

# 2<sup>nd</sup> Quarter 2019 Earnings Conference Call

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July 24, 2019



**PROVEN ASSETS.  
FUNDAMENTAL VALUE.**

# Cautionary Statement

## Regarding Forward-Looking Statements

*This presentation contains forward-looking statements in which FCX discusses its potential future performance. Forward-looking statements are all statements other than statements of historical facts, such as projections or expectations relating to ore grades and milling rates; production and sales volumes; unit net cash costs; operating cash flows; capital expenditures; FCX's expectations regarding its share of PT Freeport Indonesia's (PT-FI) net (loss) income and future cash flows through 2022; PT-FI's development, financing, construction and completion of a new smelter in Indonesia; PT-FI's compliance with environmental standards under the framework established by Indonesia's Ministry of Environment and Forestry; exploration efforts and results; development and production activities, rates and costs; liquidity; tax rates; export quotas and duties; the impact of copper, gold and molybdenum price changes; the impact of deferred intercompany profits on earnings; reserve estimates; consummation of the pending Freeport Cobalt transaction; and future dividend payments, share purchases and sales. The words "anticipates," "may," "can," "plans," "believes," "estimates," "expects," "projects," "targets," "intends," "likely," "will," "should," "to be," "potential" and any similar expressions are intended to identify those assertions as forward-looking statements. The declaration of dividends is at the discretion of the Board of Directors (Board) and will depend on FCX's financial results, cash requirements, future prospects, and other factors deemed relevant by the Board.*

*FCX cautions readers that forward-looking statements are not guarantees of future performance and actual results may differ materially from those anticipated, expected, projected or assumed in the forward-looking statements. Important factors that can cause FCX's actual results to differ materially from those anticipated in the forward-looking statements include, but are not limited to, supply of and demand for, and prices of, copper, gold and molybdenum; mine sequencing; changes in mine plans; production rates; timing of shipments; results of feasibility studies; potential inventory adjustments; potential impairment of long-lived mining assets; satisfaction of customary closing conditions, including receipt of regulatory approvals to consummate the pending Freeport Cobalt transaction; the potential effects of violence in Indonesia generally and in the province of Papua; the Indonesian government's approval of an increase in PT-FI's export quota for the current export period ending March 8, 2020, and extension of PT-FI's export license after March 8, 2020; risks associated with underground mining; satisfaction of requirements in accordance with PT-FI's special mining license (IUPK) to extend mining rights from 2031 through 2041; industry risks; regulatory changes; political and social risks; labor relations; weather- and climate-related risks; environmental risks; litigation results; cybersecurity incidents; and other factors described in more detail under the heading "Risk Factors" in FCX's Annual Report on Form 10-K for the year ended December 31, 2018, filed with the U.S. Securities and Exchange Commission (SEC).*

*Investors are cautioned that many of the assumptions upon which FCX's forward-looking statements are based are likely to change after the forward-looking statements are made, including for example commodity prices, which FCX cannot control, and production volumes and costs, some aspects of which FCX may not be able to control. Further, FCX may make changes to its business plans that could affect its results. FCX cautions investors that it does not intend to update forward-looking statements more frequently than quarterly notwithstanding any changes in its assumptions, changes in business plans, actual experience or other changes, and FCX undertakes no obligation to update any forward-looking statements.*

*This presentation also contains certain financial measures such as unit net cash costs per pound of copper and molybdenum, net debt and adjusted EBITDA (earnings before interest, taxes, depreciation and amortization) that are not recognized under U.S. generally accepted accounting principles. As required by SEC Regulation G, reconciliations of unit net cash costs per pound of copper and molybdenum to amounts reported in FCX's consolidated financial statements are in the supplemental schedules of FCX's 2Q19 press release, which are also available on FCX's website, "fcx.com." Net debt equals consolidated debt less consolidated cash. A reconciliation of adjusted EBITDA to amounts reported in FCX's consolidated financial statements is included on slide 29.*

