX, by FM Services Company, FCX's wholly owned subsidiary, or by any predecessor employer (including FCX's former parent company), except for benefits produced by accounts funded exclusively by deductions from the participant's pay.

PT-FI Plan. PT-FI has a defined benefit pension plan denominated in Indonesia rupiah covering substantially all of its Indonesia national employees. PT-FI funds the plan and invests the assets in accordance with Indonesia pension guidelines. The pension obligation was valued at an exchange rate of 14,034 rupiah to one U.S. dollar on December 31, 2020, and 13,832 rupiah to one U.S. dollar on December 31, 2019. Indonesia labor laws require that companies provide a minimum level of benefits to employees upon employment termination based on the reason for termination and the employee's years of service. PT-FI's pension benefit obligation includes benefits determined in accordance with this law. PT-FI's expected rate of return on plan assets is evaluated at least annually, taking into consideration its long-range estimated return for the plan based on the asset mix. Based on these factors, PT-FI expects its pension assets will earn an average of 7.75 percent per annum beginning January 1, 2021. The discount rate assumption for PT-FI's plan is based on the Indonesia Government Security Yield Curve. Changes in the discount rate are reflected in PT-FI's benefit obligation and, therefore, in future pension costs.

Plan Information. FCX uses a measurement date of December 31 for its plans. Information for qualified and non-qualified plans where the projected benefit obligations and the accumulated benefit obligations exceed the fair value of plan assets follows:

	December 31,	
	2020	2019
Projected benefit obligation	$ 2,666	$ 2,522
Accumulated benefit obligation	2,664	2,361
Fair value of plan assets	1,884	1,615

Information on the qualified and non-qualified FCX (FMC and SERP plans) and PT-FI plans as of December 31 follows:

	FCX		PT-FI	
	2020	2019	2020	2019
Change in benefit obligation:				
Benefit obligation at beginning of year	$ 2,576	$ 2,230	$ 217	$ 220
Service cost	37	42	11	12
Interest cost	77	95	14	17
Actuarial losses (gains)	308	328	12	(27)
Foreign exchange losses (gains)	1	1	(2)	8
Curtailment	(154)	—	—	—
Benefits and administrative expenses paid	(123)	(120)	(14)	(13)
Benefit obligation at end of year	2,722	2,576	238	217
Change in plan assets:				
Fair value of plan assets at beginning of year	1,677	1,433	254	238
Actual return on plan assets	272	289	13	19
Employer contributions[a]	119	74	2	—
Foreign exchange gains (losses)	1	1	(4)	10
Benefits and administrative expenses paid	(123)	(120)	(14)	(13)
Fair value of plan assets at end of year	1,946	1,677	251	254
Funded status	$ (776)	$ (899)	$ 13	$ 37
Accumulated benefit obligation	$ 2,719	$ 2,414	$ 194	$ 175
Weighted-average assumptions used to determine benefit obligations:				
Discount rate	2.50 %	3.40 %	6.25 %	7.25 %
Rate of compensation increase	— %	3.25 %	4.00 %	4.00 %
Balance sheet classification of funded status:				
Other assets	$ 7	$ 8	$ 13	$ 37
Accounts payable and accrued liabilities	(4)	(4)	—	—
Other liabilities	(779)	(903)	—	—
Total	$ (776)	$ (899)	$ 13	$ 37

a. Employer contributions for 2021 are expected to approximate $64 million for the FCX plans and $2 million for the PT-FI plan (based on a December 31, 2020, exchange rate of 14,034 Indonesia rupiah to one U.S. dollar).

In August 2020, the FMC Retirement Plan, the largest FMC plan, was amended such that, effective September 1, 2020, participants no longer accrue any additional benefits under the FMC Retirement Plan. As a result, FCX remeasured its pension assets and benefit obligation as of July 31, 2020. The discount rate and expected long-term rate of return on the plan assets used for the July 31, 2020, remeasurement were 2.40 percent and 6.25 percent, respectively. The rate of compensation increase was unchanged (3.25 percent). The remeasurement and curtailment resulted in the projected benefit obligation increasing by $184 million and plan assets increasing by $103 million. In addition, FCX recognized a curtailment loss of $4 million in third-quarter 2020.

During 2020, the actuarial loss of $308 million for the FCX pension plans primarily resulted from the decrease in the discount rate from 3.40 percent to 2.50 percent, offset by the FMC Retirement Plan amendment to discontinue additional benefits. During 2019, the actuarial loss of $328 million for the FCX pension plans primarily resulted from the decrease in the discount rate from 4.40 percent to 3.40 percent.

During 2020, the actuarial loss of $12 million for the PT-FI pension plan primarily resulted from the decrease in the discount rate from 7.25 percent to 6.25 percent. During 2019, the actuarial gain of $27 million for the PT-FI pension plan primarily resulted from a change in the estimated plan administration costs, partially offset by a decrease in the discount rate from 8.25 percent to 7.25 percent.

The weighted-average assumptions used to determine net periodic benefit cost and the components of net periodic benefit cost for FCX's pension plans for the years ended December 31 follow:

	2020	2019	2018
Weighted-average assumptions:[a]			
Discount rate	2.98 %	4.40 %	3.70 %
Expected return on plan assets	6.25 %	6.50 %	6.50 %
Rate of compensation increase	3.25 %	3.25 %	3.25 %
Service cost	$ 37	$ 42	$ 44
Interest cost	77	95	84
Expected return on plan assets	(105)	(90)	(101)
Amortization of net actuarial losses	45	48	49
Curtailment loss	4	—	—
Net periodic benefit cost	$ 58	$ 95	$ 76

a. The assumptions shown relate only to the FMC Retirement Plan.

The weighted-average assumptions used to determine net periodic benefit cost and the components of net periodic benefit cost for PT-FI's pension plan for the years ended December 31 follow:

	2020	2019	2018
Weighted-average assumptions:			
Discount rate	7.25 %	8.25 %	6.75 %
Expected return on plan assets	7.75 %	8.25 %	6.75 %
Rate of compensation increase	4.00 %	4.00 %	4.00 %
Service cost	$ 11	$ 12	$ 13
Interest cost	14	17	14
Expected return on plan assets	(19)	(17)	(19)
Amortization of prior service cost	2	1	2
Amortization of net actuarial gains	(3)	(1)	(1)
Net periodic benefit cost	$ 5	$ 12	$ 9

The service cost component of net periodic benefit cost is included in operating income, and the other components are included in other income (expense), net in the consolidated statements of operations.

Included in accumulated other comprehensive loss are the following amounts that have not been recognized in net periodic pension cost as of December 31:

	2020		2019	
	Before Taxes	After Taxes and Noncontrolling Interests	Before Taxes	After Taxes and Noncontrolling Interests
Net actuarial losses	$ 673	$ 558	$ 710	$ 604
Prior service costs	6	1	11	6
	$ 679	$ 559	$ 721	$ 610

Plan assets are classified within a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1), then to prices derived using significant observable inputs (Level 2) and the lowest priority to prices derived using significant unobservable inputs (Level 3).

A summary of the fair value for pension plan assets, including those measured at net asset value (NAV) as a practical expedient, associated with the FCX plans follows:

	Fair Value at December 31, 2020				
	Total	NAV	Level 1	Level 2	Level 3
Commingled/collective funds:					
Global equity	$ 527	$ 527	$ —	$ —	$ —
Fixed income securities	404	404	—	—	—
International small-cap equity	76	76	—	—	—
Real estate property	59	59	—	—	—
U.S. real estate securities	51	51	—	—	—
Short-term investments	51	51	—	—	—
U.S. small-cap equity	25	25	—	—	—
Fixed income:					
Corporate bonds	381	—	—	381	—
Government bonds	181	—	—	181	—
Global large-cap equity securities	109	—	109	—	—
Private equity investments	10	10	—	—	—
Other investments	55	—	1	54	—
Total investments	1,929	$ 1,203	$ 110	$ 616	$ —
Cash and receivables	100				
Payables	(83)				
Total pension plan net assets	$ 1,946				

	Fair Value at December 31, 2019				
	Total	NAV	Level 1	Level 2	Level 3
Commingled/collective funds:					
Global equity	$ 425	$ 425	$ —	$ —	$ —
Fixed income securities	239	239	—	—	—
U.S. small-cap equity	67	67	—	—	—
Real estate property	58	58	—	—	—
International small-cap equity	55	55	—	—	—
U.S. real estate securities	53	53	—	—	—
Short-term investments	16	16	—	—	—
Fixed income:					
Government bonds	279	—	—	279	—
Corporate bonds	256	—	—	256	—
Global large-cap equity securities	107	—	107	—	—
Private equity investments	11	11	—	—	—
Other investments	64	—	14	50	—
Total investments	1,630	$ 924	$ 121	$ 585	$ —
Cash and receivables	86				
Payables	(39)				
Total pension plan net assets	$ 1,677				

Following is a description of the pension plan asset categories and the valuation techniques used to measure fair value. There have been no changes to the techniques used to measure fair value.

Commingled/collective funds are managed by several fund managers and are valued at the NAV per unit of the fund. For most of these funds, the majority of the underlying assets are actively traded securities. These funds (except the real estate property fund) require up to a 15-calendar-day notice for redemptions. The real estate property fund is valued at NAV using information from independent appraisal firms, who have knowledge and expertise about the current market values of real property in the same vicinity as the investments. Redemptions of the real estate property fund are allowed once per quarter, subject to available cash.

Fixed income investments include government and corporate bonds held directly by the Master Trust. Fixed income securities are valued using a bid-evaluation price or a mid-evaluation price and, as such, are classified within Level 2 of the fair value hierarchy. A bid-evaluation price is an estimated price at which a dealer would pay for a security. A mid-evaluation price is the average of the estimated price at which a dealer would sell a security and the estimated price at which a dealer would pay for a security. These evaluations are based on quoted prices, if available, or models that use observable inputs.

Common stocks included in global large-cap equity securities and preferred stocks included in other investments are valued at the closing price reported on the active market on which the individual securities are traded and, as such, are classified within Level 1 of the fair value hierarchy.

Private equity investments are valued at NAV using information from general partners and have inherent restrictions on redemptions that may affect the ability to sell the investments at their NAV in the near term.

A summary of the fair value hierarchy for pension plan assets associated with the PT-FI plan follows:

	Fair Value at December 31, 2020			
	Total	Level 1	Level 2	Level 3
Government bonds	$ 117	$ 117	$ —	$ —
Common stocks	77	77	—	—
Mutual funds	18	18	—	—
Total investments	212	$ 212	$ —	$ —
Cash and receivables[a]	41			
Payables	(2)			
Total pension plan net assets	$ 251			

	Fair Value at December 31, 2019			
	Total	Level 1	Level 2	Level 3
Government bonds	$ 93	$ 93	$ —	$ —
Common stocks	80	80	—	—
Mutual funds	17	17	—	—
Total investments	190	$ 190	$ —	$ —
Cash and receivables[a]	65			
Payables	(1)			
Total pension plan net assets	$ 254			

a. Cash consists primarily of short-term time deposits.

Following is a description of the valuation techniques used for pension plan assets measured at fair value associated with the PT-FI plan. There have been no changes to the techniques used to measure fair value.

Government bonds, common stocks and mutual funds are valued at the closing price reported on the active market on which the individual securities are traded and, as such, are classified within Level 1 of the fair value hierarchy.

The techniques described above may produce a fair value calculation that may not be indicative of NRV or reflective of future fair values. Furthermore, while FCX believes its valuation techniques are appropriate and consistent with those used by other market participants, the use of different techniques or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The expected benefit payments for FCX's and PT-FI's pension plans follow:

	FCX	PT-FI[a]
2021	$ 127	$ 16
2022	174	21
2023	129	29
2024	131	31
2025	132	28
2026 through 2030	655	154

a. Based on a December 31, 2020, exchange rate of 14,034 Indonesia rupiah to one U.S. dollar.

Postretirement and Other Benefits. FCX also provides postretirement medical and life insurance benefits for certain U.S. employees and, in some cases, employees of certain international subsidiaries. These postretirement benefits vary among plans, and many plans require contributions from retirees. The expected cost of providing such postretirement benefits is accrued during the years employees render service.

The benefit obligation (funded status) for the postretirement medical and life insurance benefit plans consisted of a current portion of $7 million (included in accounts payable and accrued liabilities) and a long-term portion of $69 million (included in other liabilities) at December 31, 2020, and a current portion of $13 million and a long-term portion of $112 million at December 31, 2019. The decrease in the benefit obligation from December 31, 2019, to December 31, 2020, is primarily a result of a plan amendment that modified the benefit for most medicare eligible retirees effective January 1, 2021. The discount rate used to determine the benefit obligation for these plans, which was determined on the same basis as FCX's pension plans, was 2.21 percent at December 31, 2020, and 3.00 percent at December 31, 2019. Expected benefit payments for these plans total $8 million for 2021, $7 million for 2022, $7 million for 2023, $6 million for 2024, $6 million for 2025 and $23 million for 2026 through 2030.

The net periodic benefit cost charged to operations for FCX's postretirement benefits (primarily for interest costs) totaled $3 million in 2020, $4 million in 2019 and $5 million in 2018. The discount rate used to determine net periodic benefit cost and the components of net periodic benefit cost for FCX's postretirement benefits was 3.00 percent in 2020, 4.20 percent in 2019 and 3.50 percent in 2018. The medical-care trend rates assumed the first year trend rate was 7.50 percent at December 31, 2020, which declines over the next 15 years with an ultimate trend rate of 4.25 percent.

FCX has a number of postemployment plans covering severance, long-term disability income, continuation of health and life insurance coverage for disabled employees or other welfare benefits. The accumulated postemployment benefit obligation consisted of a current portion of $6 million (included in accounts payable and accrued liabilities) and a long-term portion of $42 million (included in other liabilities) at December 31, 2020, and a current portion of $7 million and a long-term portion of $44 million at December 31, 2019.

FCX also sponsors savings plans for the majority of its U.S. employees. The plans allow employees to contribute a portion of their income in accordance with specified guidelines. These savings plans are principally qualified 401(k) plans for all U.S. salaried and non-bargained hourly employees. In these plans, participants exercise control and direct the investment of their contributions and account balances among various investment options. FCX contributes to these plans at varying rates and matches a percentage of employee contributions up to certain limits, which vary by plan. For employees whose eligible compensation exceeds certain levels, FCX provides an unfunded defined contribution plan, which had a liability balance of $49 million at December 31, 2020, and $46 million at December 31, 2019, all of which was included in other liabilities.

The costs charged to operations for employee savings plans totaled $40 million in 2020, $85 million in 2019 and $75 million in 2018. The decrease in costs for 2020, compared with 2019, resulted from a temporary suspension of FCX contributions to certain plans implemented as part of its April 2020 revised operating plans. FCX contributions resumed on January 1, 2021. FCX has other employee benefit plans, certain of which are related to FCX's financial results, which are recognized in operating costs.

NOTE 10. STOCKHOLDERS' EQUITY AND STOCK-BASED COMPENSATION

FCX's authorized shares of capital stock total 3.05 billion shares, consisting of 3.0 billion shares of common stock and 50 million shares of preferred stock.

Common Stock. In March 2020, in response to the COVID-19 pandemic and resulting global economic uncertainties, the Board suspended FCX's quarterly cash dividend of $0.05 per share. In February 2021, the Board reinstated a cash dividend on FCX's common stock at an annual rate of $0.30 per share. The Board also adopted a new financial policy for the allocation of cash flows aligned with our strategic objectives of maintaining a strong balance sheet, increasing cash returns to shareholders and advancing opportunities for future growth. Under the new policy, up to 50 percent of available cash flows generated after planned capital spending and distributions to noncontrolling interests would be allocated to shareholder returns and the balance to debt reduction and investments in value enhancing growth projects. The new payout policy will be implemented following achievement of a net debt (total consolidated debt less total consolidated cash and cash equivalents) target in the range of $3 billion to $4 billion, excluding project debt for additional smelter capacity in Indonesia. The declaration and payment of future dividends is at the discretion of the Board and will be assessed on an ongoing basis, taking into account FCX's financial results, cash requirements, future prospects, global economic conditions and other factors deemed relevant by the Board.

Accumulated Other Comprehensive Loss. A summary of changes in the balances of each component of accumulated other comprehensive loss, net of tax, follows:

	Defined Benefit Plans	Unrealized Losses on Securities	Translation Adjustment	Total
Balance at January 1, 2018	$ (494)	$ (3)	$ 10	$ (487)
Adoption of accounting standard for reclassification of income taxes	(79)	—	—	(79)
Amounts arising during the period[a,b]	(84)	—	—	(84)
Amounts reclassified[c]	48	3	—	51
Sale of interest in PT-FI (refer to Note 2)	(6)	—	—	(6)
Balance at December 31, 2018	(615)	—	10	(605)
Amounts arising during the period[a,b]	(118)	—	—	(118)
Amounts reclassified[c]	47	—	—	47
Balance at December 31, 2019	(686)	—	10	(676)
Amounts arising during the period[a,b]	47	—	—	47
Amounts reclassified[c]	46	—	—	46
Balance at December 31, 2020	$ (593)	$ —	$ 10	$ (583)

a. Includes net actuarial (losses) gains, net of noncontrolling interest, totaling $(87) million for 2018, $(111) million for 2019 and $40 million for 2020.

b. Includes tax provision (benefit) totaling $4 million for 2018, $(8) million for 2019 and $7 million for 2020.

c. Includes amortization primarily related to actuarial losses, net of taxes of less than $1 million for 2018, 2019 and 2020.

Stock Award Plans. FCX currently has awards outstanding under various stock-based compensation plans. The stockholder-approved 2016 Stock Incentive Plan (the 2016 Plan) provides for the issuance of stock options, stock appreciation rights, restricted stock, RSUs, PSUs and other stock-based awards for up to 72 million common shares. As of December 31, 2020, 39.7 million shares were available for grant under the 2016 Plan, and no shares were available under other plans.

Stock-Based Compensation Cost. Compensation cost charged against earnings for stock-based awards for the years ended December 31 follows:

	2020	2019	2018
Selling, general and administrative expenses	$ 70	$ 48	$ 62
Production and delivery	29	15	12
Total stock-based compensation	99	63	74
Tax benefit and noncontrolling interests' share[a]	(5)	(4)	(4)
Impact on net income (loss)	$ 94	$ 59	$ 70

a. Charges in the U.S. are not expected to generate a future tax benefit.

Stock Options. Stock options granted under the plans generally expire 10 years after the date of grant. Stock options granted prior to 2018 generally vest in 25 percent annual increments; beginning in 2018, awards granted vest in 33 percent annual increments beginning one year from the date of grant. The award agreements provide that participants will receive the following year's vesting upon retirement. Therefore, on the date of grant, FCX accelerates one year of amortization for retirement-eligible employees. Stock options provide for accelerated vesting only upon certain qualifying terminations of employment within one year following a change of control.

A summary of stock options outstanding as of December 31, 2020, and activity during the year ended December 31, 2020, follows:

	Number of Options	Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Balance at January 1	48,312,053	$ 26.16		
Granted	3,803,000	12.04		
Exercised	(6,240,340)	9.09		
Expired/Forfeited	(8,774,615)	34.62		
Balance at December 31	37,100,098	25.58	4.6	$ 259
Vested and exercisable at December 31	30,045,828	28.71	3.7	$ 162

The fair value of each stock option is estimated on the date of grant using the Black-Scholes-Merton option valuation model. Expected volatility is based on implied volatilities from traded options on FCX's common stock and historical volatility of FCX's common stock. FCX uses historical data to estimate future option exercises, forfeitures and expected life. When appropriate, separate groups of employees who have similar historical exercise behavior are considered separately for valuation purposes. The expected dividend rate is calculated using the annual dividend at the date of grant. The risk-free interest rate is based on Federal Reserve rates in effect for bonds with maturity dates equal to the expected term of the option.

Information related to stock options during the years ended December 31 follows:

	2020	2019	2018
Weighted-average assumptions used to value stock option awards:			
Expected volatility	47.7 %	47.8 %	46.1 %
Expected life of options (in years)	5.83	6.10	5.92
Expected dividend rate	1.7 %	1.8 %	1.2 %
Risk-free interest rate	1.5 %	2.5 %	2.6 %
Weighted-average grant-date fair value (per option)	$ 4.72	$ 4.87	$ 7.84
Intrinsic value of options exercised	$ 82	$ 3	$ 7
Fair value of options vested	$ 28	$ 26	$ 24

As of December 31, 2020, FCX had $14 million of total unrecognized compensation cost related to unvested stock options expected to be recognized over a weighted-average period of approximately 1.2 years.

Stock-Settled PSUs and RSUs. Beginning in 2014, FCX's executive officers received annual grants of PSUs that vest after three years. The total grant date target shares related to the PSU grants were 0.5 million for 2018, 0.7 million for 2019 and 0.8 million for 2020, of which the executive officers will earn (i) between 0 percent and 200 percent of the target shares based on achievement of financial metrics and (ii) +/- up to 25 percent of the target shares based on FCX's total shareholder return compared to the total shareholder return of a peer group.

All of FCX's executive officers are retirement eligible, and their PSU awards are therefore non-forfeitable. As such, FCX charges the estimated fair value of the PSU awards to expense at the time the financial and operational, if applicable, metrics are established.

FCX grants RSUs that vest over a period of three years or at the end of three years to certain employees. Some award agreements allow for participants to receive the following year's vesting upon retirement. Therefore, on the date of grant of these RSU awards, FCX accelerates one year of amortization for retirement-eligible employees. FCX also grants RSUs to its directors, which vest on the first anniversary of the date of grant. The fair value of the RSUs is amortized over the vesting period or the period until the director becomes retirement eligible, whichever is shorter. Upon a director's retirement, all of their unvested RSUs immediately vest. For retirement-eligible directors, the fair value of RSUs is recognized in earnings on the date of grant.

The award agreements provide for accelerated vesting of all RSUs held by directors if there is a change of control (as defined in the award agreements) and for accelerated vesting of all RSUs held by employees if they experience a qualifying termination within one year following a change of control.

Dividends attributable to RSUs and PSUs accrue and are paid if the award vests. A summary of outstanding stock-settled RSUs and PSUs as of December 31, 2020, and activity during the year ended December 31, 2020, follows:

	Number of Awards	Weighted-Average Grant-Date Fair Value Per Award	Aggregate Intrinsic Value
Balance at January 1	5,590,685	$ 18.61	
Granted	3,548,497	13.15	
Vested	(1,475,892)	14.95	
Forfeited	(140,268)	14.85	
Balance at December 31	7,523,022	16.79	$ 196

The total fair value of stock-settled RSUs and PSUs granted was $47 million during 2020, $24 million during 2019 and $41 million during 2018. The total intrinsic value of stock-settled RSUs and PSUs vested was $18 million during 2020, $26 million during 2019 and $14 million during 2018. As of December 31, 2020, FCX had $10 million of total unrecognized compensation cost related to unvested stock-settled RSUs expected to be recognized over approximately 1.6 years.

Cash-Settled RSUs. Cash-settled RSUs are similar to stock-settled RSUs, but are settled in cash rather than in shares of common stock. These cash-settled RSUs generally vest over three years of service. Some award agreements allow for participants to receive the following year's vesting upon retirement. Therefore, on the date of grant of these cash-settled RSU awards, FCX accelerates one year of amortization for retirement-eligible employees. The cash-settled RSUs are classified as liability awards, and the fair value of these awards is remeasured each reporting period until the vesting dates. The award agreements for cash-settled RSUs provide for accelerated vesting upon certain qualifying terminations of employment within one year following a change of control.

Dividends attributable to cash-settled RSUs accrue and are paid if the award vests. A summary of outstanding cash-settled RSUs as of December 31, 2020, and activity during the year ended December 31, 2020, follows:

	Number of Awards	Weighted-Average Grant-Date Fair Value Per Award	Aggregate Intrinsic Value
Balance at January 1	1,582,887	$ 14.54	
Granted	879,500	11.96	
Vested	(911,459)	14.79	
Forfeited	(29,831)	13.44	
Balance at December 31	1,521,097	12.92	$ 40

The total grant-date fair value of cash-settled RSUs was $11 million during 2020, $10 million during 2019 and $16 million during 2018. The intrinsic value of cash-settled RSUs vested was $11 million during 2020, $8 million during 2019 and $11 million during 2018. The accrued liability associated with cash-settled RSUs consisted of a current portion of $22 million (included in accounts payable and accrued liabilities) and a long-term portion of $6 million (included in other liabilities) at December 31, 2020, and a current portion of $11 million and a long-term portion of $3 million at December 31, 2019.

Other Information. The following table includes amounts related to exercises of stock options and vesting of RSUs and PSUs during the years ended December 31:

	2020	2019	2018
FCX shares tendered to pay the exercise price and/or the minimum required taxes[a]	1,193,183	670,508	195,322
Cash received from stock option exercises	$ 51	$ 2	$ 8
Actual tax benefit realized for tax deductions	$ 2	$ 1	$ 3
Amounts FCX paid for employee taxes	$ 17	$ 8	$ 4

a. Under terms of the related plans, upon exercise of stock options, vesting of stock-settled RSUs and payout of PSUs, employees may tender FCX shares to pay the exercise price and/or the minimum required taxes.

NOTE 11. INCOME TAXES

Geographic sources of income (losses) before income taxes and equity in affiliated companies' net earnings for the years ended December 31 consist of the following:

	2020	2019	2018
U.S.	$ (40)	$ (287)	$ 390
Foreign	1,837	593	3,502
Total	$ 1,797	$ 306	$ 3,892

Income taxes are provided on the earnings of FCX's material foreign subsidiaries under the assumption that these earnings will be distributed. FCX has not provided deferred income taxes for other differences between the book and tax carrying amounts of its investments in material foreign subsidiaries as FCX considers its ownership positions to be permanent in duration, and quantification of the related deferred tax liability is not practicable.

FCX's provision for income taxes for the years ended December 31 consist of the following:

	2020	2019	2018
Current income taxes:			
Federal	$ 53 [a]	$ (23) [c,d]	$ 46 [c,e]
State	(1)	3	1
Foreign	(816) [b]	(462)	(1,445) [e]
Total current	(764)	(482)	(1,398)
Deferred income taxes:			
Federal	3	48	(106)
State	5	8	(8)
Foreign	(306)	(101)	(102)
Total deferred	(298)	(45)	(216)
Adjustments	37	12	504 [f]
Operating loss carryforwards	81	5	119
Provision for income taxes	$ (944)	$ (510)	$ (991)

a. Includes a tax credit of $53 million associated with the reversal of the tax charge discussed in footnote d below.

b. Includes a tax charge of $135 million associated with the gain on sale of Kisanfu.

c. As a result of the 2017 Tax Cuts and Jobs Act (the Act) guidance regarding a transition tax issued in 2018, FCX recognized a $29 million tax charge in 2018. Additional guidance released in 2019 resulted in a $29 million tax credit in 2019.

d. Includes a tax charge of $53 million associated with the sale of FCX's interest in the lower zone of the Timok exploration project in Serbia.

e. In 2018, FCX completed its analysis of the Act and recognized benefits totaling $123 million ($76 million to the U.S. tax provision and $47 million to PT-FI's tax provision) associated with alternative minimum tax (AMT) credit refunds.

f. Represents net tax credits resulting from the reduction in PT-FI's statutory tax rates in accordance with its new special mining license (IUPK).

A reconciliation of the U.S. federal statutory tax rate to FCX's effective income tax rate for the years ended December 31 follows:

	2020		2019		2018	
	Amount	Percent	Amount	Percent	Amount	Percent
U.S. federal statutory tax rate	$ (377)	(21)%	$ (64)	(21)%	$ (817)	(21)%
Valuation allowance[a]	(210)	(12)	(149)	(49)	129	3
PT-FI historical tax disputes	(8)	—	(145)	(47)	—	—
Percentage depletion	104	6	118	39	141	4
Effect of foreign rates different than the U.S. federal statutory rate	(109)	(6)	(64)	(21)	(494)	(13)
Withholding and other impacts on foreign earnings	(193)	(11)	(55)	(18)	(232)	(6)
Adjustment to deferred taxes	—	—	(49)[b]	(16)	—	—
Non-deductible permanent differences	—	—	(47)	(15)	(25)	(1)
Uncertain tax positions	(15)	(1)	(47)	(15)	(7)	—
U.S. tax reform	—	—	29[c]	9	94[c,d]	2
Foreign tax credit limitation	28	2	(16)	(5)	(195)	(5)
State income taxes	(2)	—	16	6	7	1
Cerro Verde historical tax disputes[e]	(39)	(2)	2	1	(55)	(1)
Change in PT-FI tax rates	—	—	—	—	504	13
Timok exploration project sale	53	3	(15)	(5)	—	—
Sale of Kisanfu	(135)	(8)	—	—	—	—
Other items, net	(41)	(3)	(24)	(9)	(41)	(1)
Provision for income taxes	$ (944)	(53)%	$ (510)	(166)%	$ (991)	(25)%

a. Refer to "Valuation Allowance" below for discussion of changes.

b. Represents net tax charges primarily to adjust deferred taxes on historical balance sheet items in accordance with tax accounting principles.

c. As a result of the Act guidance regarding a transition tax issued in 2018, FCX recognized a $29 million tax charge in 2018. Additional guidance released in 2019 resulted in a $29 million tax credit in 2019.

d. In 2018, FCX completed its analysis of the Act and recognized benefits totaling $123 million ($76 million to the U.S. tax provisions and $47 million to PT-FI's tax provision) associated with AMT credit refunds.

e. Refer to Note 12 for further discussion.

FCX paid federal, state and foreign income taxes totaling $397 million in 2020, $610 million in 2019 and $2.0 billion in 2018. FCX received refunds of federal, state and foreign income taxes of $265 million in 2020, $306 million in 2019 and $108 million in 2018.

The components of deferred taxes follow:

	December 31,	
	2020	2019
Deferred tax assets:		
Foreign tax credits	$ 1,641	$ 1,716
Accrued expenses	1,194	1,108
Net operating losses	2,443	2,249
Employee benefit plans	171	198
Other	238	267
Deferred tax assets	5,687	5,538
Valuation allowances	(4,732)	(4,576)
Net deferred tax assets	955	962
Deferred tax liabilities:		
Property, plant, equipment and mine development costs	(4,500)	(4,372)
Undistributed earnings	(694)	(639)
Other	(169)	(157)
Total deferred tax liabilities	(5,363)	(5,168)
Net deferred tax liabilities	$ (4,408)	$ (4,206)

Tax Attributes. At December 31, 2020, FCX had (i) U.S. foreign tax credits of $1.6 billion that will expire between 2021 and 2027, (ii) U.S. federal net operating losses of $7.0 billion that primarily expire between 2036 and 2037, of that balance approximately $305 million can be carried forward indefinitely, (iii) U.S. state net operating losses of $10.8 billion that primarily expire between 2021 and 2040, (iv) Spanish net operating losses of $559 million that can be carried forward indefinitely and (v) Indonesia net operating losses of $910 million that expire between 2021 and 2025.

Valuation Allowance. On the basis of available information at December 31, 2020, including positive and negative evidence, FCX has provided valuation allowances for certain of its deferred tax assets where it believes it is more-likely-than-not that some portion or all of such assets will not be realized. Valuation allowances totaled $4.7 billion at December 31, 2020, and $4.6 billion at December 31, 2019, and covered all of FCX's U.S. foreign tax credits, U.S. federal net operating losses, foreign net operating losses and substantially all of its U.S. state net operating losses.

The valuation allowance related to FCX's U.S. foreign tax credits totaled $1.6 billion at December 31, 2020. FCX has operations in tax jurisdictions where statutory income taxes and withholding taxes are in excess of the U.S. federal income tax rate. Valuation allowances are recognized on foreign tax credits for which no benefit is expected to be realized.

The valuation allowance related to FCX's U.S. federal, state and foreign net operating losses totaled $2.4 billion and other deferred tax assets totaled $647 million at December 31, 2020. Net operating losses and deferred tax assets represent future deductions for which a benefit will only be realized to the extent these deductions offset future income. FCX develops an estimate of which future tax deductions will be realized and recognizes a valuation allowance to the extent these deductions are not expected to be realized in future periods.

Valuation allowances will continue to be carried on U.S. foreign tax credits, U.S. federal, state and foreign net operating losses and U.S. federal, state and foreign deferred tax assets, until such time that (i) FCX generates taxable income against which any of the assets, credits or net operating losses can be used, (ii) forecasts of future income provide sufficient positive evidence to support reversal of the valuation allowances or (iii) FCX identifies a prudent and feasible means of securing the benefit of the assets, credits or net operating losses that can be implemented.

The $156 million net increase in the valuation allowances during 2020 primarily related to increases totaling $250 million in U.S. federal net operating loss carryforwards, partly offset by an $11 million decrease in U.S. deferred tax assets for which no benefit is expected to be realized, and a $75 million decrease in U.S foreign tax credits associated with expirations.

Other Events. In connection with the negative impacts of the COVID-19 pandemic on the global economy, governments throughout the world are announcing measures that are intended to provide tax and other financial relief. Such measures include the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), signed into law by President Trump on March 27, 2020. None of these measures resulted in material impacts to FCX's provision for income taxes for the year ended December 31, 2020. However, certain provisions of the CARES Act provided FCX with the opportunity to accelerate collections of tax refunds, primarily those associated with the U.S. AMT. FCX collected U.S. AMT credit refunds of $244 million in 2020. FCX expects to collect an additional $24 million within the next 12 months. FCX continues to evaluate income tax accounting considerations of COVID-19 measures as they develop, including any impact on its measurement of existing deferred tax assets and deferred tax liabilities. FCX will recognize any impact from COVID-19 related changes to tax laws in the period in which the new legislation is enacted.

On December 21, 2018, FCX completed the transaction with the Indonesia government regarding PT-FI's long-term mining rights and share ownership. Concurrent with closing the transaction, the Indonesia government granted PT-FI an IUPK to replace its former COW. Under the terms of the IUPK, PT-FI is subject to a 25 percent corporate income tax rate and a 10 percent profits tax on net income beginning in 2019. As a result of the change in statutory tax rate applicable to deferred income tax liabilities, during fourth-quarter 2018, FCX recognized a tax credit of $504 million.

In 2018, PT-FI received unfavorable Indonesia Tax Court decisions with respect to its appeal of capitalized mine development costs on its 2012 and 2014 corporate income tax returns. PT-FI appealed those decisions to the Indonesia Supreme Court. On October 31, 2019, the Indonesia Supreme Court communicated an unfavorable ruling regarding the treatment of mine development costs on PT-FI's 2014 tax return. During the fourth quarter of 2019, PT-FI met with the Indonesia Tax Office and developed a framework for resolution of the disputed matters. On December 30, 2019, PT-FI made a payment of $250 million based on its understanding of the framework for resolution of disputes arising from the audits of the tax years 2012 through 2016, as well as tax years 2017 (for which a tax audit is not complete), 2018 (for which a tax audit has not begun) and 2019 (for which an audit has just begun). Additional administrative steps will need to be completed by both PT-FI and the Indonesia Tax Office in order to implement the resolution.

In 2019, in conjunction with the framework for resolution above, PT-FI recorded total net charges in 2019 of $304 million, including $123 million for non-deductible penalties recorded to other income (expense), net, $78 million for non-deductible interest recorded to interest expense and $103 million to provision for income tax expense, primarily for the impact of a reduction in the statutory rate on PT-FI's deferred tax assets.

During fourth-quarter 2020, in connection with progress of the framework for resolution, PT-FI recorded additional net charges of $42 million, including $9 million for non-deductible penalties recorded to other income (expense), net and $35 million for non-deductible interest recorded to interest expense, partly offset by a benefit of $2 million to provision for income tax expense.

SUNAT (National Superintendency of Customs and Administration), the Peru national tax authority, has assessed mining royalties on ore processed by the Cerro Verde concentrator for the period December 2006 to December 2013, which Cerro Verde has contested on the basis that its 1998 stability agreement exempts from royalties all minerals extracted from its mining concessions, irrespective of the method used for processing those minerals. Refer to Note 12 for further discussion of the Cerro Verde royalty dispute and net charges recorded in 2017 through 2019.

In December 2016, the Peru parliament passed tax legislation that, in part, modified the applicable tax rates established in its December 2014 tax legislation, which progressively decreased the corporate income tax rate from 30 percent in 2014 to 26 percent in 2019 and thereafter, and also increased the dividend tax rate on distributions from 4.1 percent in 2014 to 9.3 percent in 2019 and thereafter. Under the tax legislation, which was effective January 1, 2017, the corporate income tax rate was 29.5 percent, and the dividend tax rate on distributions of earnings was 5 percent. Cerro Verde's current mining stability agreement subjects FCX to a stable income tax rate of 32 percent through the expiration of the agreement on December 31, 2028. The tax rate on dividend distributions is not stabilized by the agreement.

In September 2014, the Chile legislature approved a tax reform package that implemented a dual tax system, which was amended in January 2016. Under previous rules, FCX's share of income from Chile operations was subject to an effective 35 percent tax rate allocated between income taxes and dividend withholding taxes. Under the

amended tax reform package, FCX's Chile operation is subject to the "Partially-Integrated System," resulting in FCX's share of income from El Abra being subject to progressively increasing effective tax rates of 35 percent through 2019 and 44.5 percent in 2020 and thereafter. In November 2017, the progression of increasing tax rates was delayed by the Chile legislature so that the 35 percent rate continues through 2021 increasing to 44.5 percent in 2022 and thereafter. In January 2020, the Chile legislature approved a tax reform package that would further delay the 44.5 percent rate until 2027 and thereafter.

In 2010, the Chile legislature approved an increase in mining royalty taxes to help fund earthquake reconstruction activities, education and health programs. Mining royalty taxes at FCX's El Abra mine were 4 percent for the years 2013 through 2017. Beginning in 2018, and through 2023, rates moved to a sliding scale of 5 to 14 percent (depending on a defined operational margin).

Uncertain Tax Positions. FCX accounts for uncertain income tax positions using a threshold and measurement criteria for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. FCX's policy associated with uncertain tax positions is to record accrued interest in interest expense and accrued penalties in other income (expense), net rather than in the provision for income taxes.

A summary of the activities associated with FCX's reserve for unrecognized tax benefits for the years ended December 31 follows:

	2020	2019	2018
Balance at beginning of year	$ 376	$ 404	$ 390
Additions:			
Prior year tax positions	48	73	100
Current year tax positions	10	11	14
Decreases:			
Prior year tax positions	(60)	(75)	(86)
Settlements with taxing authorities	(79)	(37)	(9)
Lapse of statute of limitations	—	—	(5)
Balance at end of year	$ 295	$ 376	$ 404

The total amount of accrued interest and penalties associated with unrecognized tax benefits included in the consolidated balance sheets was $163 million at December 31, 2020, primarily relating to unrecognized tax benefits associated with royalties and other related mining taxes, and $231 million at December 31, 2019, and $186 million at December 31, 2018.

The reserve for unrecognized tax benefits of $295 million at December 31, 2020, included $254 million ($168 million net of income tax benefits and valuation allowances) that, if recognized, would reduce FCX's provision for income taxes. Changes in the reserve for unrecognized tax benefits associated with prior year tax positions were primarily related to uncertainties associated with non-deductible service costs, royalties and other related mining taxes and cost recovery methods. Changes to the reserve for unrecognized tax benefits associated with current year tax positions were primarily related to uncertainties associated with FCX's tax treatment of social welfare payments and cost recovery methods. There continues to be uncertainty related to the timing of settlements with taxing authorities, but if additional settlements are agreed upon during the year 2021, FCX could experience a change in its reserve for unrecognized tax benefits.

FCX or its subsidiaries file income tax returns in the U.S. federal jurisdiction and various state and foreign jurisdictions. The tax years for FCX's major tax jurisdictions that remain subject to examination are as follows:

Jurisdiction	Years Subject to Examination	Additional Open Years
U.S. Federal	2017-2018	2014-2016, 2019-2020
Indonesia	2011-2017, 2019	2018, 2020
Peru	2014-2016	2017-2020
Chile	2018-2019	2020

NOTE 12. CONTINGENCIES

Environmental. FCX subsidiaries are subject to various national, state and local environmental laws and regulations that govern emissions of air pollutants; discharges of water pollutants; generation, handling, storage and disposal of hazardous substances, hazardous wastes and other toxic materials; and remediation, restoration and reclamation of environmental contamination. FCX subsidiaries that operate in the U.S. also are subject to potential liabilities arising under CERCLA and similar state laws that impose responsibility on current and previous owners and operators of a facility for the remediation of hazardous substances released from the facility into the environment, including damages to natural resources, in some cases irrespective of when the damage to the environment occurred or who caused it. Remediation liability also extends to persons who arranged for the disposal of hazardous substances or transported the hazardous substances to a disposal site selected by the transporter. These liabilities are often shared on a joint and several basis, meaning that each responsible party is fully responsible for the remediation if some or all of the other historical owners or operators no longer exist, do not have the financial ability to respond or cannot be found. As a result, because of FCX's acquisition of FMC in 2007, many of the subsidiary companies FCX now owns are responsible for a wide variety of environmental remediation projects throughout the U.S., and FCX expects to spend substantial sums annually for many years to address those remediation issues. Certain FCX subsidiaries have been advised by the U.S. Environmental Protection Agency (EPA), the Department of the Interior, the Department of Agriculture and various state agencies that, under CERCLA or similar state laws and regulations, they may be liable for costs of responding to environmental conditions at a number of sites that have been or are being investigated to determine whether releases of hazardous substances have occurred and, if so, to develop and implement remedial actions to address environmental concerns. FCX is also subject to claims where the release of hazardous substances is alleged to have damaged natural resources (NRD) and to litigation by individuals allegedly exposed to hazardous substances. As of December 31, 2020, FCX had more than 100 active remediation projects, including NRD claims, in 24 U.S. states.