# 2Q19 Highlights

## Americas Operations

- Strong Performance
- Innovation/Advanced Analytics Gaining Momentum

## Lone Star Project

- Located in Arizona, USA
- On Track for First Copper Production by YE 2020
- Low Capital Intensive Oxide Expansion Opportunity

## Grasberg Open Pit

- Mine Sequencing Affected Timing of Cu/Au Production
- Extension of Open Pit Through 3Q19 and Potentially Longer

## Grasberg Underground

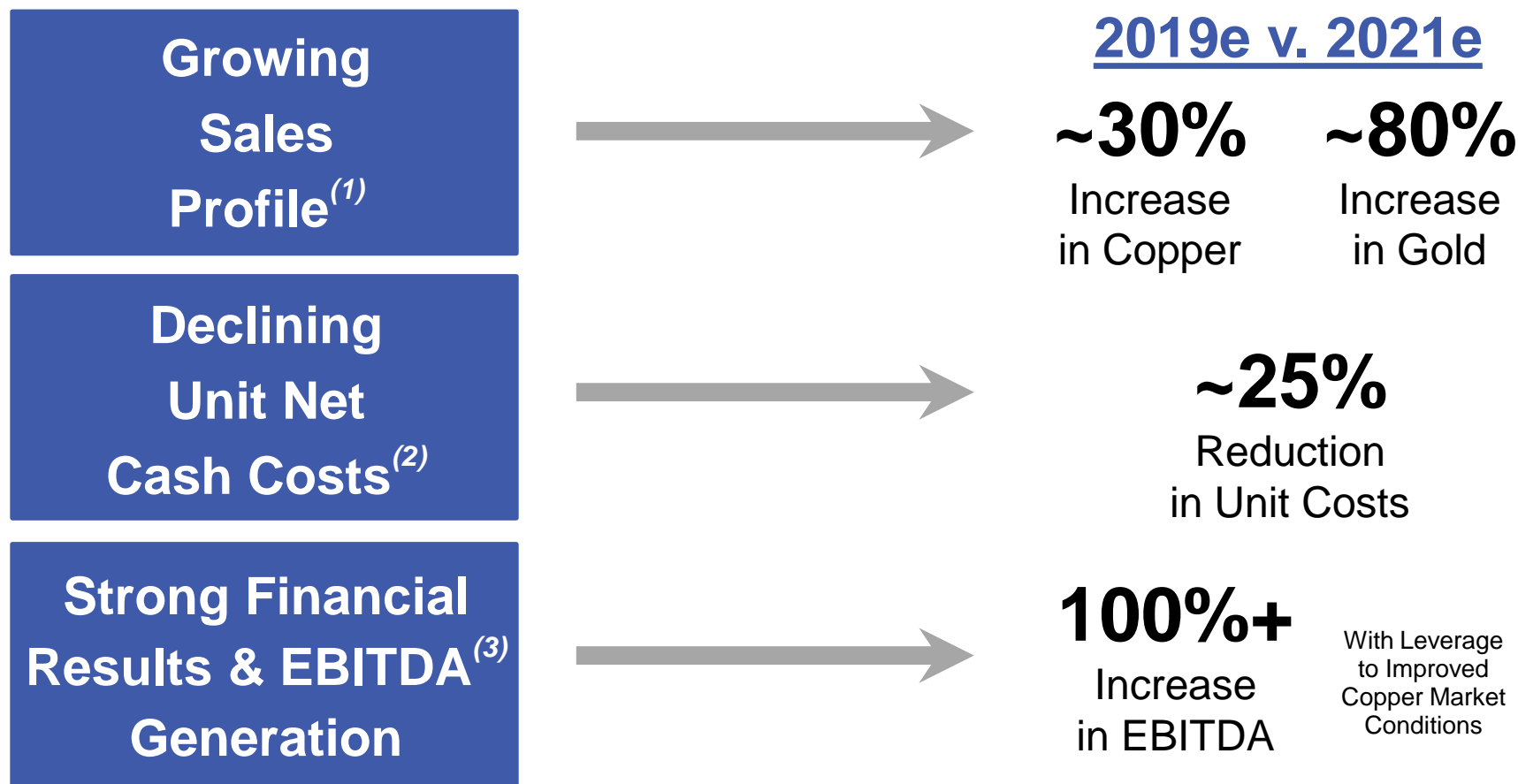
- Achieved Positive Development Milestones
- Data Providing Increased Confidence in Growing Production Rates