A summary of changes in estimated environmental obligations for the years ended December 31 follows:

	2020	2019	2018
Balance at beginning of year	$ 1,561	$ 1,511	$ 1,439
Accretion expense[a]	102	102	100
Additions[b]	38	23	56
Reductions[b]	(58)	(1)	—
Spending	(59)	(74)	(84)
Balance at end of year	1,584	1,561	1,511
Less current portion	(83)	(106)	(132)
Long-term portion	$ 1,501	$ 1,455	$ 1,379

a. Represents accretion of the fair value of environmental obligations assumed in the 2007 acquisition of FMC, which were determined on a discounted cash flow basis.

b. Adjustments to environmental obligations that do not provide future economic benefits are charged to operating income. Reductions primarily reflect revisions for changes in the anticipated scope and timing of projects and other noncash adjustments.

Estimated future environmental cash payments (on an undiscounted and de-escalated basis) total $83 million in 2021, $95 million in 2022, $100 million in 2023, $100 million in 2024, $100 million in 2025 and $3.2 billion thereafter. The amount and timing of these estimated payments will change as a result of changes in regulatory requirements, changes in scope and timing of remediation activities, the settlement of environmental matters and as actual spending occurs.

At December 31, 2020, FCX's environmental obligations totaled $1.6 billion, including $1.5 billion recorded on a discounted basis for those obligations assumed in the FMC acquisition at fair value. On an undiscounted and de-escalated basis, these obligations totaled $3.7 billion. FCX estimates it is reasonably possible that these obligations could range between $3.3 billion and $4.2 billion on an undiscounted and unescalated basis.

At December 31, 2020, the most significant environmental obligations were associated with the Pinal Creek site in Arizona; the Newtown Creek site in New York City; historical smelter sites principally located in Arizona, Indiana, Kansas, Missouri, New Jersey, Oklahoma and Pennsylvania; and uranium mining sites in the western U.S. The recorded environmental obligations for these sites totaled $1.4 billion at December 31, 2020. FCX may also be subject to litigation brought by private parties, regulators and local governmental authorities related to these historical sites. A discussion of these sites follows.

Pinal Creek. The Pinal Creek site was listed under the Arizona Department of Environmental Quality's (ADEQ) Water Quality Assurance Revolving Fund program in 1989 for contamination in the shallow alluvial aquifers within the Pinal Creek drainage near Miami, Arizona. Since that time, environmental remediation has been performed by members of the Pinal Creek Group, consisting of Freeport-McMoRan Miami Inc. (Miami), an indirect wholly owned subsidiary of FCX, and two other companies. Pursuant to a 2010 settlement agreement, Miami agreed to take full responsibility for future groundwater remediation at the Pinal Creek site, with limited exceptions. Remediation work consisting of groundwater extraction and treatment plus source control capping is expected to continue for many years.

Newtown Creek. From the 1930s until 1964, Phelps Dodge Refining Corporation (PDRC), an indirect wholly owned subsidiary of FCX, operated a copper smelter, and from the 1930s until 1984 operated a copper refinery, on the banks of Newtown Creek (the creek), which is a 3.5-mile-long waterway that forms part of the boundary between Brooklyn and Queens in New York City. Heavy industrialization along the banks of the creek and discharges from the City of New York's sewer system over more than a century resulted in significant environmental contamination of the waterway. In 2010, EPA notified PDRC, four other companies and the City of New York that EPA considers them to be PRPs under CERCLA. The notified parties began working with EPA to identify other PRPs. In 2010, EPA designated the creek as a Superfund site, and in 2011, PDRC and five other parties (the Newtown Creek Group, NCG) entered an Administrative Order on Consent (AOC) to perform a remedial investigation/feasibility study (RI/FS) to assess the nature and extent of environmental contamination in the creek and identify potential remedial options. The parties' RI/FS work under the AOC and their efforts to identify other PRPs are ongoing. The NCG submitted the initial draft RI to EPA in 2016 and currently expects the report to be finalized in 2021. The NCG currently anticipates a draft FS to be submitted to EPA for review and approval in 2024. EPA is not expected to propose a final creek-wide remedy until after the RI/FS is completed, with the actual remediation construction starting several years later. In July 2019, the NCG entered into an AOC to conduct a Focused Feasibility Study (FFS) of the first two miles of the creek to support an evaluation of an interim remedy for that section of the creek (Early Action). A draft FFS was submitted to EPA in December 2019, and an EPA decision on the Early Action is currently expected in late 2021. The actual costs of fulfilling this remedial obligation and the allocation of costs among PRPs are uncertain and subject to change based on the results of the Early Action, the RI/FS, the remedy ultimately selected by EPA and related allocation determinations. The overall cost and the portion ultimately allocated to PDRC could be material to FCX.

Historical Smelter Sites. FCX subsidiaries and their predecessors at various times owned or operated copper, zinc and lead smelters or refineries in states including Arizona, Indiana, Kansas, Missouri, New Jersey, Oklahoma and Pennsylvania. For some of these former processing sites, certain FCX subsidiaries have been advised by EPA or state agencies that they may be liable for costs of investigating and, if appropriate, remediating environmental conditions associated with these former processing facilities. At other sites, certain FCX subsidiaries have entered into state voluntary remediation programs to investigate and, if appropriate, remediate on-site and off-site conditions associated with the facilities. The historical processing sites are in various stages of assessment and remediation. At some of these sites, disputes with local residents and elected officials regarding alleged health effects or the effectiveness of remediation efforts have resulted in litigation of various types, and similar litigation at other sites is possible.

From 1920 until 1986, United States Metals Refining Company (USMR), an indirect wholly owned subsidiary of FCX, owned and operated a copper smelter and refinery in the Borough of Carteret, New Jersey. Since the early 1980s, the site has been the subject of environmental investigation and remediation, under the direction and supervision of the New Jersey Department of Environmental Protection (NJDEP). On-site contamination is in the later stages of remediation. In 2012, after receiving a request from NJDEP, USMR also began investigating and remediating off-site properties, which is ongoing. As a result of off-site soil sampling in public and private areas near the former Carteret smelter, FCX established an environmental obligation for known and potential off-site environmental remediation. Additional sampling and analysis is ongoing and could result in additional adjustments to the related environmental remediation obligation in future periods. The extent of contamination and potential remedial actions are uncertain and may take several years to evaluate.

On January 30, 2017, a putative class action titled Juan Duarte, Betsy Duarte and N.D., Infant, by Parents and Natural Guardians Juan Duarte and Betsy Duarte, Leroy Nobles and Betty Nobles, on behalf of themselves and all others similarly situated v. United States Metals Refining Company, Freeport-McMoRan Copper & Gold Inc. and Amax Realty Development, Inc., Docket No. 734-17, was filed in the Superior Court of New Jersey against USMR, FCX, and Amax Realty Development, Inc. The defendants removed this litigation to the U.S. District Court for the District of New Jersey, where it remains pending, and FMC was added as a defendant. The suit alleges that USMR

generated and disposed of smelter waste at the site and allegedly released contaminants on-site and off-site through discharges to surface water and air emissions over a period of decades and seeks unspecified compensatory and punitive damages for economic losses, including diminished property values, additional soil investigation and remediation and other damages. In January 2020, the parties completed briefing on the plaintiffs' motion for class certification and are awaiting a decision by the court. FCX continues to vigorously defend this matter.

Uranium Mining Sites. During a period between 1940 and the early 1980s, certain FCX subsidiaries and their predecessors were involved in uranium exploration and mining in the western U.S., primarily on federal and tribal lands in the Four Corners region of the southwest. Similar exploration and mining activities by other companies have also caused environmental impacts warranting remediation. In 2017, the Department of Justice, EPA, Navajo Nation, and two FCX subsidiaries reached an agreement regarding the financial contribution of the U.S. Government and the FCX subsidiaries and the scope of the environmental investigation and remediation work for 94 former uranium mining sites on tribal lands. Under the terms of the Consent Decree executed on May 22, 2017, and approved by the U.S. District Court for the District of Arizona, the U.S. contributed $335 million into a trust fund to cover the government's initial share of the costs, and FCX's subsidiaries are proceeding with the environmental investigation and remediation work at the 94 sites. The program is expected to take more than 20 years to complete. In 2020, FCX reduced its associated obligation and recorded a $47 million credit to operating income to reflect the discounting effect of the recent and expected pace of project work under post-COVID-19 pandemic conditions. FCX is also conducting site surveys of historical uranium mining claims associated with FCX subsidiaries on non-tribal federal lands in the Four Corners region. Under a memorandum of understanding with the U.S. Bureau of Land Management (BLM), site surveys are being performed on approximately 15,000 mining claims, ranging from undisturbed claims to claims with mining features. Based on these surveys, BLM has issued no further action determinations for certain undisturbed claims. BLM may request additional assessment or reclamation activities for other claims with mining features. FCX will update this obligation when it has a sufficient number of remedy decisions from the BLM to support a reasonably certain range of outcomes. FCX expects it will take several years to complete this work.

AROs. FCX's ARO estimates are reflected on a third-party cost basis and are based on FCX's legal obligation to retire tangible, long-lived assets. A summary of changes in FCX's AROs for the years ended December 31 follows:

	2020	2019	2018
Balance at beginning of year	$ 2,505	$ 2,547	$ 2,583
Liabilities incurred	7	20	1
Settlements and revisions to cash flow estimates, net	(13)	(5)	50
Accretion expense	131	118	110
Dispositions	(2)	(5)	(37)
Spending	(156)	(170)	(160)
Balance at end of year	2,472	2,505	2,547
Less current portion	(268)	(330)	(317)
Long-term portion	$ 2,204	$ 2,175	$ 2,230

ARO costs may increase or decrease significantly in the future as a result of changes in regulations, changes in engineering designs and technology, permit modifications or updates, changes in mine plans, settlements, inflation or other factors and as reclamation (concurrent with mining operations or post mining) spending occurs. ARO activities and expenditures for mining operations generally are made over an extended period of time commencing near the end of the mine life; however, certain reclamation activities may be accelerated if legally required or if determined to be economically beneficial. The methods used or required to plug and abandon non-producing oil and gas wellbores; remove platforms, tanks, production equipment and flow lines; and restore wellsites could change over time.

Financial Assurance. New Mexico, Arizona, Colorado and other states, as well as federal regulations governing mine operations on federal land, require financial assurance to be provided for the estimated costs of mine reclamation and closure, including groundwater quality protection programs. FCX has satisfied financial assurance requirements by using a variety of mechanisms, primarily involving parent company performance guarantees and financial capability demonstrations, but also including trust funds, surety bonds, letters of credit and other collateral. The applicable regulations specify financial strength tests that are designed to confirm a company's or guarantor's financial capability to fund estimated reclamation and closure costs. The amount of financial assurance FCX subsidiaries are required to provide will vary with changes in laws, regulations, reclamation and closure

requirements, and cost estimates. At December 31, 2020, FCX's financial assurance obligations associated with these U.S. mine closure and reclamation/restoration costs totaled $1.5 billion, of which $860 million was in the form of guarantees issued by FCX and FMC. At December 31, 2020, FCX had trust assets totaling $212 million (included in other assets), which are legally restricted to be used to satisfy its financial assurance obligations for its mining properties in New Mexico. In addition, FCX subsidiaries have financial assurance obligations for its oil and gas properties associated with plugging and abandoning wells and facilities totaling $469 million. Where oil and gas guarantees associated with the Bureau of Ocean Energy Management do not include a stated cap, the amounts reflect management's estimates of the potential exposure.

New Mexico Environmental and Reclamation Programs. FCX's New Mexico operations are regulated under the New Mexico Water Quality Act and regulations adopted by the Water Quality Control Commission. In connection with discharge permits, the New Mexico Environment Department (NMED) has required each of these operations to submit closure plans for NMED's approval. The closure plans must include measures to assure meeting applicable groundwater quality standards following the closure of discharging facilities and to abate groundwater or surface water contamination to meet applicable standards. FCX's New Mexico operations also are subject to regulation under the 1993 New Mexico Mining Act (the Mining Act) and the related rules that are administered by the Mining and Minerals Division of the New Mexico Energy, Minerals and Natural Resources Department. Under the Mining Act, mines are required to obtain approval of reclamation plans. In 2020, the agencies approved updates to the closure plan and financial assurance instruments and completed a permit renewal for Chino. FCX expects permit renewals and updated financial assurance instruments for Tyrone to be finalized during in 2021. At December 31, 2020, FCX had accrued reclamation and closure costs of $477 million for its New Mexico operations. Additional accruals may be required based on the state's periodic review of FCX's updated closure plans and any resulting permit conditions, and the amount of those accruals could be material.

Arizona Environmental and Reclamation Programs. FCX's Arizona operations are subject to regulatory oversight by the ADEQ. ADEQ has adopted regulations for its aquifer protection permit (APP) program that require permits for, among other things, certain facilities, activities and structures used for mining, leaching, concentrating and smelting, and require compliance with aquifer water quality standards during operations and closure. An application for an APP requires a proposed closure strategy that will meet applicable groundwater protection requirements following cessation of operations and an estimate of the implementation cost, with a more detailed closure plan required at the time operations cease. A permit applicant must demonstrate its financial ability to meet the closure costs approved by ADEQ. Closure costs for facilities covered by APPs are required to be updated every six years and financial assurance mechanisms are required to be updated every two years. Morenci's APP requires updated stockpile reclamation plans by 2022, which will result in increased closure costs. Bagdad's APP also requires an updated cost estimate for its closure plan in 2022. FCX will continue updating its closure strategy and closure cost estimates at other Arizona sites and intends to submit an updated tailings dam system closure cost for Bagdad according to a schedule to be determined by ADEQ.

Portions of Arizona mining facilities that operated after January 1, 1986, also are subject to the Arizona Mined Land Reclamation Act (AMLRA). AMLRA requires reclamation to achieve stability and safety consistent with post-mining land use objectives specified in a reclamation plan. Reclamation plans must be approved by the State Mine Inspector and must include an estimate of the cost to perform the reclamation measures specified in the plan along with financial assurance. FCX will continue to evaluate options for future reclamation and closure activities at its operating and non-operating sites, which are likely to result in adjustments to FCX's AROs, and those adjustments could be material. At December 31, 2020, FCX had accrued reclamation and closure costs of $362 million for its Arizona operations.

Colorado Reclamation Programs. FCX's Colorado operations are regulated by the Colorado Mined Land Reclamation Act (Reclamation Act) and regulations promulgated thereunder. Under the Reclamation Act, mines are required to obtain approval of plans for reclamation of lands affected by mining operations to be performed during mining or upon cessation of mining operations. In December 2019, Henderson submitted an updated closure plan, which resulted in increased closure costs. In March 2020, the Division of Reclamation, Mining, and Safety (DRMS) approved Henderson's proposed update to its closure plan and closure cost estimate. As of December 31, 2020, FCX had accrued reclamation and closure costs of $138 million for its Colorado operations. In 2019, Colorado enacted legislation that requires proof of an end date for water treatment as a condition of permit authorizations for new mining operations and expansions beyond current permit authorizations. While this requirement does not apply to existing operations, it may lead to changes in long-term water management requirements at Climax and

Henderson operations and AROs. In accordance with its permit from DRMS, Climax will submit an updated reclamation plan and cost estimate in 2024.

Chile Reclamation and Closure Programs. El Abra is subject to regulation under the Mine Closure Law administered by the Chile Mining and Geology Agency. In compliance with the requirement for five-year updates, in November 2018, El Abra submitted an updated plan with closure cost estimates based on the existing approved closure plan. Approval of the updated closure plan and cost estimates was received on August 12, 2020, and did not result in a material increase to closure costs. At December 31, 2020, FCX had accrued reclamation and closure costs of $81 million for its El Abra operation.

Peru Reclamation and Closure Programs. Cerro Verde is subject to regulation under the Mine Closure Law administered by the Peru Ministry of Energy and Mines. Under the closure regulations, mines must submit a closure plan that includes the reclamation methods, closure cost estimates, methods of control and verification, closure and post-closure plans, and financial assurance. In compliance with the five-year closure plan and cost update required by the Mine Closure Law, the latest closure plan and cost estimate for the Cerro Verde mine expansion were submitted in 2017 and approved in February 2018. At December 31, 2020, FCX had accrued reclamation and closure costs of $138 million for its Cerro Verde operation.

Indonesia Reclamation and Closure Programs. The ultimate amount of reclamation and closure costs to be incurred at PT-FI's operations will be determined based on applicable laws and regulations and PT-FI's assessment of appropriate remedial activities under the circumstances, after consultation with governmental authorities, affected local residents and other affected parties and cannot currently be projected with precision. Some reclamation costs will be incurred during mining activities, while the remaining reclamation costs will be incurred at the end of mining activities, which are currently estimated to continue through 2041. At December 31, 2020, FCX had accrued reclamation and closure costs of $827 million for its PT-FI operations.

Indonesia government regulations issued in 2010 require a company to provide a mine closure guarantee in the form of a time deposit placed in a state-owned bank in Indonesia. In December 2018, PT-FI, in conjunction with the issuance of the IUPK, submitted a revised mine closure plan to Indonesia's Department of Energy and Mineral Resources to reflect the extension of operations to 2041. At December 31, 2020, PT-FI had restricted time deposits for mine closure guarantees ($94 million) and reclamation guarantees ($2 million).

In October 2017, Indonesia's Ministry of Environment and Forestry (the MOEF) notified PT-FI of administrative sanctions related to certain activities the MOEF indicated were not reflected in PT-FI's environmental permit. The MOEF also notified PT-FI that certain operational activities were inconsistent with factors set forth in its environmental permitting studies and that additional monitoring and improvements need to be undertaken related to air quality, water drainage, treatment and handling of certain wastes, and tailings management. In December 2018, the MOEF issued a revised environmental permit to PT-FI to address many of the operational activities that it alleged were inconsistent with earlier studies. The remaining administrative sanctions are being resolved through adoption of revised practices and, in a few situations, PT-FI has agreed with the MOEF on an appropriate multi-year work plan, including the closure of an overburden stockpile. In addition, PT-FI continues to work with MOEF to finalize environmental permitting related to the rail facilities and certain of the underground mining production operations as well as permitting for the extension of levees to contain the lateral flow of tailings in the lowlands.

In December 2018, PT-FI and the MOEF also established a new framework for continuous improvement in environmental practices in PT-FI's operations, including initiatives that PT-FI will pursue to increase tailings retention and to evaluate large-scale beneficial uses of tailings within Indonesia. The MOEF issued a new decree that incorporates various initiatives and studies to be completed by PT-FI that would target continuous improvement in a manner that would not impose new technical risks or significant long-term costs to PT-FI's operations. The new framework enables PT-FI to maintain compliance with site-specific standards and provides for ongoing monitoring by the MOEF. In 2018, PT-FI recorded a $32 million charge for MOEF assessments of prior period permit fees. In 2020, the final settlement for these permit fees totaled $13 million and PT-FI recorded a credit of $19 million.

Oil and Gas Properties. Substantially all of FM O&G's oil and gas leases require that, upon termination of economic production, the working interest owners plug and abandon non-producing wellbores, remove equipment and facilities from leased acreage, and restore land in accordance with applicable local, state and federal laws. Following several sales transactions, FM O&G's remaining operating areas primarily include offshore California and

the Gulf of Mexico (GOM). As of December 31, 2020, FM O&G AROs cover approximately 165 wells and 120 platforms and other structures and it had accrued reclamation and closure costs of $410 million.

Litigation. In addition to the material pending legal proceedings discussed below and above under "Environmental", we are involved periodically in ordinary routine litigation incidental to our business and not required to be disclosed, some of which may result in adverse judgments, settlements, fines, penalties, injunctions or other relief. SEC regulations require us to disclose environmental proceedings involving a governmental authority if we reasonably believe that such proceedings may result in monetary sanctions above a stated threshold. Pursuant to the SEC regulations, we use a threshold of $1 million for purposes of determining whether disclosure of any such environmental proceedings is required. Management does not believe, based on currently available information, that the outcome of any current pending legal proceeding will have a material adverse effect on FCX's financial condition, although individual or cumulative outcomes could be material to FCX's operating results for a particular period, depending on the nature and magnitude of the outcome and the operating results for the period.

Louisiana Parishes Coastal Erosion Cases. Certain FCX affiliates were named as defendants, along with numerous co-defendants, in 13 cases out of a total of 42 cases filed in Louisiana state courts by six south Louisiana parishes (Cameron, Jefferson, Plaquemines, St. Bernard, St. John the Baptist and Vermilion), alleging that certain oil and gas exploration and production operations and sulphur mining and production operations in coastal Louisiana contaminated and damaged coastal wetlands and caused significant land loss along the Louisiana coast. The state of Louisiana, through the Attorney General and separately through the Louisiana Department of Natural Resources, intervened in the litigation in support of the parishes' claims. Specifically, the cases alleged the defendants failed to obtain and/or comply with required coastal use permits in violation of the Louisiana State and Local Coastal Resources Management Act of 1978, and sought unspecified damages for the alleged statutory violations, and restoration of the properties at issue to their original condition. Certain FCX affiliates were named as defendants in two of the five cases that had been set for trial, both originally filed on November 8, 2013: Parish of Plaquemines v. ConocoPhillips Company et al., 25th Judicial District Court, Plaquemines Parish, Louisiana; No. 60-982, Div. B and Parish of Plaquemines v. Hilcorp Energy Company et al., 25th Judicial District Court, Plaquemines Parish, Louisiana; No. 60-999, Div. B. In 2019, affiliates of FCX reached an agreement in principle to settle all 13 cases. The maximum out-of-pocket settlement payment will be $23.5 million with the initial payment of $15 million to be paid upon execution of the settlement agreement. The initial payment will be held in trust and later deposited into a newly formed Coastal Zone Recovery Fund (the Fund) once the state of Louisiana passes enabling legislation to establish the Fund. The settlement agreement will also require the FCX affiliates to pay into the Fund twenty annual installments of $4.25 million beginning in 2023 provided the state of Louisiana passes the enabling legislation. The first two of those annual installments are conditioned only on the enactment of the enabling legislation within three years of execution of the settlement agreement, but all subsequent installments are also conditioned on the FCX affiliates receiving simultaneous reimbursement on a dollar-for-dollar basis from the proceeds of environmental credit sales generated by the Fund, resulting in the $23.5 million maximum total payment obligation. The settlement agreement must be executed by all parties, including authorized representatives of the six south Louisiana parishes originally plaintiffs in the suit and certain other non-plaintiff Louisiana parishes and the state of Louisiana. The agreement in principle does not include any admission of liability by FCX or its affiliates. FCX recorded a charge in 2019 for the initial payment of $15 million, which will be paid upon execution of the settlement agreement. The settlement agreement has been executed by the FCX affiliates and several of the Louisiana parishes. FCX expects the agreement to be executed by all parties; however, execution has been delayed by the ongoing COVID-19 pandemic, fall 2020 elections and changes to the administrative structure developed by the Louisiana parishes. Upon execution of the settlement agreement by all parties, the FCX affiliates will be fully released and dismissed from all 13 pending cases.

Asbestos and Talc Claims. Since approximately 1990, various FCX affiliates have been named as defendants in a large number of lawsuits alleging personal injury from exposure to asbestos or talc allegedly contained in industrial products such as electrical wire and cable, raw materials such as paint and joint compounds, talc-based lubricants used in rubber manufacturing or from asbestos contained in buildings and facilities located at properties owned or operated by affiliates of FCX. Many of these suits involve a large number of codefendants. Based on litigation results to date and facts currently known, FCX believes there is a reasonable possibility that losses may have been incurred related to these matters; however, FCX also believes that the amounts of any such losses, individually or in the aggregate, are not material to its consolidated financial statements. There can be no assurance that future developments will not alter this conclusion.

There has been a significant increase in the number of cases alleging the presence of asbestos contamination in talc-based cosmetic and personal care products and in cases alleging exposure to talc products that are not alleged

to be contaminated with asbestos. The primary targets have been the producers of those products, but defendants in many of these cases also include talc miners. Cyprus Amax Minerals Company (CAMC), an indirect wholly owned subsidiary of FCX, and Cyprus Mines Corporation (Cyprus Mines), a wholly owned subsidiary of CAMC, are among those targets. Cyprus Mines was engaged in talc mining and processing from 1964 until 1992 when it exited its talc business by conveying it to a third party in two related transactions. Those transactions involved (1) a transfer by Cyprus Mines of the assets of its talc business to a newly formed subsidiary that assumed all pre-sale and post-sale talc liabilities, subject to limited reservations, and (2) a sale of the stock of that subsidiary to the third party. In 2011, the third party sold that subsidiary to Imerys Talc America (Imerys), an affiliate of Imerys S.A. In accordance with the terms of the 1992 transactions and subsequent agreements, Imerys undertook the defense and indemnification of Cyprus Mines and CAMC in talc lawsuits.

Cyprus Mines has contractual indemnification rights, subject to limited reservations, against Imerys, which has historically acknowledged those indemnification obligations and took responsibility for all cases tendered to it. However, on February 13, 2019, Imerys filed for Chapter 11 bankruptcy protection, which triggered an immediate automatic stay under the federal bankruptcy code prohibiting any party from continuing or initiating litigation or asserting new claims against Imerys. As a result, Imerys stopped defending the talc lawsuits against Cyprus Mines and CAMC. In addition, Imerys took the position that it alone owns, and has the sole right to access, the proceeds of the legacy insurance coverage of Cyprus Mines and CAMC for talc liabilities. In late March 2019, Cyprus Mines and CAMC challenged this position and obtained emergency relief from the bankruptcy court to gain access to the insurance until the question of ownership and contractual access could be decided in an adversary proceeding before the bankruptcy court, which is currently on hold.

FCX recorded legal defense and settlement costs associated with talc-related litigation totaling approximately $24 million for the year 2020 and $28 million for the year 2019. Multiple trials previously scheduled during 2020 were postponed because of the ongoing COVID-19 pandemic. Postponed cases may be reset prior to the adversary proceeding regarding the legacy insurance, which is currently on hold.

On December 22, 2020, Imerys filed an amended bankruptcy plan disclosing a global settlement with Cyprus Mines and CAMC, which provides a framework for a full and comprehensive resolution of all current and future potential liabilities arising out of the Cyprus Mines talc business, including claims against FCX, its affiliates, Cyprus Mines, and CAMC.

On January 21 2021, Imerys sought an injunction temporarily staying approximately 950 talc-related lawsuits against CAMC and Cyprus Mines and the bankruptcy court is expected to rule on the injunction in February 2021. The interim stay is a component of the global settlement but there can be no assurance that the bankruptcy court will impose the interim stay.

On January 23, 2021, Imerys filed the form of a settlement and release agreement to be entered into by CAMC, Cyprus Mines, FCX, Imerys and the other debtors, tort claimants' committee and future claims representative in the Imerys bankruptcy. In accordance with the global settlement, among other things, (1) CAMC will pay a total of $130 million in cash to a settlement trust in seven annual installments, which will be guaranteed by FCX; (2) CAMC and Cyprus Mines and their affiliates will contribute to the settlement trust all rights that they have to the proceeds of certain legacy insurance policies as well as indemnity rights they have against Johnson & Johnson, and (3) Cyprus Mines will file for Chapter 11 bankruptcy protection with CAMC paying expenses of Cyprus Mines' bankruptcy process. On February 11, 2021, Cyprus Mines filed for Chapter 11 bankruptcy protection. FCX has concluded that it has a probable loss and recorded a $130 million charge to environmental obligations and shutdown costs in 2020.

The global settlement is subject to, among other things, bankruptcy court approvals of both the Imerys bankruptcy plan and the Cyprus Mines bankruptcy plan, and there can be no assurance that the global settlement will be successfully implemented.

Tax and Other Matters. FCX's operations are in multiple jurisdictions where uncertainties arise in the application of complex tax regulations. Some of these tax regimes are defined by contractual agreements with the local government, while others are defined by general tax laws and regulations. FCX and its subsidiaries are subject to reviews of its income tax filings and other tax payments, and disputes can arise with the taxing authorities over the interpretation of its contracts or laws. The final taxes paid may be dependent upon many factors, including negotiations with taxing authorities. In certain jurisdictions, FCX pays a portion of the disputed amount before formally appealing an assessment. Such payment is recorded as a receivable if FCX believes the amount is collectible.

Cerro Verde Royalty Dispute. SUNAT has assessed mining royalties on ore processed by the Cerro Verde concentrator, which commenced operations in late 2006, for the period December 2006 to December 2013. No assessments can be issued for years after 2013, as Cerro Verde began paying royalties on all of its production in January 2014 under its new 15-year stability agreement. Cerro Verde contested each of these assessments because it believes that its 1998 stability agreement exempts from royalties all minerals extracted from its mining concession, irrespective of the method used for processing such minerals. Since 2014, Cerro Verde has been paying the disputed assessments for the period from December 2006 through December 2013 under installment payment programs provided under Peru law. Through December 31, 2020, Cerro Verde has paid $477 million under these installment payment programs.

In October 2017, the Peru Supreme Court issued a ruling in favor of SUNAT that the assessments of royalties for the year 2008 on ore processed by the Cerro Verde concentrator were proper under Peru law. As a result of the unfavorable Peru Supreme Court ruling, Cerro Verde recorded net charges in 2017. In September 2018, the Peru Tax Tribunal denied Cerro Verde's request to waive penalties and interest, primarily associated with the disputed assessments for the period January 2009 through September 2011. In December 2018, Cerro Verde elected not to appeal the Peru Tax Tribunal's decisions, and as a result, recorded net charges for these amounts in 2018.

As of December 31, 2019, Cerro Verde had recorded all of its exposure associated with disputed royalties for prior years with the Peru tax authorities. Cumulative charges to net income recorded during the three years ended December 31, 2019, totaled $388 million. Any future recoveries would be recorded when collected.

A summary of the charges recorded for the three-years ended December 31, 2019, related to the Cerro Verde royalty dispute follows:

Royalty and related assessment charges:	2019	2018[a]	2017	Total
Production and delivery	$ 6	$ 14	$ 203 [b]	$ 223
Interest expense, net	10	370	145	525
Other expense	—	22	—	22
(Benefit from) provision for income taxes	(2)	(35)	7 [c]	(30)
Net loss attributable to noncontrolling interests	(7)	(176)	(169)	(352)
	$ 7	$ 195	$ 186	$ 388

a. Amounts are net of gains of $16 million (consisting of pre-tax gains of $14 million and net tax benefits of $17 million, net of $15 million in noncontrolling interests) for refunds received for the overpayment of special (voluntary) levies for the period October 2012 through the year 2013.

b. Includes $175 million related to disputed royalty assessments for the period from December 2006 to September 2011 (when royalties were determined based on revenues).

c. Includes tax charges of $136 million for disputed royalties ($69 million) and other related mining taxes ($67 million) for the period October 2011 through the year 2013 when royalties were determined based on operating income, mostly offset by a tax benefit of $129 million associated with disputed royalties and other related mining taxes for the period December 2006 through December 2013.

Cerro Verde has also recorded other interest charges associated with royalty matters, including installment payment programs, totaling $44 million in 2020 and $58 million in 2019.

On February 28, 2020, FCX filed on its own behalf and on behalf of Cerro Verde international arbitration proceedings against the Peru government. In April 2020, SMM Cerro Verde Netherlands B.V., another shareholder of Cerro Verde, filed a parallel arbitration proceeding under a different investment treaty against the Peru government.

Other Peru Tax Matters. Cerro Verde has also received assessments from SUNAT for additional taxes, penalties and interest related to various audit exceptions for income and other taxes. Cerro Verde has filed or will file objections to the assessments because it believes it has properly determined and paid its taxes. A summary of these assessments follows:

Tax Year	Tax Assessment	Penalty and Interest Assessment	Total
2003 to 2008	$ 50	$ 129	$ 179
2009	56	52	108
2010	54	118	172
2011 and 2012	42	78	120
2013	48	66	114
2014 to 2020	45	—	45
	$ 295	$ 443	$ 738

As of December 31, 2020, Cerro Verde had paid $433 million on these disputed tax assessments. A reserve has been applied against these payments totaling $243 million, resulting in a net receivable of $190 million (included in other assets), which Cerro Verde believes is collectible.

Indonesia Tax Matters. PT-FI has received assessments from the Indonesia tax authorities for additional taxes and interest related to various audit exceptions for income and other taxes. PT-FI has filed objections to the assessments because it believes it has properly determined and paid its taxes. Excluding surface water and withholding tax assessments discussed below and the Indonesia government's previous imposition of a 7.5 percent export duty that PT-FI paid under protest during the period April 2017 to December 21, 2018 (refer to Note 13), a summary of these assessments follows:

Tax Year	Tax Assessment	Interest Assessment	Total
2005	$ 62	$ 30	$ 92
2007	48	23	71
2008, 2010 to 2011	31	8	39
2012	97	—	97
2013	152	76	228
2014	123	—	123
2015	159	—	159
2016	257	113	370
2017	40	19	59
	$ 969	$ 269	$ 1,238

As of December 31, 2020, PT-FI had paid $143 million (included in other assets) on disputed tax assessments, which it believes is collectible.

Surface Water Taxes. PT-FI received assessments from the local regional tax authority in Papua, Indonesia, for additional taxes and penalties related to surface water taxes for the period from January 2011 through December 2018. As a result, PT-FI offered to pay one trillion rupiah to settle these historical surface water tax disputes and charged $69 million to production and delivery costs in December 2018. In May 2019, PT-FI agreed to a final settlement of 1.394 trillion rupiah (approximately $99 million) and recorded an incremental charge of $28 million. PT-FI paid 708.5 billion rupiah ($50 million) in October 2019, and will pay the balance of 685.5 billion rupiah ($49 million based on the exchange rate at December 31, 2020, and included in accounts payable and accrued liabilities in the consolidated balance sheet at December 31, 2020) in 2021.

Export Duty Matter. In April 2017, PT-FI entered into a memorandum of understanding with the Indonesia government (the 2017 MOU) confirming that the former COW would continue to be valid and honored until replaced by a mutually agreed IUPK and investment stability agreement and agreed to continue to pay export duties of 5 percent on copper concentrate export sales until completion of the divestment and new IUPK. Subsequently, the Customs Office of the Minister of Finance refused to recognize the 5 percent export duty agreed to under the 2017 MOU and imposed a 7.5 percent export duty under the Ministry of Finance regulations. PT-FI paid $155 million under protest during the period April 2017 and December 21, 2018, and appealed the disputed amounts to the Indonesia Tax Court. The Indonesia Tax Court subsequently ruled in favor of PT-FI related to the cases involving $29 million of the disputed amounts, which were refunded by the Indonesia Customs Office to PT-FI. The Indonesia

Customs Office appealed the Indonesia Tax Court decisions on these cases to the Indonesia Supreme Court. On October 29, 2019, the Indonesia Supreme Court posted on its website rulings unfavorable to PT-FI for certain of the appealed cases involving approximately half of the $29 million that had been refunded to PT-FI. As a result of the October 2019 ruling, FCX recorded a charge of $155 million in 2019 to fully reserve for this matter. PT-FI continues to believe that a five percent export duty was applicable during this period and is evaluating options to recover these overpayments.

Withholding Tax Assessments. In January 2019, the Indonesia Supreme Court posted on its website an unfavorable decision related to a PT-FI 2005 withholding tax matter. PT-FI had also received an unfavorable Indonesia Supreme Court decision in November 2017 and has other pending cases at the Indonesia Supreme Court related to withholding taxes for employees and other service providers for the year 2005 and the year 2007, which total approximately $47 million (based on the exchange rate as of December 31, 2020, and included in accounts payable and accrued liabilities in the consolidated balance sheet at December 31, 2020), including penalties and interest. As a result of the January 2019 ruling, PT-FI concluded a loss on all outstanding withholding tax matters is probable under applicable accounting guidance, and it recorded a charge of $61 million in 2018.
For information regarding PT-FI mine development cost tax matters, refer to Note 11.

Smelter Development Progress. As a result of COVID-19 mitigation measures, there have been disruptions to work and travel schedules of international contractors and restrictions on access to the proposed physical site of the new smelter in Gresik, Indonesia. PT-FI continues to discuss with the Indonesia government a deferred schedule for the new smelter project as well as other alternatives in light of the ongoing COVID-19 pandemic and volatile global economic conditions.

On January 7, 2021, the Indonesia government levied an administrative fine of $149 million for the period from March 30, 2020, through September 30, 2020 (additional fines could be levied on exports after September 30, 2020), on PT-FI for failing to achieve physical development progress on the new smelter as of July 31, 2020. On January 13, 2021, PT-FI responded to the Indonesia government objecting to the fine because of events outside of its control causing a delay of the new smelter's development progress. PT-FI believes that its communications during 2020 with the Indonesia government were not properly considered before the administrative fine was levied. PT-FI and its legal counsel believe, upon consideration of all the facts, PT-FI is not obligated to pay the fine and, therefore, it has not recorded an accrual for this loss contingency.

Letters of Credit, Bank Guarantees and Surety Bonds. Letters of credit and bank guarantees totaled $671 million at December 31, 2020, primarily for environmental and AROs, the Cerro Verde royalty dispute (refer to discussion above), workers' compensation insurance programs, tax and customs obligations, and other commercial obligations. In addition, FCX had surety bonds totaling $437 million at December 31, 2020, primarily associated with environmental and AROs.

Insurance. FCX purchases a variety of insurance products to mitigate potential losses, which typically have specified deductible amounts or self-insured retentions and policy limits. FCX generally is self-insured for U.S. workers' compensation, but purchases excess insurance up to statutory limits. An actuarial analysis is performed twice a year on the various casualty insurance programs covering FCX's U.S.-based mining operations, including workers' compensation, to estimate expected losses. At December 31, 2020, FCX's liability for expected losses under these insurance programs totaled $50 million, which consisted of a current portion of $9 million (included in accounts payable and accrued liabilities) and a long-term portion of $41 million (included in other liabilities). In addition, FCX has receivables of $14 million (a current portion of $5 million included in other accounts receivable and a long-term portion of $9 million included in other assets) for expected claims associated with these losses to be filed with insurance carriers.

FCX's oil and gas operations are subject to all of the risks normally incident to the production of oil and gas, including well blowouts, cratering, explosions, oil spills, releases of gas or well fluids, fires, pollution and releases of toxic gas, each of which could result in damage to or destruction of oil and gas wells, production facilities or other property, or injury to persons. While FCX is not fully insured against all risks related to its oil and gas operations, its insurance policies provide limited coverage for losses or liabilities relating to pollution, with broader coverage for sudden and accidental occurrences. FCX is self-insured for named windstorms in the GOM.

NOTE 13. COMMITMENTS AND GUARANTEES

Leases. Effective January 1, 2019, FCX adopted the new ASU for lease accounting. FCX leases various types of properties, including offices and equipment under non-cancelable leases. Nearly all of FCX's leases were considered operating leases under the new ASU.

The components of FCX's leases presented in the consolidated balance sheet for the years ended December 31 follow:

	December 31,	
	2020	2019
Lease right-of-use assets (included in property, plant, equipment and mine development costs, net)	$ 207	$ 232
Short-term lease liabilities (included in accounts payable and accrued liabilities)	$ 38	$ 44
Long-term lease liabilities (included in other liabilities)	190	204
Total lease liabilities	$ 228	$ 248

Operating lease costs, primarily included in production and delivery expense in the consolidated statement of operations, for the two years ended December 31 follow:

	2020	2019
Operating leases	$ 42	$ 55
Variable and short-term leases	74	$ 79
Total operating lease costs	$ 116	$ 134

Prior to the adoption of the new ASU, lease costs totaled $80 million in 2018 (FCX elected the practical expedient not to adjust that year).

FCX paid $40 million during 2020 and $43 million in 2019 for lease liabilities recorded in the consolidated balance sheet (primarily included in operating cash flows in the consolidated statements of cash flows). As of December 31, 2020, the weighted-average discount rate used to determine the lease liabilities was 5.4 percent (5.5 percent as of December 31, 2019) and the weighted-average remaining lease term was 7.7 years (8.2 years as of December 31, 2019).