**Annual Sales Outlook Affirmed**

**Executing A Clearly Defined Strategy to Drive Shareholder Value**

*See Cautionary Statement.*

# Executing The Plan



## Value Creation for Shareholders

(1) Based on estimated copper and gold sales of 3.26 bn lbs and 0.8 mm ozs in 2019e, and 4.2 bn lbs and 1.5 mm ozs in 2021e.

(2) Assumes consolidated unit net cash costs for 2019e of \$1.75/lb and ~\$1.30/lb in 2021e. 2021e assumes ~30¢/lb unit net cash cost for Indonesia following the underground ramp-up.

(3) Based on estimated EBITDA of ~\$2.8 bn in 2019e and ~\$6 bn in 2021e based on \$2.75/lb copper.

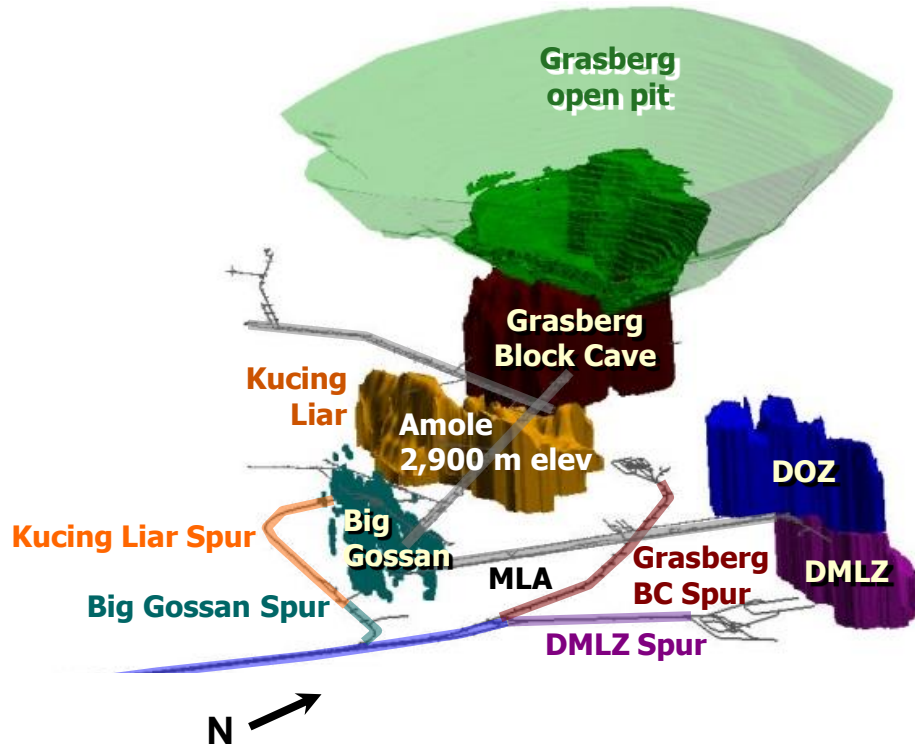
e = estimate. See Cautionary Statement.

# Grasberg Underground

## Initiating Production Phase

### Established Long-lived Minerals District

	Copper (bn lbs)	Gold (mm ozs)
Historical Production	36	54
Expected Future Production	36	30



- Long History and an Industry Leader in Block Caving
- Significant Investments & Planning for Underground Era Since 2003
- Large Footprint Conducive to Block Caving
- Multiple Cave Fronts & Production Blocks Enable Large-Scale Production
- Two-Thirds of Development Meters Already Achieved for Grasberg Block Cave/DMLZ\*