The future minimum payments for leases presented in the consolidated balance sheet at December 31, 2020, follow:

2021	$ 50
2022	41
2023	36
2024	34
2025	29
Thereafter	97
Total payments	287
Less amount representing interest	(59)
Present value of net minimum lease payments	228
Less current portion	(38)
Long-term portion	$ 190

Contractual Obligations. At December 31, 2020, based on applicable prices on that date, FCX has unconditional purchase obligations (including take-or-pay contracts with terms less than one year) of $4.2 billion, primarily comprising the procurement of copper concentrate ($2.9 billion), cobalt ($516 million), electricity ($301 million) and transportation services ($209 million). Some of FCX's unconditional purchase obligations are settled based on the prevailing market rate for the service or commodity purchased. In some cases, the amount of the actual obligation may change over time because of market conditions. Obligations for copper concentrate provide for deliveries of

specified volumes to Atlantic Copper at market-based prices. Obligations for cobalt hydroxide intermediate provide for deliveries of specified volumes to Freeport Cobalt at market-based prices. Electricity obligations are primarily for long-term power purchase agreements in North America and contractual minimum demand at the South America mines. Transportation obligations are primarily for South America contracted ocean freight.

FCX's unconditional purchase obligations by year total $1.8 billion in 2021, $1.2 billion in 2022, $539 million in 2023, $334 million in 2024, $119 million in 2025 and $253 million thereafter. During the three-year period ended December 31, 2020, FCX fulfilled its minimum contractual purchase obligations.

Special Mining License (IUPK) - Indonesia. As discussed in Note 2, on December 21, 2018, FCX completed the transaction with the Indonesia government regarding PT-FI's long-term mining rights and share ownership. Concurrent with the closing of the transaction, the Indonesia government granted PT-FI an IUPK to replace its former COW, enabling PT-FI to conduct operations in the Grasberg minerals district through 2041. Under the terms of the IUPK, PT-FI has been granted an extension of mining rights through 2031, with rights to extend mining rights through 2041, subject to PT-FI completing the construction of a new smelter in Indonesia within five years of closing the transaction and fulfilling its defined fiscal obligations to the Indonesia government. The IUPK, and related documentation, contains legal and fiscal terms and is legally enforceable through 2041. In addition, FCX, as a foreign investor, has rights to resolve investment disputes with the Indonesia government through international arbitration.

The key fiscal terms set forth in the IUPK include a 25 percent corporate income tax rate, a 10 percent profits tax on net income, and royalty rates of 4 percent for copper, 3.75 percent for gold and 3.25 percent for silver. PT-FI's royalties totaled $160 million in 2020, $106 million in 2019 and $238 million in 2018. Dividend distributions from PT-FI to FCX are subject to a 10 percent withholding tax.

The IUPK requires PT-FI to pay export duties of 5 percent, declining to 2.5 percent when smelter development progress exceeds 30 percent and eliminated when smelter progress exceeds 50 percent. PT-FI had previously agreed to and has been paying export duties since July 2014 (refer to Note 12 for further discussion of disputed export duties for the period April 2017 to December 21, 2018). PT-FI's export duties charged against revenues totaled $92 million in 2020, $66 million in 2019 (excluding $155 million associated with the historical export duty matter as discussed in Note 12), and $180 million in 2018.

The IUPK also requires PT-FI to pay surface water taxes of $15 million annually, beginning in 2019, which are recognized in production and delivery costs as incurred.

In connection with a memorandum of understanding previously entered into with the Indonesia government in July 2014, PT-FI provided an assurance bond at that time to support its commitment to construct a new smelter in Indonesia ($148 million based on exchange rate as of December 31, 2020).

In March 2020, PT-FI received a one-year extension of its export license through March 15, 2021.

Community Development Programs. FCX has adopted policies that govern its working relationships with the communities where it operates. These policies are designed to guide its practices and programs in a manner that respects and promotes basic human rights and the culture of the local people impacted by FCX's operations. FCX continues to make significant expenditures on community development, education, training and cultural programs.

In 1996, PT-FI established the Freeport Partnership Fund for Community Development (Partnership Fund) through which PT-FI has made available funding and technical assistance to support community development initiatives in the areas of health, education, economic development and local infrastructure of the area. Throughout 2019, PT-FI consulted with key stakeholders to restructure the management of the Partnership Fund in compliance with PT-FI's IUPK. Throughout the restructuring process, PT-FI continued its contributions to ensure no disruptions in implementation of approved projects. Beginning in February 2020, the Partnership Fund is managed by a legally-recognized Indonesian foundation (*Yayasan Pemberdayaan Masyarakat Amungme dan Kamoro,* or YPMAK). PT-FI charged $36 million in 2020, $28 million in 2019 and $55 million in 2018 to cost of sales for this commitment.

Guarantees. FCX provides certain financial guarantees (including indirect guarantees of the indebtedness of others) and indemnities.

Prior to its acquisition by FCX, FMC and its subsidiaries have, as part of merger, acquisition, divestiture and other transactions, from time to time, indemnified certain sellers, buyers or other parties related to the transaction from and against certain liabilities associated with conditions in existence (or claims associated with actions taken) prior to the closing date of the transaction. As part of these transactions, FMC indemnified the counterparty from and against certain excluded or retained liabilities existing at the time of sale that would otherwise have been transferred to the party at closing. These indemnity provisions generally now require FCX to indemnify the party against certain liabilities that may arise in the future from the pre-closing activities of FMC for assets sold or purchased. The indemnity classifications include environmental, tax and certain operating liabilities, claims or litigation existing at closing and various excluded liabilities or obligations. Most of these indemnity obligations arise from transactions that closed many years ago, and given the nature of these indemnity obligations, it is not possible to estimate the maximum potential exposure. Except as described in the following sentence, FCX does not consider any of such obligations as having a probable likelihood of payment that is reasonably estimable, and accordingly, has not recorded any obligations associated with these indemnities. With respect to FCX's environmental indemnity obligations, any expected costs from these guarantees are accrued when potential environmental obligations are considered by management to be probable and the costs can be reasonably estimated.

NOTE 14. FINANCIAL INSTRUMENTS

FCX does not purchase, hold or sell derivative financial instruments unless there is an existing asset or obligation, or it anticipates a future activity that is likely to occur and will result in exposure to market risks, which FCX intends to offset or mitigate. FCX does not enter into any derivative financial instruments for speculative purposes, but has entered into derivative financial instruments in limited instances to achieve specific objectives. These objectives principally relate to managing risks associated with commodity price changes, foreign currency exchange rates and interest rates.

Commodity Contracts. From time to time, FCX has entered into derivative contracts to hedge the market risk associated with fluctuations in the prices of commodities it purchases and sells. Derivative financial instruments used by FCX to manage its risks do not contain credit risk-related contingent provisions.

In April 2020, FCX entered into forward sales contracts for 150 million pounds of copper for settlement in May and June of 2020. The forward sales provided for fixed pricing of $2.34 per pound of copper on approximately 60 percent of North America's sales volumes for May and June 2020. These contracts resulted in hedging losses totaling $24 million for the year ended December 31, 2020. There were no remaining forward sales contracts after June 30, 2020.

A discussion of FCX's other derivative contracts and programs follows.

Derivatives Designated as Hedging Instruments – Fair Value Hedges

Copper Futures and Swap Contracts. Some of FCX's U.S. copper rod customers request a fixed market price instead of the COMEX average copper price in the month of shipment. FCX hedges this price exposure in a manner that allows it to receive the COMEX average price in the month of shipment while the customers pay the fixed price they requested. FCX accomplishes this by entering into copper futures or swap contracts. Hedging gains or losses from these copper futures and swap contracts are recorded in revenues. FCX did not have any significant gains or losses during the three years ended December 31, 2020, resulting from hedge ineffectiveness. At December 31, 2020, FCX held copper futures and swap contracts that qualified for hedge accounting for 50 million pounds at an average contract price of $3.21 per pound, with maturities through December 2022.

A summary of gains (losses) recognized in revenues for derivative financial instruments related to commodity contracts that are designated and qualify as fair value hedge transactions, including the unrealized gains (losses) on the related hedged item for the years ended December 31 follows:

	2020	2019	2018
Copper futures and swap contracts:			
Unrealized gains (losses):			
Derivative financial instruments	$ 9	$ 15	$ (20)
Hedged item – firm sales commitments	(9)	(15)	20
Realized gains (losses):			
Matured derivative financial instruments	22	(8)	(22)

Derivatives Not Designated as Hedging Instruments

Embedded Derivatives. Certain FCX concentrate, copper cathode and gold sales contracts provide for provisional pricing primarily based on the LME copper price or the COMEX copper price and the London gold price at the time of shipment as specified in the contract. FCX receives market prices based on prices in the specified future month, which results in price fluctuations recorded in revenues until the date of settlement. FCX records revenues and invoices customers at the time of shipment based on then-current LME or COMEX copper prices and London gold prices as specified in the contracts, which results in an embedded derivative (*i.e.*, a pricing mechanism that is finalized after the time of delivery) that is required to be bifurcated from the host contract. The host contract is the sale of the metals contained in the concentrate or cathode at the then-current LME or COMEX copper price and the London gold price. FCX applies the normal purchases and normal sales scope exception in accordance with derivatives and hedge accounting guidance to the host contract in its concentrate or cathode sales agreements since these contracts do not allow for net settlement and always result in physical delivery. The embedded derivative does not qualify for hedge accounting and is adjusted to fair value through earnings each period, using the period-end LME or COMEX copper forward prices and the adjusted London gold price, until the date of final pricing. Similarly, FCX purchases copper and cobalt under contracts that provide for provisional pricing. Mark-to-market price fluctuations from these embedded derivatives are recorded through the settlement date and are reflected in revenues for sales contracts and in inventory for purchase contracts.

A summary of FCX's embedded derivatives at December 31, 2020, follows:

	Open Positions	Average Price Per Unit		Maturities Through
		Contract	Market	
Embedded derivatives in provisional sales contracts:				
Copper (millions of pounds)	520	$ 3.21	$ 3.52	May 2021
Gold (thousands of ounces)	142	1,850	1,893	February 2021
Embedded derivatives in provisional purchase contracts:				
Copper (millions of pounds)	53	3.15	3.52	April 2021

Copper Forward Contracts. Atlantic Copper, FCX's wholly owned smelting and refining unit in Spain, enters into copper forward contracts designed to hedge its copper price risk whenever its physical purchases and sales pricing periods do not match. These economic hedge transactions are intended to hedge against changes in copper prices, with the mark-to-market hedging gains or losses recorded in production and delivery costs. At December 31, 2020, Atlantic Copper held net copper forward purchase contracts for 6 million pounds at an average contract price of $3.56 per pound, with maturities through February 2021.

Summary of Gains (Losses). A summary of the realized and unrealized gains (losses) recognized in operating income for commodity contracts that do not qualify as hedge transactions, including embedded derivatives, for the years ended December 31 follows:

	2020	2019	2018
Embedded derivatives in provisional sales contracts[a]:			
Copper	$ 259	$ 34	$ (310)
Gold and other	45	20	(7)
Copper forward contracts[b]	3	(7)	18

a. Amounts recorded in revenues.

b. Amounts recorded in cost of sales as production and delivery costs.

Unsettled Derivative Financial Instruments

A summary of the fair values of unsettled commodity derivative financial instruments follows:

	December 31, 2020	December 31, 2019
Commodity Derivative Assets:		
Derivatives designated as hedging instruments:		
Copper futures and swap contracts	$ 15	$ 6
Derivatives not designated as hedging instruments:		
Embedded derivatives in provisional sales/purchase contracts	169	68
Total derivative assets	$ 184	$ 74
Commodity Derivative Liabilities:		
Derivatives not designated as hedging instruments:		
Embedded derivatives in provisional sales/purchase contracts	$ 21	$ 20
Copper forward contracts	—	1
Total derivative liabilities	$ 21	$ 21

FCX's commodity contracts have netting arrangements with counterparties with which the right of offset exists, and it is FCX's policy to generally offset balances by contract on its balance sheet. FCX's embedded derivatives on provisional sales/purchase contracts are netted with the corresponding outstanding receivable/payable balances.

A summary of these unsettled commodity contracts that are offset in the balance sheet follows:

	Assets at December 31,		Liabilities at December 31,	
	2020	2019	2020	2019
Gross amounts recognized:				
Commodity contracts:				
Embedded derivatives in provisional sales/purchase contracts	$ 169	$ 68	$ 21	$ 20
Copper derivatives	15	6	—	1
	184	74	21	21
Less gross amounts of offset:				
Commodity contracts:				
Embedded derivatives in provisional sales/purchase contracts	1	—	1	—
	1	—	1	—
Net amounts presented in balance sheet:				
Commodity contracts:				
Embedded derivatives in provisional sales/purchase contracts	168	68	20	20
Copper derivatives	15	6	—	1
	$ 183	$ 74	$ 20	$ 21
Balance sheet classification:				
Trade accounts receivable	$ 168	$ 66	$ —	$ —
Other current assets	15	6	—	—
Accounts payable and accrued liabilities	—	2	20	21
	$ 183	$ 74	$ 20	$ 21

Credit Risk. FCX is exposed to credit loss when financial institutions with which it has entered into derivative transactions (commodity, foreign exchange and interest rate swaps) are unable to pay. To minimize the risk of such losses, FCX uses counterparties that meet certain credit requirements and periodically reviews the creditworthiness of these counterparties. FCX does not anticipate that any of the counterparties it deals with will default on their obligations. As of December 31, 2020, the maximum amount of credit exposure associated with derivative transactions was $186 million.

Other Financial Instruments. Other financial instruments include cash and cash equivalents, restricted cash, restricted cash equivalents, accounts receivable, investment securities, legally restricted funds, accounts payable and accrued liabilities, dividends payable and long-term debt. The carrying value for cash and cash equivalents (which included time deposits of $0.3 billion at December 31, 2020, and $1.3 billion at December 31, 2019), restricted cash, restricted cash equivalents, accounts receivable, accounts payable and accrued liabilities, and dividends payable approximates fair value because of their short-term nature and generally negligible credit losses (refer to Note 15 for the fair values of investment securities, legally restricted funds and long-term debt).

In addition, as of December 31, 2020, FCX has contingent consideration assets related to the sales of certain oil and gas properties (refer to Note 15 for the related fair values).

Cash, Cash Equivalents, Restricted Cash and Restricted Cash Equivalents. The following table provides a reconciliation of total cash, cash equivalents, restricted cash and restricted cash equivalents presented in the consolidated statements of cash flows to the components presented in the consolidated balance sheets:

	December 31,	
	2020	2019
Balance sheet components:		
Cash and cash equivalents	$ 3,657	$ 2,020
Restricted cash and restricted cash equivalents included in:		
Other current assets	97	100
Other assets	149	158
Total cash, cash equivalents, restricted cash and restricted cash equivalents presented in the consolidated statements of cash flows	$ 3,903	$ 2,278

NOTE 15. FAIR VALUE MEASUREMENT

Fair value accounting guidance includes a hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). FCX did not have any significant transfers in or out of Level 3 for 2020.

FCX's financial instruments are recorded on the consolidated balance sheets at fair value except for contingent consideration associated with the sale of the Deepwater GOM oil and gas properties (which was recorded under the loss recovery approach) and debt. A summary of the carrying amount and fair value of FCX's financial instruments (including those measured at NAV as a practical expedient), other than cash and cash equivalents, restricted cash, restricted cash equivalents, accounts receivable, accounts payable and accrued liabilities, and dividends payable (refer to Note 14) follows:

	At December 31, 2020					
	Carrying Amount	Fair Value				
		Total	NAV	Level 1	Level 2	Level 3
Assets						
Investment securities:[a,b]						
U.S. core fixed income fund	$ 29	$ 29	$ 29	$ —	$ —	$ —
Equity securities	7	7	—	7	—	—
Total	36	36	29	7	—	—
Legally restricted funds:[a]						
U.S. core fixed income fund	65	65	65	—	—	—
Government bonds and notes	49	49	—	—	49	—
Corporate bonds	43	43	—	—	43	—
Government mortgage-backed securities	30	30	—	—	30	—
Asset-backed securities	16	16	—	—	16	—
Money market funds	5	5	—	5	—	—
Collateralized mortgage-backed securities	4	4	—	—	4	—
Municipal bonds	1	1	—	—	1	—
Total	213	213	65	5	143	—
Derivatives:						
Embedded derivatives in provisional sales/purchase contracts in a gross asset position[c]	169	169	—	—	169	—
Copper futures and swap contracts[c]	15	15	—	13	2	—
Total	184	184	—	13	171	—
Contingent consideration for the sale of the Deepwater GOM oil and gas properties[a]	108	88	—	—	—	88
Liabilities						
Derivatives:[c]						
Embedded derivatives in provisional sales/purchase contracts in a gross liability position	21	21	—	—	21	—
Long-term debt, including current portion[d]	9,711	10,994	—	—	10,994	—

	At December 31, 2019					
	Carrying Amount	Fair Value				
		Total	NAV	Level 1	Level 2	Level 3
Assets						
Investment securities:[a,b]						
U.S. core fixed income fund	$ 27	$ 27	$ 27	$ —	$ —	$ —
Equity securities	4	4	—	4	—	—
Total	31	31	27	4	—	—
Legally restricted funds:[a]						
U.S. core fixed income fund	59	59	59	—	—	—
Government mortgage-backed securities	43	43	—	—	43	—
Government bonds and notes	36	36	—	—	36	—
Corporate bonds	33	33	—	—	33	—
Asset-backed securities	14	14	—	—	14	—
Collateralized mortgage-backed securities	7	7	—	—	7	—
Money market funds	3	3	—	3	—	—
Municipal bonds	1	1	—	—	1	—
Total	196	196	59	3	134	—
Derivatives:						
Embedded derivatives in provisional sales/purchase contracts in a gross asset position[c]	68	68	—	—	68	—
Copper futures and swap contracts[c]	6	6	—	5	1	—
Contingent consideration for the sale of onshore California oil and gas properties[a]	11	11	—	—	11	—
Total	85	85	—	5	80	—
Contingent consideration for the sale of the Deepwater GOM oil and gas properties[a]	122	108	—	—	—	108
Liabilities						
Derivatives:[c]						
Embedded derivatives in provisional sales/purchase contracts in a gross liability position	20	20	—	—	20	—
Copper forward contracts	1	1	—	—	1	—
Total	21	21	—	—	21	—
Long-term debt, including current portion[d]	9,826	10,239	—	—	10,239	—

a. Current portion included in other current assets and long-term portion included in other assets.

b. Excludes time deposits (which approximated fair value) included in (i) other current assets of $97 million at December 31, 2020, and $100 million at December 31, 2019, and (ii) other assets of $148 million at December 31, 2020, and $157 million at December 31, 2019, primarily associated with an assurance bond to support PT-FI's commitment for the development of a new smelter in Indonesia (refer to Note 13 for further discussion) and PT-FI's closure and reclamation guarantees (refer to Note 12 for further discussion).

c. Refer to Note 14 for further discussion and balance sheet classifications.

d. Recorded at cost except for debt assumed in acquisitions, which are recorded at fair value at the respective acquisition dates.

Valuation Techniques. The U.S. core fixed income fund is valued at NAV. The fund strategy seeks total return consisting of income and capital appreciation primarily by investing in a broad range of investment-grade debt securities, including U.S. government obligations, corporate bonds, mortgage-backed securities, asset-backed securities and money market instruments. There are no restrictions on redemptions (which are usually within one business day of notice).

Equity securities are valued at the closing price reported on the active market on which the individual securities are traded and, as such, are classified within Level 1 of the fair value hierarchy.

Fixed income securities (government securities, corporate bonds, asset-backed securities, collateralized mortgage-backed securities and municipal bonds) are valued using a bid-evaluation price or a mid-evaluation price. These

evaluations are based on quoted prices, if available, or models that use observable inputs and, as such, are classified within Level 2 of the fair value hierarchy.

Money market funds are classified within Level 1 of the fair value hierarchy because they are valued using quoted market prices in active markets.

FCX's embedded derivatives on provisional copper concentrate, copper cathode and gold purchases and sales are valued using only quoted monthly LME or COMEX copper forward prices and the adjusted London gold prices at each reporting date based on the month of maturity (refer to Note 14 for further discussion); however, FCX's contracts themselves are not traded on an exchange. As a result, these derivatives are classified within Level 2 of the fair value hierarchy.

FCX's derivative financial instruments for copper futures and swap contracts and copper forward contracts that are traded on the respective exchanges are classified within Level 1 of the fair value hierarchy because they are valued using quoted monthly COMEX or LME prices at each reporting date based on the month of maturity (refer to Note 14 for further discussion). Certain of these contracts are traded on the over-the-counter market and are classified within Level 2 of the fair value hierarchy based on COMEX and LME forward prices.

In 2016, FCX completed the sale of its onshore California oil and gas properties, which included contingent consideration of up to $150 million, consisting of $50 million per year for 2018, 2019 and 2020 if the price of Brent crude oil averages over $70 per barrel in each of these calendar years. No contingent consideration was realized in 2020 or 2019 because the average Brent crude oil price did not exceeded $70 per barrel for either year. Contingent consideration of $50 million was realized in 2018 and collected in first-quarter 2019 (included in proceeds from sales of assets in the consolidated statements of cash flows) because the average Brent crude oil price exceeded $70 per barrel for 2018. The fair value of the contingent consideration derivative was $11 million (included in other assets in the consolidated balance sheets) at December 31, 2019. The fair value at December 31, 2019, was calculated based on average commodity price forecasts through the applicable maturity date using a Monte-Carlo simulation model. The model used various observable inputs, including Brent crude oil forward prices, volatilities and discount rates. As a result, this contingent consideration asset was classified within Level 2 of the fair value hierarchy.

In December 2016, FCX's sale of its Deepwater GOM oil and gas properties included up to $150 million in contingent consideration that was recorded at the total amount under the loss recovery approach. The contingent consideration will be received over time as future cash flows are realized in connection from a third-party production handling agreement for an offshore platform, with the related payments commencing in third-quarter 2018. The contingent consideration included in (i) other current assets totaled $12 million at December 31, 2020, and $18 million at December 31, 2019, and (ii) other assets totaled $96 million at December 31, 2020, and $104 million at December 31, 2019. The fair value of this contingent consideration was calculated based on a discounted cash flow model using inputs that include third-party estimates for reserves, production rates and production timing, and discount rates. Because significant inputs are not observable in the market, the contingent consideration is classified within Level 3 of the fair value hierarchy.

Long-term debt, including current portion, is primarily valued using available market quotes and, as such, is classified within Level 2 of the fair value hierarchy.

The techniques described above may produce a fair value that may not be indicative of NRV or reflective of future fair values. Furthermore, while FCX believes its valuation techniques are appropriate and consistent with other market participants, the use of different techniques or assumptions to determine fair value of certain financial instruments could result in a different fair value measurement at the reporting date. There have been no changes in the techniques used at December 31, 2020, as compared to those techniques used at December 31, 2019.

A summary of the changes in the fair value of FCX's Level 3 instrument, contingent consideration for the sale of the Deepwater GOM oil and gas properties, for the years ended December 31 follows:

	2020	2019	2018
Balance at beginning of year	$ 108	$ 127	$ 134
Net unrealized (losses) gains related to assets still held at the end of the year	(6)	2	—
Settlements	(14)	(21)	(7)
Balance at end of year	$ 88	$ 108	$ 127

NOTE 16. BUSINESS SEGMENT INFORMATION

Product Revenues. FCX's revenues attributable to the products it sold for the years ended December 31 follow:

	2020	2019	2018
Copper:			
Concentrate	$ 4,294	$ 4,566	$ 6,180
Cathode	4,204	3,656	4,366
Rod and other refined copper products	2,052	2,110	2,396
Purchased copper[a]	821	1,060	1,053
Gold	1,702	1,620	3,231
Molybdenum	848	1,169	1,190
Other[b]	592	905	1,490
Adjustments to revenues:			
Treatment charges	(362)	(404)	(535)
Royalty expense[c]	(165)	(113)	(246)
Export duties[d]	(92)	(221)	(180)
Revenues from contracts with customers	13,894	14,348	18,945
Embedded derivatives[e]	304	54	(317)
Total consolidated revenues	$ 14,198	$ 14,402	$ 18,628

a. FCX purchases copper cathode primarily for processing by its Rod & Refining operations.

b. Primarily includes revenues associated with cobalt and silver.

c. Reflects royalties on sales from PT-FI and Cerro Verde that will vary with the volume of metal sold and prices.

d. Reflects PT-FI export duties. The year 2019 includes charges totaling $155 million primarily associated with an unfavorable Indonesia Supreme Court ruling related to certain disputed export duties (refer to Note 12).

e. Refer to Note 14 for discussion of embedded derivatives related to FCX's provisionally priced concentrate and cathode sales contracts.

Geographic Area. Information concerning financial data by geographic area follows:

	December 31,	
	2020	2019
Long-lived assets:[a]		
Indonesia	$ 15,567	$ 14,971
U.S.	8,420	8,834
Peru	6,989	7,215
Chile	1,172	1,084
Other	290	384
Total	$ 32,438	$ 32,488

a. Excludes deferred tax assets and intangible assets.

	Years Ended December 31,		
	2020	2019	2018
Revenues:[a]			
U.S.	$ 5,248	$ 5,107	$ 5,790
Switzerland	2,032	2,223	2,941
Indonesia	1,760	1,894	2,226
Japan	1,205	1,181	1,946
Spain	785	884	1,070
China	692	531	873
United Kingdom	491	233	296
Germany	248	311	256
Chile	221	242	294
France	153	198	255
India	152	107	389
Korea	89	140	269
Belgium	36	160	278
Philippines	34	73	221
Bermuda	—	38	207
Other	1,052	1,080	1,317
Total	$ 14,198	$ 14,402	$ 18,628

a. Revenues are attributed to countries based on the location of the customer.

Major Customers and Affiliated Companies. Copper concentrate sales to PT Smelting totaled 12 percent of FCX's consolidated revenues for the year ended December 31, 2020, 13 percent for the year ended December 31, 2019 and 12 percent for the year ended December 31, 2018, which is the only customer that accounted for 10 percent or more of FCX's consolidated revenues during the three years ended December 31, 2020.

Consolidated revenues include sales to the noncontrolling interest owners of FCX's South America mining operations totaling $0.9 billion in 2020, $1.0 billion in 2019 and $1.2 billion in 2018, and PT-FI's sales to PT Smelting totaling $1.8 billion in 2020, $1.9 billion in 2019 and $2.2 billion in 2018.

Labor Matters. As of December 31, 2020, approximately 38 percent of FCX's global labor force was covered by collective bargaining agreements, and approximately 16 percent was covered by agreements that expired and are currently being negotiated or will expire within one year. In December 2020, PT-FI signed a new agreement with one union effective April 2020 through March 2022, giving all employees the option to reject the new stipulations, but no employees have rejected the agreement. Another union filed a lawsuit in November 2020 regarding the new agreement, and the pending decision could modify the agreement.

Business Segments. FCX has organized its mining operations into four primary divisions – North America copper mines, South America mining, Indonesia mining and Molybdenum mines, and operating segments that meet certain thresholds are reportable segments. Separately disclosed in the following tables are FCX's reportable segments, which include the Morenci, Cerro Verde and Grasberg (Indonesia Mining) copper mines, the Rod & Refining operations and Atlantic Copper Smelting & Refining.

At year-end 2020, FCX's Bagdad mine did not meet the quantitative thresholds of a reportable segment. As a result, FCX revised its segment disclosure for the years ended December 31, 2019 and 2018, to conform with the current year presentation.

Intersegment sales between FCX's business segments are based on terms similar to arms-length transactions with third parties at the time of the sale. Intersegment sales may not be reflective of the actual prices ultimately realized because of a variety of factors, including additional processing, timing of sales to unaffiliated customers and transportation premiums.

FCX defers recognizing profits on sales from its mines to other segments, including Atlantic Copper Smelting & Refining, and on 25 percent of PT-FI's sales to PT Smelting, until final sales to third parties occur. Quarterly variations in ore grades, the timing of intercompany shipments and changes in product prices result in variability in FCX's net deferred profits and quarterly earnings.

FCX allocates certain operating costs, expenses and capital expenditures to its operating divisions and individual segments. However, not all costs and expenses applicable to an operation are allocated. U.S. federal and state income taxes are recorded and managed at the corporate level (included in Corporate, Other & Eliminations), whereas foreign income taxes are recorded and managed at the applicable country level. In addition, most mining exploration and research activities are managed on a consolidated basis, and those costs, along with some selling, general and administrative costs, are not allocated to the operating divisions or individual segments. Accordingly, the following Financial Information by Business Segment reflects management determinations that may not be indicative of what the actual financial performance of each operating division or segment would be if it was an independent entity.

North America Copper Mines. FCX operates seven open-pit copper mines in North America – Morenci, Bagdad, Safford (including Lone Star), Sierrita and Miami in Arizona, and Chino and Tyrone in New Mexico. The North America copper mines include open-pit mining, sulfide ore concentrating, leaching and SX/EW operations. A majority of the copper produced at the North America copper mines is cast into copper rod by FCX's Rod & Refining segment. In addition to copper, certain of FCX's North America copper mines also produce molybdenum concentrate, gold and silver.

The Morenci open-pit mine, located in southeastern Arizona, produces copper cathode and copper concentrate. In addition to copper, the Morenci mine also produces molybdenum concentrate. The Morenci mine produced 50 percent of FCX's North America copper during 2020.

South America Mining. South America mining includes two operating copper mines – Cerro Verde in Peru and El Abra in Chile. These operations include open-pit mining, sulfide ore concentrating, leaching and SX/EW operations.

The Cerro Verde open-pit copper mine, located near Arequipa, Peru, produces copper cathode and copper concentrate. In addition to copper, the Cerro Verde mine also produces molybdenum concentrate and silver. The Cerro Verde mine produced 84 percent of FCX's South America copper during 2020.

Indonesia Mining. Indonesia mining includes PT-FI's Grasberg minerals district that produces copper concentrate that contains significant quantities of gold and silver.

Molybdenum Mines. Molybdenum mines include the wholly owned Henderson underground mine and Climax open-pit mine, both in Colorado. The Henderson and Climax mines produce high-purity, chemical-grade molybdenum concentrate, which is typically further processed into value-added molybdenum chemical products.

Rod & Refining. The Rod & Refining segment consists of copper conversion facilities located in North America, and includes a refinery and two rod mills, which are combined in accordance with segment reporting aggregation guidance. These operations process copper produced at FCX's North America copper mines and purchased copper into copper cathode, rod and custom copper shapes. At times these operations refine copper and produce copper rod and shapes for customers on a toll basis. Toll arrangements require the tolling customer to deliver appropriate copper-bearing material to FCX's facilities for processing into a product that is returned to the customer, who pays FCX for processing its material into the specified products.

Atlantic Copper Smelting & Refining. Atlantic Copper smelts and refines copper concentrate and markets refined copper and precious metals in slimes. During 2020, Atlantic Copper purchased 10 percent of its concentrate requirements from FCX's North America copper mines, 7 percent from FCX's South America mining operations and 4 percent from FCX's Indonesia mining operations, with the remainder purchased from unaffiliated third parties.

Corporate, Other & Eliminations. Corporate, Other & Eliminations consists of FCX's other mining, oil and gas operations and other corporate and elimination items. Other mining includes the Miami smelter (a smelter at FCX's Miami, Arizona, mining operation), Freeport Cobalt, molybdenum conversion facilities in the U.S. and Europe, five non-operating copper mines in North America (Ajo, Bisbee, Tohono, Twin Buttes and Christmas in Arizona) and other mining support entities.

Financial Information by Business Segment

Year Ended December 31, 2020	North America Copper Mines			South America Mining								
	Morenci	Other	Total	Cerro Verde	Other	Total	Indonesia Mining	Molybdenum Mines	Rod & Refining	Atlantic Copper Smelting & Refining	Corporate, Other & Elimi-nations	FCX Total
Revenues:												
Unaffiliated customers	$ 29	$ 48	$ 77	$ 2,282	$ 431	$ 2,713	$ 3,534	$ —	$ 4,781	$ 2,020	$ 1,073 [a]	$14,198
Intersegment	2,015	2,272	4,287	242	—	242	80	222	33	17	(4,881)	—
Production and delivery	1,269	1,831	3,100	1,599	379	1,978	1,606	230	4,819	1,962	(3,664)	10,031
Depreciation, depletion and amortization	166	189	355	367	54	421	580	57	16	29	70	1,528
Metals inventory adjustments	4	48	52	—	3	3	—	10	3	—	28	96
Selling, general and administrative expenses	2	2	4	6	—	6	108	—	—	21	231	370
Mining exploration and research expenses	—	2	2	—	—	—	—	—	—	—	48	50
Environmental obligations and shutdown costs	—	(1)	(1)	—	—	—	—	—	1	—	159 [b]	159
Net gain on sales of assets	—	—	—	—	—	—	—	—	—	—	(473) [c]	(473)
Operating income (loss)	603	249	852	552 [d]	(5)	547	1,320	(75)	(25) [d]	25	(207) [d]	2,437 [d]
Interest expense, net	2	—	2	139	—	139	39 [e]	—	—	6	412	598
Provision for income taxes	—	—	—	238	1	239	606	—	—	2	97 [f]	944
Total assets at December 31, 2020	2,574	5,163	7,737	8,474	1,678	10,152	17,169	1,760	211	877	4,238	42,144
Capital expenditures	102	326	428	141	42	183	1,266	19	6	29	30	1,961

a. Includes revenues from FCX's molybdenum sales company, which includes sales of molybdenum produced by the Molybdenum mines and by certain of the North America and South America copper mines.
b. Includes charges totaling $130 million associated with a framework for the resolution of all current and future potential talc-related litigation.
c. Includes a $486 million gain associated with the sale of FCX's interests in the Kisanfu undeveloped project. Refer to Note 2 for further discussion.
d. Includes charges totaling $258 million associated with (i) idle facility costs (Cerro Verde), contract cancellation and other charges directly related to the COVID-19 pandemic and (ii) the April 2020 revised operating plans (including employee separation costs). These charges were primarily recorded in the Cerro Verde segment ($89 million), Corporate, Other & Eliminations ($57 million) and the Rod & Refining segment ($30 million).
e. Includes charges totaling $35 million associated with PT-FI's historical contested tax audits.
f. Includes tax charges totaling $135 million associated with the sale of the Kisanfu undeveloped project, partly offset by tax credits of $53 million associated with the reversal of a year-end 2019 tax charge related to the sale of FCX's interest in the lower zone of the Timok exploration project in Serbia.

	North America Copper Mines			South America Mining								
	Morenci	Other	Total	Cerro Verde	Other	Total	Indonesia Mining	Molybdenum Mines	Rod & Refining	Atlantic Copper Smelting & Refining	Corporate, Other & Elimi-nations	FCX Total
Year Ended December 31, 2019												
Revenues:												
Unaffiliated customers	$ 143	$ 224	$ 367	$ 2,576	$ 499	$ 3,075	$ 2,713 [a]	$ —	$ 4,457	$ 2,063	$ 1,727 [b]	$14,402
Intersegment	1,864	2,155	4,019	313	—	313	58	344	26	5	(4,765)	—
Production and delivery	1,376	1,943	3,319	1,852	474	2,326	2,055 [c]	299	4,475	1,971	(2,911)	11,534
Depreciation, depletion and amortization	171	178	349	406	68	474	406	62	9	28	84	1,412
Metals inventory adjustments	1	29	30	2	—	2	5	50	—	—	92	179
Selling, general and administrative expenses	2	2	4	8	—	8	125	—	—	20	237	394
Mining exploration and research expenses	—	2	2	—	—	—	—	—	—	—	102	104
Environmental obligations and shutdown costs	1	—	1	—	—	—	—	—	—	—	104	105
Net gain on sales of assets	—	—	—	—	—	—	—	—	—	—	(417) [d]	(417)
Operating income (loss)	456	225	681	621	(43)	578	180	(67)	(1)	49	(329)	1,091
Interest expense, net	3	1	4	114	—	114	82 [c]	—	—	22	398	620
Provision for (benefit from) income taxes	—	—	—	250	(11)	239	167 [c]	—	—	5	99 [e]	510
Total assets at December 31, 2019	2,880	5,109	7,989	8,612	1,676	10,288	16,485	1,798	193	761	3,295	40,809
Capital expenditures	231	646	877	232	24	256	1,369	19	5	34	92	2,652

a. Includes charges totaling $155 million associated with an unfavorable Indonesia Supreme Court ruling related to PT-FI export duties. Refer to Note 12 for further discussion.
b. Includes revenues from FCX's molybdenum sales company, which includes sales of molybdenum produced by the Molybdenum mines and by certain of the North America and South America copper mines.
c. Includes net charges totaling $28 million in production and delivery costs for an adjustment to the settlement of the historical surface water tax matters with the local regional tax authority in Papua, Indonesia, and $78 million in interest expense and $103 million of tax charges in provision for income taxes associated with PT-FI's historical contested tax disputes.
d. Includes net gains totaling $343 million associated with the sale of FCX's interest in the lower zone of the Timok exploration project and $59 million for the sale of a portion of Freeport Cobalt. Refer to Note 2 for further discussion.
e. Includes tax charges totaling $53 million associated with the sale of FCX's interest in the lower zone of the Timok exploration project and $49 million primarily to adjust deferred taxes on historical balance sheet items in accordance with tax accounting principles.

	North America Copper Mines			South America Mining								
	Morenci	Other	Total	Cerro Verde	Other	Total	Indonesia Mining	Molybdenum Mines	Rod & Refining	Atlantic Copper Smelting & Refining	Corporate, Other & Elimi-nations	FCX Total
Year Ended December 31, 2018												
Revenues:												
Unaffiliated customers	$ 90	$ 54	$ 144	$2,709	$ 594	$ 3,303	$ 5,446	$ —	$ 5,103	$ 2,299	$ 2,333 [a]	$18,628
Intersegment	2,051	2,499	4,550	352	—	352	113	410	31	3	(5,459)	—
Production and delivery	1,183	1,941	3,124	1,887 [b,c]	478	2,365	1,864 [d]	289	5,117	2,218	(3,269)	11,708
Depreciation, depletion and amortization	176	184	360	456	90	546	606	79	11	27	125 [e]	1,754
Metals inventory adjustments	—	4	4	—	—	—	—	—	—	—	—	4
Selling, general and administrative expenses	3	3	6	9	—	9	123	—	—	21	263	422
Mining exploration and research expenses	—	3	3	—	—	—	—	—	—	—	102	105
Environmental obligations and shutdown costs	—	2	2	—	—	—	—	—	—	—	87	89
Net gain on sales of assets	—	—	—	—	—	—	—	—	—	—	(208) [f]	(208)
Operating income (loss)	779	416	1,195	709	26	735	2,966	42	6	36	(226)	4,754
Interest expense, net	3	1	4	429 [b]	—	429	1	—	—	25	486	945
Provision for (benefit from) income taxes	—	—	—	253 [b]	15	268	755 [g]	—	—	1	(33) [h]	991
Total assets at December 31, 2018	2,922	4,608	7,530	8,524	1,707	10,231	15,646	1,796	233	773	6,007	42,216
Capital expenditures	216	385	601	220	17	237	1,001	9	5	16	102	1,971

a. Includes revenues from FCX's molybdenum sales company, which includes sales of molybdenum produced by the Molybdenum mines and by certain of the North America and South America copper mines.
b. Includes net charges totaling $14 million in production and delivery costs, $370 million in interest expense and $35 million of net tax benefits in provision for income taxes associated with disputed royalties for prior years.
c. Includes charges totaling $69 million associated with Cerro Verde's three-year collective labor agreement.
d. Includes net charges of $223 million, primarily associated with surface water tax disputes with the local regional tax authority in Papua, Indonesia, assessments for prior period permit fees with Indonesia's MOEF, disputed payroll withholding taxes for prior years and other tax settlements, and to write-off certain previously capitalized project costs for the new smelter in Indonesia, partially offset by inventory adjustments.
e. Includes $31 million of depreciation expense at Freeport Cobalt from December 2016 through December 2017 that was suspended while it was classified as held for sale.
f. Includes net gains totaling $97 million associated with a favorable adjustment to the estimated fair value less costs to sell for Freeport Cobalt and fair value adjustments of $31 million associated with potential contingent consideration related to the 2016 sale of onshore California oil and gas properties.
g. Includes tax credits totaling $549 million related to the change in PT-FI's tax rates in accordance with its IUPK ($482 million), U.S. tax reform ($47 million) and adjustments to PT-FI's historical tax positions ($20 million).
h. Includes net tax credits totaling $76 million, primarily related to the Act and $22 million related to the change in PT-FI's tax rates in accordance with its IUPK. Refer to Note 11 for further discussion.

NOTE 17. SUPPLEMENTARY MINERAL RESERVE INFORMATION (UNAUDITED)

Recoverable proven and probable reserves have been estimated as of December 31, 2020, in accordance with Industry Guide 7 as required by the Securities Exchange Act of 1934. FCX's proven and probable reserves may not be comparable to similar information regarding mineral reserves disclosed in accordance with the guidance in other countries. Proven and probable reserves were determined by the use of mapping, drilling, sampling, assaying and evaluation methods generally applied in the mining industry, as more fully discussed below. The term "reserve," as used in the reserve data presented here, means that part of a mineral deposit that can be economically and legally extracted or produced at the time of the reserve determination. The term "proven reserves" means reserves for which (i) quantity is computed from dimensions revealed in outcrops, trenches, workings or drill holes; (ii) grade and/or quality are computed from the results of detailed sampling; and (iii) the sites for inspection, sampling and measurements are spaced so closely and the geologic character is sufficiently defined that size, shape, depth and mineral content of reserves are well established. The term "probable reserves" means reserves for which quantity and grade are computed from information similar to that used for proven reserves but the sites for sampling are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven reserves, is high enough to assume continuity between points of observation.

FCX's reserve estimates are based on the latest available geological and geotechnical studies. FCX conducts ongoing studies of its ore bodies to optimize economic values and to manage risk. FCX revises its mine plans and estimates of proven and probable mineral reserves as required in accordance with the latest available studies.

Estimated recoverable proven and probable reserves at December 31, 2020, were determined using metals price assumptions of $2.50 per pound for copper, $1,200 per ounce for gold and $10 per pound for molybdenum. For the three-year period ended December 31, 2020, LME copper settlement prices averaged $2.83 per pound, London PM gold prices averaged $1,477 per ounce and the weekly average price for molybdenum quoted by *Metals Week* averaged $10.65 per pound.

The recoverable proven and probable reserves presented in the table below represent the estimated metal quantities from which FCX expects to be paid after application of estimated metallurgical recovery rates and smelter recovery rates, where applicable. Recoverable reserves are that part of a mineral deposit that FCX estimates can be economically and legally extracted or produced at the time of the reserve determination.

	Estimated Recoverable Proven and Probable Mineral Reserves at December 31, 2020		
	Copper[a] (billion pounds)	**Gold** (million ounces)	**Molybdenum** (billion pounds)
North America	47.1	0.6	3.01
South America	32.7	—	0.70
Indonesia[b]	33.4	28.3	—
Consolidated[c]	113.2	28.9	3.71
Net equity interest[d]	81.8	15.5	3.39

a. Estimated consolidated recoverable copper reserves included 1.7 billion pounds in leach stockpiles and 0.3 billion pounds in mill stockpiles.

b. Reflects estimates of minerals that can be recovered through 2041. Refer to Note 13 for discussion of PT-FI's IUPK.

c. Consolidated reserves represent estimated metal quantities after reduction for joint venture partner interests at the Morenci mine in North America (refer to Note 3 for further discussion). Excluded from the table above were FCX's estimated recoverable proven and probable reserves of 362 million ounces of silver, which were determined using $15 per ounce.

d. Net equity interest reserves represent estimated consolidated metal quantities further reduced for noncontrolling interest ownership (refer to Note 3 for further discussion of FCX's ownership in subsidiaries). FCX's net equity interest for estimated metal quantities in Indonesia reflects approximately 81 percent from 2021 through 2022 and 48.76 percent from 2023 through 2041. Excluded from the table above were FCX's estimated recoverable proven and probable reserves of 247 million ounces of silver.

Estimated Recoverable Proven and Probable Mineral Reserves at December 31, 2020

	Ore[a] (million metric tons)	Average Ore Grade Per Metric Ton[a] Copper (%)	Gold (grams)	Molybdenum (%)	Recoverable Proven and Probable Reserves[b] Copper (billion pounds)	Gold (million ounces)	Molybdenum (billion pounds)
North America							
Developed and producing:							
Morenci	4,300	0.23	—	— [c]	14.3	—	0.20
Sierrita	3,240	0.22	— [c]	0.02	13.2	0.2	1.28
Bagdad	2,591	0.31	— [c]	0.02	15.2	0.2	0.92
Safford, including Lone Star	777	0.45	—	—	5.7	—	—
Chino, including Cobre	313	0.44	0.03	—	2.5	0.2	—
Climax	156	—	—	0.15	—	—	0.48
Henderson	60	—	—	0.17	—	—	0.20
Tyrone	33	0.27	—	—	0.2	—	—
Miami	—	—	—	—	0.1	—	—
South America							
Developed and producing:							
Cerro Verde	4,077	0.36	—	0.01	28.6	—	0.70
El Abra	779	0.41	—	—	4.2	—	—
Indonesia[d]							
Developed and producing:							
Grasberg Block Cave	874	1.08	0.73	—	17.5	13.1	—
Deep Mill Level Zone	439	0.89	0.72	—	7.4	8.1	—
Big Gossan	53	2.30	0.98	—	2.5	1.1	—
Deep Ore Zone	8	0.55	0.47	—	0.1	0.1	—
Undeveloped:							
Kucing Liar	351	0.92	0.90	—	6.0	6.0	—
Total 100% basis	**18,052** [e]				**117.2** [e]	**28.9** [e]	**3.77** [e]
Consolidated[f]					**113.2**	**28.9**	**3.71**
FCX's equity share[g]					**81.8**	**15.5**	**3.39**

a. Excludes material contained in stockpiles.

b. Includes estimated recoverable metals contained in stockpiles.

c. Amounts not shown because of rounding.

d. Estimated recoverable proven and probable reserves from Indonesia reflect estimates of minerals that can be recovered through 2041. Refer to Note 13 for discussion of PT-FI's IUPK.

e. Does not foot because of rounding.

f. Consolidated reserves represent estimated metal quantities after reduction for joint venture partner interests at the Morenci mine in North America. Refer to Note 3 for further discussion.

g. Net equity interest reserves represent estimated consolidated metal quantities further reduced for noncontrolling interest ownership. FCX's net equity interest for estimated metal quantities in Indonesia reflects an approximate 81 percent from 2021 through 2022 and 48.76 percent from 2023 through 2041. Refer to Note 3 for further discussion of FCX's ownership in subsidiaries.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

Not applicable.

Item 9A. Controls and Procedures.

(a) Evaluation of disclosure controls and procedures. Our chief executive officer and chief financial officer, with the participation of management, have evaluated the effectiveness of our "disclosure controls and procedures" (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934) as of the end of the period covered by this annual report on Form 10-K. Based on their evaluation, they have concluded that our disclosure controls and procedures are effective as of the end of the period covered by this report.

(b) Changes in internal controls over financial reporting. There has been no change in our internal control over financial reporting that occurred during the quarter ended December 31, 2020, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

(c) Management's annual report on internal control over financial reporting and the report thereon of Ernst & Young LLP are included herein under Item 8. "Financial Statements and Supplementary Data."

Item 9B. Other Information.

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The information set forth under the captions "Information About Director Nominees," "Board Committees," and "Board and Committee Independence; Audit Committee Financial Experts," and "Corporate Governance Guidelines; Principles of Business Conduct," of our definitive proxy statement to be filed with the United States Securities and Exchange Commission (SEC), relating to our 2021 annual meeting of stockholders, is incorporated herein by reference. The information required by Item 10 regarding our executive officers appears in a separately captioned heading after Item 4. "Information About our Executive Officers" in Part I of this report.

Item 11. Executive Compensation.

The information set forth under the captions "Director Compensation" and "Executive Officer Compensation" of our definitive proxy statement to be filed with the SEC, relating to our 2021 annual meeting of stockholders, is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information set forth under the captions "Stock Ownership of Directors and Executive Officers" and "Stock Ownership of Certain Beneficial Owners" of our definitive proxy statement to be filed with the SEC, relating to our 2021 annual meeting of stockholders, is incorporated herein by reference.

Equity Compensation Plan Information

Only our 2016 Stock Incentive Plan (2016 plan), which was previously approved by our stockholders, has shares of our common stock available for future grant. However, we have equity compensation plans pursuant to which awards have previously been made that could result in issuance of our common stock to employees and non-employees as compensation.

The following table presents information regarding our equity compensation plans as of December 31, 2020:

	Number of Securities To be Issued Upon Exercise of Outstanding Options, Warrants and Rights		Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
	(a)		(b)	(c)
Equity compensation plans approved by security holders	43,972,786	a	$ 25.54	39,721,487
Equity compensation plans not approved by security holders	1,496,070	b	$ 28.08	—
Total	45,468,856		25.65	39,721,487

a. Includes shares of our common stock issuable upon the vesting of 2,931,983 restricted stock units (RSUs) and 4,417,830 performance share units (PSUs) at maximum performance levels, and the termination of deferrals with respect to 1,197,900 RSUs that were vested as of December 31, 2020. These awards are not reflected in column (b) because they do not have an exercise price. The number of securities to be issued in column (a) does not include RSUs granted under our phantom stock plan, which are payable solely in cash.

b. Represents securities to be issued under awards assumed in our acquisition of McMoRan Exploration Co. Includes shares issuable upon the vesting of 13,500 RSUs that were assumed in prior acquisitions. These awards are not reflected in column (b) because they do not have an exercise price.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information set forth under the captions “Certain Transactions” and “Board and Committee Independence; Audit Committee Financial Experts” of our definitive proxy statement to be filed with the SEC, relating to our 2021 annual meeting of stockholders, is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services.

The information set forth under the caption “Independent Registered Public Accounting Firm” of our definitive proxy statement to be filed with the SEC, relating to our 2021 annual meeting of stockholders, is incorporated herein by reference.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(a)(1). Financial Statements.

The consolidated statements of operations, comprehensive income (loss), cash flows and equity, and the consolidated balance sheets are included as part of Item 8. “Financial Statements and Supplementary Data.”

(a)(2). Financial Statement Schedules.

The following financial statement schedule is presented below.

Schedule II – Valuation and Qualifying Accounts

Schedules other than the one above have been omitted since they are either not required, not applicable or the required information is included in the financial statements or notes thereto.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of

Freeport-McMoRan Inc.

We have audited the consolidated financial statements of Freeport-McMoRan Inc. (the Company) as of December 31, 2020 and 2019, for each of the three years in the period ended December 31, 2020, and have issued our report thereon dated February 16, 2021 included elsewhere in this Form 10-K. Our audits of the consolidated financial statements included the financial statement schedule listed in Item 15 (a)(2) of this Form 10-K (the "schedule"). This schedule is the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's schedule based on our audits.

In our opinion, the schedule presents fairly, in all material respects, the information set forth therein when considered in conjunction with the consolidated financial statements.

/s/ Ernst & Young LLP

Phoenix, Arizona
February 16, 2021

SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS (In millions)

	Balance at Beginning of Year	Additions (Deductions) Charged to Costs and Expense	Additions (Deductions) Charged to Other Accounts	Other Additions (Deductions)	Balance at End of Year
Reserves and allowances deducted from asset accounts:					
Valuation allowance for deferred tax assets					
Year Ended December 31, 2020	$ 4,576	$ 200 [a]	$ (16) [b]	$ (28) [c]	$ 4,732
Year Ended December 31, 2019	4,507	50 [d]	19 [b]	—	4,576
Year Ended December 31, 2018	4,575	(345) [e]	8 [b]	269 [f]	4,507
Reserves for non-income taxes:					
Year Ended December 31, 2020	$ 58	$ 21	$ (1)	$ 4 [g]	$ 82
Year Ended December 31, 2019	62	—	—	(4) [g]	58
Year Ended December 31, 2018	58	7	(1)	(2) [g]	62

a. Primarily relates to a $250 million increase in United States (U.S.) federal net operating loss (NOL) carryforwards, partly offset by a $75 million decrease in U.S foreign tax credits associated with expirations, and an $11 million decrease in U.S. deferred tax assets for which no benefit is expected to be realized.

b. Relates to a valuation allowance for tax benefits primarily associated with actuarial losses for U.S. defined benefit plans included in other comprehensive income (loss).

c. Relates to sale of interest in Kisanfu.

d. Primarily relates to a $208 million increase in U.S. federal deferred tax assets for which no benefit is expected to be realized, partly offset by a $98 million decrease in U.S. foreign tax credits associated with expirations and prior year adjustments, and a $44 million decrease in U.S. federal and state NOL carryforwards.

e. Primarily relates to a $315 million decrease in U.S. foreign tax credits associated with expirations and 2017 U.S. tax reform adjustments, and a decrease of $45 million in U.S. federal NOLs associated with 2018 usage and 2017 U.S. tax reform.

f. Primarily relates to a $244 million increase in foreign NOLs for which no benefit is expected to be realized resulting from PT Freeport Indonesia's acquisition of PT Rio Tinto Indonesia.

g. Represents amounts paid or adjustments to reserves based on revised estimates.

(a)(3). Exhibits.

Exhibit Number	Exhibit Title	Filed with this Form 10-K	Incorporated by Reference		
			Form	File No.	Date Filed
2.1	Agreement and Plan of Merger dated as of November 18, 2006, by and among FCX, Phelps Dodge Corporation and Panther Acquisition Corporation.		8-K	001-11307-01	11/20/2006
2.2	Stock Purchase Agreement, dated as of October 6, 2014, among LMC Candelaria SpA, LMC Ojos del Salado SpA and Freeport Minerals Corporation.		10-Q	001-11307-01	11/7/2014
2.3	Purchase Agreement dated February 15, 2016, between Sumitomo Metal Mining America Inc., Sumitomo Metal Mining Co., Ltd., Freeport-McMoRan Morenci Inc., Freeport Minerals Corporation, and FCX.		8-K	001-11307-01	2/16/2016
2.4	Stock Purchase Agreement dated May 9, 2016, among CMOC Limited, China Molybdenum Co., Ltd., Phelps Dodge Katanga Corporation and FCX.		8-K	001-11307-01	5/9/2016
2.5	Purchase and Sale Agreement dated September 12, 2016, between Freeport-McMoRan Oil & Gas LLC, Freeport-McMoRan Exploration & Production LLC, Plains Offshore Operations Inc. and Anadarko US Offshore LLC.		10-Q	001-11307-01	11/9/2016
2.6+	PT-FI Divestment Agreement dated as of September 27, 2018 among FCX, International Support LLC, PT Freeport Indonesia, PT Indocopper Investama (subsequently renamed PT Indonesia Papua Metal Dan Mineral) and PT Indonesia Asahan Aluminium (Persero).		10-Q	001-11307-01	11/9/2018
2.7	Supplemental and Amendment Agreement to the PT-FI Divestment Agreement, dated December 21, 2018, among FCX, PT Freeport Indonesia, PT Indonesia Papua Metal Dan Mineral (f/k/a PT Indocopper Investama), PT Indonesia Asahan Aluminium (Persero) and International Support LLC.		10-K	001-11307-01	2/15/2019
3.1	Amended and Restated Certificate of Incorporation of FCX, effective as of June 8, 2016.		8-K	001-11307-01	6/9/2016
3.2	Amended and Restated By-Laws of FCX, effective as of June 3, 2020.		8-K	001-11307-01	6/3/2020
4.1	Description of Common Stock of Freeport-McMoRan Inc.	X			
4.2	Indenture dated as of February 13, 2012, between FCX and U.S. Bank National Association, as Trustee (relating to the 3.55% Senior Notes due 2022, the 4.00% Senior Notes due 2021, the 4.55% Senior Notes due 2024, and the 5.40% Senior Notes due 2034).		8-K	001-11307-01	2/13/2012
4.3	Third Supplemental Indenture dated as of February 13, 2012, between FCX and U.S. Bank National Association, as Trustee (relating to the 3.55% Senior Notes due 2022).		8-K	001-11307-01	2/13/2012
4.4	Fourth Supplemental Indenture dated as of May 31, 2013, among FCX, Freeport-McMoRan Oil & Gas LLC and U.S. Bank National Association, as Trustee (relating to the 3.55% Senior Notes due 2022, the 4.00% Senior Notes due 2021, the 4.55% Senior Notes due 2024, and the 5.40% Senior Notes due 2034).		8-K	001-11307-01	6/3/2013

Exhibit Number	Exhibit Title	Filed with this Form 10-K	Incorporated by Reference		
			Form	File No.	Date Filed
4.5	Seventh Supplemental Indenture dated as of November 14, 2014 among FCX, Freeport-McMoRan Oil & Gas LLC and U.S. Bank National Association, as Trustee (relating to the 4.55% Senior Notes due 2024).		8-K	001-11307-01	11/14/2014
4.6	Eighth Supplemental Indenture dated as of November 14, 2014 among FCX, Freeport-McMoRan Oil & Gas LLC and U.S. Bank National Association, as Trustee (relating to the 5.40% Senior Notes due 2034).		8-K	001-11307-01	11/14/2014
4.7	Indenture dated as of March 7, 2013, between FCX and U.S. Bank National Association, as Trustee (relating to the 3.875% Senior Notes due 2023, and the 5.450% Senior Notes due 2043).		8-K	001-11307-01	3/7/2013
4.8	Supplemental Indenture dated as of May 31, 2013, among FCX, Freeport-McMoRan Oil & Gas LLC, as guarantor, and U.S. Bank National Association, as Trustee (relating to the 3.875% Senior Notes due 2023, and the 5.450% Senior Notes due 2043).		8-K	001-11307-01	6/3/2013
4.9	Form of Indenture dated as of September 22, 1997, between Phelps Dodge Corporation and The Chase Manhattan Bank, as Trustee (relating to the 7.125% Senior Notes due 2027, the 9.50% Senior Notes due 2031, and the 6.125% Senior Notes due 2034).		S-3	333-36415	9/25/1997
4.10	Form of 7.125% Debenture due November 1, 2027 of Phelps Dodge Corporation issued on November 5, 1997, pursuant to the Indenture dated as of September 22, 1997, between Phelps Dodge Corporation and The Chase Manhattan Bank, as Trustee (relating to the 7.125% Senior Notes due 2027).		8-K	001-00082	11/3/1997
4.11	Form of 9.5% Note due June 1, 2031 of Phelps Dodge Corporation issued on May 30, 2001, pursuant to the Indenture dated as of September 22, 1997, between Phelps Dodge Corporation and First Union National Bank, as successor Trustee (relating to the 9.50% Senior Notes due 2031).		8-K	001-00082	5/30/2001
4.12	Form of 6.125% Note due March 15, 2034 of Phelps Dodge Corporation issued on March 4, 2004, pursuant to the Indenture dated as of September 22, 1997, between Phelps Dodge Corporation and First Union National Bank, as successor Trustee (relating to the 6.125% Senior Notes due 2034).		10-K	001-00082	3/7/2005
4.13	Supplemental Indenture dated as of April 4, 2007 to the Indenture dated as of September 22, 1997, among Phelps Dodge Corporation, as Issuer, Freeport-McMoRan Copper & Gold Inc., as Parent Guarantor, and U.S. Bank National Association, as Trustee (relating to the 7.125% Senior Notes due 2027, the 9.50% Senior Notes due 2031, and the 6.125% Senior Notes due 2034).		10-K	001-11307-01	2/26/2016
4.14	Form of Certificate representing shares of common stock, par value $0.10.		8-A/A	001-11307-01	8/10/2015
4.15	Indenture dated as of August 15, 2019, between FCX and U.S. Bank National Association, as Trustee (relating to the 5.00% Senior Notes due 2027, the 5.25% Senior Notes due 2029, the 4.125% Senior Notes due 2028, the 4.25% Senior Notes due 2030, the 4.375% Senior Notes due 2028, and the 4.625% Senior Notes due 2030).		8-K	001-11307-01	8/15/2019
4.16	First Supplemental Indenture dated as of August 15, 2019, among FCX, Freeport-McMoRan Oil & Gas LLC, as Guarantor, and U.S. Bank National Association, as Trustee (including the form of 5.00% Senior Notes due 2027).		8-K	001-11307-01	8/15/2019
4.17	Second Supplemental Indenture dated as of August 15, 2019, among FCX, Freeport-McMoRan Oil & Gas LLC, as Guarantor, and U.S. Bank National Association, as Trustee (including the form of 5.25% Senior Notes due 2029).		8-K	001-11307-01	8/15/2019

Exhibit Number	Exhibit Title	Filed with this Form 10-K	Incorporated by Reference		
			Form	File No.	Date Filed
4.18	Third Supplemental Indenture dated as of March 4, 2020, among FCX, Freeport-McMoRan Oil & Gas LLC, as Guarantor, and U.S. Bank National Association, as Trustee (including the form of 4.125% Senior Notes due 2028).		8-K	001-11307-01	3/4/2020
4.19	Fourth Supplemental Indenture dated as of March 4, 2020, among FCX, Freeport-McMoRan Oil & Gas LLC, as Guarantor, and U.S. Bank National Association, as Trustee (including the form of 4.25% Senior Notes due 2030).		8-K	001-11307-01	3/4/2020
4.20	Fifth Supplemental Indenture dated as of March 31, 2020, among FCX, Freeport-McMoRan Oil & Gas LLC, as Guarantor, and U.S. Bank National Association, as Trustee (relating to the 4.125% Senior Notes due 2028 and the 4.25% Senior Notes due 2030).		10-Q	001-11307-01	8/7/2020
4.21	Sixth Supplemental Indenture dated as of July 27, 2020, among FCX, Freeport-McMoRan Oil & Gas LLC, as Guarantor, and U.S. Bank National Association, as Trustee (including the form of 4.375% Senior Notes due 2028).		8-K	001-11307-01	7/27/2020
4.22	Seventh Supplemental Indenture dated as of July 27, 2020, among FCX, Freeport-McMoRan Oil & Gas LLC, as Guarantor, and U.S. Bank National Association, as Trustee (including the form of 4.625% Senior Notes due 2030).		8-K	001-11307-01	7/27/2020
10.1	Concentrate Purchase and Sales Agreement dated effective December 11, 1996, between PT Freeport Indonesia and PT Smelting.		S-3	333-72760	11/5/2001
10.2	Amendment No. 1, dated as of March 19, 1998, Amendment No. 2 dated as of December 1, 2000, Amendment No. 3 dated as of January 1, 2003, Amendment No. 4 dated as of May 10, 2004, Amendment No. 5 dated as of March 19, 2009, Amendment No. 6 dated as of January 1, 2011, and Amendment No. 7 dated as of October 29, 2012, to the Concentrate Purchase and Sales Agreement dated effective December 11, 1996, between PT Freeport Indonesia and PT Smelting.		10-K	001-11307-01	2/27/2015
10.3	Amendment No. 8 dated as of April 16, 2014 to the Concentrate Purchase and Sales Agreement dated December 11,1996 between PT Freeport Indonesia and PT Smelting.		10-K	001-11307-01	2/20/2018
10.4	Amendment No. 9 dated as of April 10, 2017 to the Concentrate Purchase and Sales Agreement dated December 11,1996 between PT Freeport Indonesia and PT Smelting.		10-K	001-11307-01	2/20/2018
10.5	Shareholders Agreement dated as of December 21, 2018, among FCX, PT Freeport Indonesia, PT Indonesia Papua Metal Dan Mineral and PT Indonesia Asahan Aluminium (Persero).		10-K	001-11307-01	2/15/2019
10.6	PT Freeport Indonesia Special Mining License (IUPK) from the Minister of Energy and Mineral Resources of the Republic of Indonesia (English translation).		10-K	001-11307-01	2/15/2019
10.7	Third Amended and Restated Joint Venture and Shareholders Agreement dated as of December 11, 2003 among PT Freeport Indonesia, Mitsubishi Corporation, Nippon Mining & Metals Company, Limited and PT Smelting, as amended by the First Amendment dated as of September 30, 2005, and the Second Amendment dated as of April 30, 2008.		10-K	001-11307-01	2/27/2015

Exhibit Number	Exhibit Title	Filed with this Form 10-K	Incorporated by Reference		
			Form	File No.	Date Filed
10.8	Participation Agreement, dated as of March 16, 2005, among Phelps Dodge Corporation, Cyprus Amax Minerals Company, a Delaware corporation, Cyprus Metals Company, a Delaware corporation, Cyprus Climax Metals Company, a Delaware corporation, Sumitomo Corporation, a Japanese corporation, Summit Global Management, B.V., a Dutch corporation, Sumitomo Metal Mining Co., Ltd., a Japanese corporation, Compañia de Minas Buenaventura S.A.A., a Peruvian sociedad anonima abierta, and Sociedad Minera Cerro Verde S.A.A., a Peruvian sociedad anonima abierta.		8-K	001-00082	3/22/2005
10.9	Shareholders Agreement, dated as of June 1, 2005, among Phelps Dodge Corporation, Cyprus Climax Metals Company, a Delaware corporation, Sumitomo Corporation, a Japanese corporation, Sumitomo Metal Mining Co., Ltd., a Japanese corporation, Summit Global Management B.V., a Dutch corporation, SMM Cerro Verde Netherlands, B.V., a Dutch corporation, Compañia de Minas Buenaventura S.A.A., a Peruvian sociedad anonima abierta, and Sociedad Minera Cerro Verde S.A.A., a Peruvian sociedad anonima abierta.		8-K	001-00082	6/7/2005
10.10	Revolving Credit Agreement dated as of April 20, 2018, among FCX, PT Freeport Indonesia, Freeport-McMoRan Oil & Gas LLC, JPMorgan Chase Bank, N.A., as administrative agent, Bank of America, N.A., as syndication agent, and each of the lenders and issuing banks party thereto.		8-K	001-11307-0	4/23/2018
10.11	First Amendment dated as of May 2, 2019 to the Revolving Credit Agreement dated as of April 20, 2018, among Freeport-McMoRan Inc., PT Freeport Indonesia, Freeport-McMoRan Oil & Gas LLC, JPMorgan Chase Bank, N.A., as administrative agent, Bank of America, N.A., as syndication agent, and each of the lenders and issuing banks party thereto.		8-K	001-11307-01	5/2/2019
10.12	Second Amendment dated as of November 25, 2019 to the Revolving Credit Agreement dated as of April 20, 2018, as amended by that certain First Amendment dated as of May 2, 2019, among Freeport-McMoRan Inc., PT Freeport Indonesia, Freeport-McMoRan Oil & Gas LLC, JPMorgan Chase Bank, N.A., as administrative agent, Bank of America, N.A., as syndication agent, and each of the lenders and issuing banks party thereto.		8-K	001-11307-01	11/25/2019
10.13	Third Amendment dated as of June 3, 2020 to the Revolving Credit Agreement dated as of April 20, 2018, as amended, among FCX, PT Freeport Indonesia, Freeport-McMoRan Oil & Gas LLC, JPMorgan Chase Bank, N.A., as administrative agent, and each of the lenders and issuing banks party thereto.		8-K	001-11307-01	6/3/2020
10.14*	Letter Agreement dated as of December 19, 2013, by and between FCX and Richard C. Adkerson.		8-K	001-11307-01	12/23/2013
10.15*	FCX Director Compensation.	X			
10.16*	Amended and Restated Executive Employment Agreement dated effective as of December 2, 2008, between FCX and Kathleen L. Quirk.		10-K	001-11307-01	2/26/2009
10.17*	Amendment to Amended and Restated Executive Employment Agreement dated December 2, 2008, by and between FCX and Kathleen L. Quirk, dated April 27, 2011.		8-K	001-11307-01	4/29/2011
10.18*	FCX Executive Services Program.		10-K	001-11307-01	2/24/2017
10.19*	FCX Supplemental Executive Retirement Plan, as amended and restated.		8-K	001-11307-01	2/5/2007
10.20*	FCX 1996 Supplemental Executive Capital Accumulation Plan.		10-Q	001-11307-01	5/12/2008

Exhibit Number	Exhibit Title	Filed with this Form 10-K	Incorporated by Reference		
			Form	File No.	Date Filed
10.21*	FCX 1996 Supplemental Executive Capital Accumulation Plan Amendment One.		10-Q	001-11307-01	5/12/2008
10.22*	FCX 1996 Supplemental Executive Capital Accumulation Plan Amendment Two.		10-K	001-11307-01	2/26/2009
10.23*	FCX 1996 Supplemental Executive Capital Accumulation Plan Amendment Three.		10-K	001-11307-01	2/27/2015
10.24*	FCX 1996 Supplemental Executive Capital Accumulation Plan Amendment Four.		10-K	001-11307-01	2/27/2015
10.25*	FCX 2005 Supplemental Executive Capital Accumulation Plan, as amended and restated effective January 1, 2015.		10-K	001-11307-01	2/27/2015
10.26*	FCX 2005 Supplemental Executive Capital Accumulation Plan Amendment One	X			
10.27*	FCX 2005 Supplemental Executive Capital Accumulation Plan Amendment Two	X			
10.28*	FCX 2005 Supplemental Executive Capital Accumulation Plan Amendment Three	X			
10.29*	Freeport Minerals Corporation Supplemental Retirement Plan, as amended and restated.		10-K	001-11307-01	2/15/2019
10.30*	FCX 2003 Stock Incentive Plan, as amended and restated.		10-Q	001-11307-01	5/10/2007
10.31*	FCX 2004 Director Compensation Plan, as amended and restated.		10-Q	001-11307-01	8/6/2010
10.32*	FCX Amended and Restated 2006 Stock Incentive Plan.		10-K	001-11307-01	2/27/2014
10.33*	FCX 2016 Stock Incentive Plan.		8-K	001-11307-01	6/9/2016
10.34*	Form of Notice of Grant of Nonqualified Stock Options and Restricted Stock Units under the 2006 Stock Incentive Plan (for grants made to non-management directors and advisory directors).		8-K	001-11307-01	6/14/2010
10.35*	Form of Nonqualified Stock Options Grant Agreement under the FCX stock incentive plans (effective February 2014).		10-K	001-11307-01	2/27/2014
10.36*	Form of Notice of Grant of Restricted Stock Units (for grants made to non-management directors).		10-K	001-11307-01	2/24/2017
10.37*	Form of Restricted Stock Unit Agreement (effective February 2015).		10-K	001-11307-01	2/27/2015
10.38*	Form of Performance Share Unit Agreement (effective March 2016).		10-K	001-11307-01	2/20/2018
10.39*	Form of Performance Share Unit Agreement (effective February 2018).		10-K	001-11307-01	2/20/2018
10.40*	Form of Nonqualified Stock Options Grant Agreement (effective February 2018).		10-K	001-11307-01	2/20/2018
10.41*	Form of Restricted Stock Unit Agreement (effective February 2018).		10-K	001-11307-01	2/20/2018
10.42*	FCX Annual Incentive Plan (effective January 2019).		10-K	001-11307-01	2/15/2019
10.43*	Freeport-McMoRan Inc. Executive Change in Control Severance Plan, effective as of May 5, 2020.		10-Q	001-11307-01	5/7/2020
14.1	FCX Principles of Business Conduct.		10-K	001-11307-01	2/14/2020
21.1	Subsidiaries of FCX.	X			
22.1	List of Guarantor Subsidiaries	X			
23.1	Consent of Ernst & Young LLP.	X			
24.1	Certified resolution of the Board of Directors of FCX authorizing this report to be signed on behalf of any officer or director pursuant to a Power of Attorney.	X			
24.2	Powers of Attorney pursuant to which this report has been signed on behalf of certain officers and directors of FCX.	X			

Exhibit Number	Exhibit Title	Filed with this Form 10-K	Incorporated by Reference		
			Form	File No.	Date Filed
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a)/15d – 14(a).	X			
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a)/15d – 14(a).	X			
32.1	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350.	X			
32.2	Certification of Principal Financial Officer pursuant to 18 U.S.C Section 1350.	X			
95.1	Mine Safety Disclosure.	X			
101.INS	XBRL Instance Document - the XBRL Instance Document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.	X			
101.SCH	Inline XBRL Taxonomy Extension Schema.	X			
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase.	X			
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase.	X			
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase.	X			
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase.	X			
104	The cover page from this Annual Report on Form 10-K, formatted in Inline XBRL.	X			

Note: Certain instruments with respect to long-term debt of FCX have not been filed as exhibits to this Annual Report on Form 10-K since the total amount of securities authorized under any such instrument does not exceed 10 percent of the total assets of FCX and its subsidiaries on a consolidated basis. FCX agrees to furnish a copy of each such instrument upon request of the Securities and Exchange Commission (SEC).

* Indicates management contract or compensatory plan or arrangement.

\+ The registrant agrees to furnish supplementally to the SEC a copy of any omitted schedule or exhibit upon the request of the SEC in accordance with Item 601(b)(2) of Regulation S-K.

Item 16. Form 10-K Summary.

Not applicable.

GLOSSARY OF TERMS

Following is a glossary of selected terms used throughout this Annual Report on Form 10-K that are technical in nature:

Adits. A horizontal passage leading into a mine for the purposes of access or drainage.

Alluvial aquifers. A water-bearing deposit of loosely arranged gravel, sand or silt left behind by a river or other flowing water.

Anode. A positively charged metal sheet, usually lead, on which oxidation occurs. During the electro-refining process, anodes are impure copper sheets from the smelting process that require further processing to produce refined copper cathode.

Azurite. A bluish supergene copper mineral and ore found in the oxidized portions of copper deposits often associated with malachite.

Barrel or Bbl. One stock tank barrel, or 42 U.S. gallons liquid volume (used in reference to crude oil or other liquid hydrocarbons).

Bench. The horizontal floor cuttings along which mining progresses in an open-pit mine. As the pit progresses to lower levels, safety benches are left in the walls to catch any falling rock.

Blasthole stoping. An underground mining method that extracts the ore zone in large vertical rooms. The ore is broken by blasting using large-diameter vertical drill holes.

Block cave. A general term used to describe an underground mining method where the extraction of ore depends largely on the action of gravity. By continuously removing a thin horizontal layer at the bottom mining level of the ore column, the vertical support of the ore column is removed and the ore then caves by gravity.

Blowouts. Accidents resulting from loss of hydraulic well control while conducting drilling operations.

Bornite. A red-brown isometric mineral comprising copper, iron and sulfur.

British thermal unit or Btu. One British thermal unit is the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

Brochantite. A greenish-black copper mineral occurring in the oxidation zone of copper sulfide deposits.

Cathode. Refined copper produced by electro-refining of impure copper or by electrowinning.

Chalcocite. A grayish copper sulfide mineral, usually found as a supergene in copper deposits formed from the re-deposition of copper minerals that were solubilized from the oxide portion of the deposit.

Chalcopyrite. A brass-yellow sulfide of mineral copper and iron.

Chrysocolla. A bluish-green to emerald-green oxide copper mineral that forms incrustations and thin seams in oxidized parts of copper-mineral veins; a source of copper and an ornamental stone.

Cobalt. A tough, lustrous, nickel-white or silvery-gray metallic element often associated with nickel and copper ores from which it is obtained as a by-product.

Concentrate. The resulting product from the concentrating process that is composed predominantly of copper sulfide or molybdenum sulfide minerals. Further processing might include smelting and electro-refining, or roasting.

Concentrating. The process by which ore is separated into metal concentrate through crushing, milling and flotation.

Concentrator. A process plant used to separate targeted minerals from gangue and produce a mineral concentrate that can be marketed or processed by additional downstream processes to produce salable metals or mineral products. Term is used interchangeably with Mill.

Contained copper. The percentage of copper in a mineral sample before the reduction of amounts unable to be recovered during the metallurgical process.

Covellite. A metallic, indigo-blue supergene mineral found in copper deposits.

Cratering. The collapse of the circulation system dug around the drilling rig for the prevention of blowouts.

Crushed-ore leach pad. A slightly sloping pad upon which leach ores are placed in lifts for processing.

Cutoff grade. The minimum percentage of copper contained in the ore for processing. When percentages are below this grade, the material would be routed to a high-lift or waste stockpile. When percentages are above grade, the material would be processed using concentrating or leaching methods for higher recovery.

Disseminations. A mineral deposit in which the desired minerals occur as scattered particles in the rock that has sufficient quantity to be considered an ore deposit.

Electrolytic refining. The purification of metals by electrolysis. A large piece of impure copper is used as the anode with a thin strip of pure copper as the cathode.

Electrowinning. A process that uses electricity to plate copper contained in an electrolyte solution into copper cathode.

Flotation. A concentrating process in which valuable minerals attach themselves to bubbles of an oily froth for separation as concentrate. The gangue material from the flotation process reports as a tailing product.

Grade. The relative quality or percentage of metal content.

Indigenous Peoples. Indigenous Peoples are distinct social and cultural groups that share collective ancestral ties to the lands and natural resources where they live, occupy or from which they have been displaced.

Leach stockpiles. A quantity of leachable ore placed on a leach pad or in another suitable location that permits leaching and collection of solutions that contain solubilized metal.

Leaching. The process of extracting copper using a chemical solution to dissolve copper contained in ore.

Malachite. A bright-green copper mineral (ore) that often occurs with azurite in oxidized zones of copper deposits.

Metric ton. The equivalent of 2,204.62 pounds.

Mill stockpile. Millable ore that has been mined, and is available for future processing.

Mine-for-leach. A mining operation focused on mining only leachable ores.

Mineralization. The process by which a mineral is introduced into a rock, resulting in concentration of minerals that may form a valuable or potentially valuable deposit.

Molybdenite. A black, platy, disulfide of molybdenum. It is the most common ore of molybdenum.

Ore body. A continuous, well-defined mass of mineralized material of sufficient ore content to make extraction economically feasible.

Oxide. In mining, oxide is used as an ore classification relating to material that usually leaches well but does not perform well in a concentrator. Oxide minerals in mining refer to an oxidized form.

Paste backfill. A slurry of paste material produced from tailings with engineered cement and water content that is used to fill underground mined out stopes.

Porphyry. A deposit in which minerals of copper, molybdenum, gold or, less commonly, tungsten and tin are disseminated or occur in stock-work of small veinlets within a large mass of hydro-thermally altered igneous rock. The host rock is commonly an intrusive porphyry, but other rocks intruded by a porphyry can also be hosts for ore minerals.

Production level. With respect to underground mining, the elevation of the underground works that permit extraction/transport of the ore to a common point, shaft or plant.

Pseudomalachite. A dark-green monoclinic copper mineral.

Roasting. The heating of sulfide ores to oxidize sulfides to facilitate further processing.

Run-of-Mine (ROM). Leachable ore that is mined and directly placed on a leach pad without utilizing any further processes to reduce particle size prior to leaching.

Skarn. A Swedish mining term for silicate gangue of certain iron ore and sulfide deposits of Archaean age, particularly those that have replaced limestone and dolomite. Its meaning has been generally expanded to include lime-bearing silicates, of any geologic age, derived from nearly pure limestone and dolomite with the introduction of large amounts of silicon, aluminum, iron and magnesium.

Smelting. The process of melting and oxidizing concentrate to separate copper and precious metals from metallic and non-metallic impurities, including iron, silica, alumina and sulfur.

Solution extraction. A process that transfers copper from a copper-bearing ore to an organic solution, then to an electrolyte. The electrolyte is then pumped to a tankhouse where the copper is extracted, using electricity, into a copper cathode (refer to the term Electrowinning), together referred to as solution extraction/electrowinning (SX/EW).

Stope. An underground mining method that is usually applied to highly inclined or vertical veins. Ore is extracted by driving horizontally upon it in a series of workings, one immediately over the other. Each horizontal working is called

a stope because when a number of them are in progress, each working face under attack assumes the shape of a flight of stairs.

Sulfide. A mineral compound containing sulfur and a metal. Copper sulfides can be concentrated or leached, depending on the mineral type.

Tailings. The crushed and ground material remaining after economically recoverable minerals have been extracted. In upstream design and construction, tailings are deposited on the upstream side of the starter embankment, with subsequent crest raises progressively shifting upstream of each previous raise, using deposited tailings as a foundation. In downstream design and construction, tailings are deposited on the upstream side of the starter embankment. Borrow fill or a portion of the tailings are placed on the downstream side of the starter embankment. Subsequent crest raises progressively shift downstream of each previous raise, such that the previous raise becomes the foundation of the subsequent raise. As a result, the toe and the crest of the embankment progressively shift downstream as the embankment is raised. In centerline design and construction, tailings are deposited on the upstream side of the starter embankment. Borrow fill or a portion of the tailings are placed on the crest of the starter embankment. Subsequent crest raises are constructed vertically along the centerline of the previous raise such that the previous raise becomes the foundation of the subsequent raise. As a result, the toe of the embankment shifts downstream but the crest stays along initial alignment as the embankment is raised.

Tolling. The process of converting customer-owned material into specified products, which is then returned to the customer.

Working interest. An interest in an oil and gas lease that gives the owner of the interest the right to drill for and produce oil and gas on the leased acreage and requires the owner to pay a share of the costs of drilling and production operations.

SIGNATURES

Pursuant to the requirements of Section 13 of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on February 16, 2021.

Freeport-McMoRan Inc.

By:/s/ Richard C. Adkerson
Richard C. Adkerson
Chairman of the Board and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant in the capacities indicated on February 16, 2021.

/s/ Richard C. Adkerson Richard C. Adkerson	Chairman of the Board and Chief Executive Officer (Principal Executive Officer)
/s/ Kathleen L. Quirk Kathleen L. Quirk	President and Chief Financial Officer (Principal Financial Officer)
* C. Donald Whitmire, Jr.	Vice President and Controller - Financial Reporting (Principal Accounting Officer)
* Gerald J. Ford	Director
* Lydia H. Kennard	Director
* Dustan E. McCoy	Director
* John J. Stephens	Director
* Frances Fragos Townsend	Director

* By: /s/ Richard C. Adkerson
Richard C. Adkerson
Attorney-in-Fact