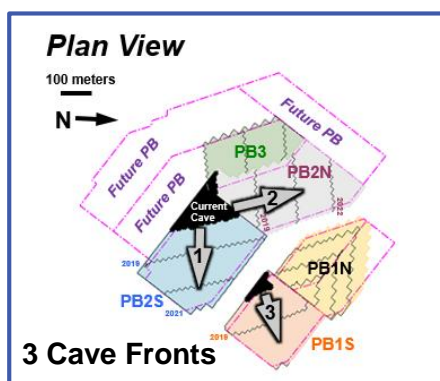
\*Over 400 km of Development Achieved; 200 km Remaining  
See Cautionary Statement



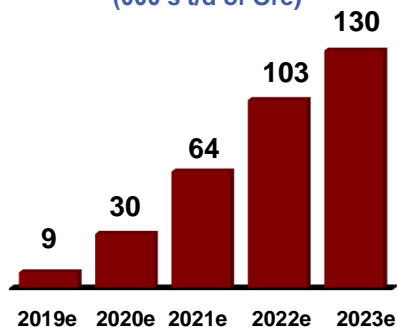
# World Class Block Cave Design

## Substantial Infrastructure in Place to Support Large-Scale Production

### Grasberg Block Cave



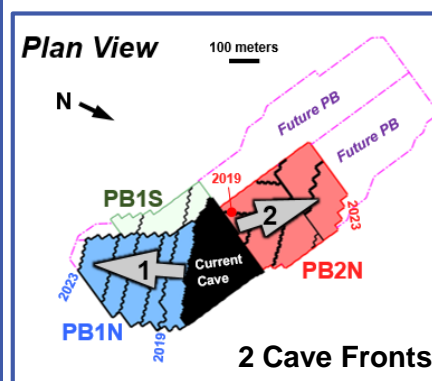
#### Ramp-up Schedule (000's t/d of Ore)



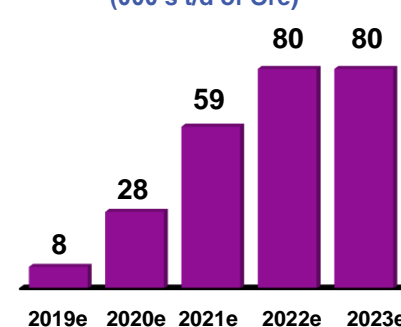
#### 5 Production Blocks, 3 Currently Active

- Continuation of Ore Mined in Open Pit (300 meters below)
- 963 mm t @ 0.96% Copper & 0.72 g/t Gold
- YE 2018 Reserves: 17 bn lbs Copper; 14 mm ozs Gold
- By 2023: 335,000 Sq Meter Footprint (over 80 acres)
- Life of Mine: 725,000 Sq Meter Footprint (180 acres)
- Fully Autonomous Underground Rail System
- Annual Production @ Avg. Reserve Grade<sup>(1)</sup>
  - 850 mm lbs Copper & 700,000 ozs Gold

### DMLZ



#### Ramp-up Schedule (000's t/d of Ore)



#### 3 Production Blocks, 2 Currently Active

- Located Below DOZ Underground Block Cave Mine
- 1,500 meters below surface
- 432 mm t @ 0.92% Copper & 0.76 g/t Gold
- YE 2018 Reserves: 8 bn lbs Copper; 8 mm ozs Gold
- By 2022: 200,000 Sq Meter Footprint (~ 50 acres)
- Life of Mine: 450,000 Sq Meter Footprint (110 acres)
- Annual Production @ Avg. Reserve Grade<sup>(1)</sup>
  - 500 mm lbs Copper & 560,000 ozs Gold

## Average Unit Net Cash Costs First 5 Years After Ramp-Up: ~\$0.30/lb<sup>(2)</sup>

(1) Access to higher ore grades expected in early years of production.

(2) After ramp-up for 2021e – 2025e; based on \$3.00/lb copper and \$1,400/oz gold.  
e = estimate. See Cautionary Statement.

# Hitting the Milestones

## Positive Progress in 2Q19

### Initiated Caving in 2 New Production Blocks (PB) in Grasberg Block Cave and 1 New PB in DMLZ

#### Undercutting (square meters)

	<u>Grasberg BC</u>	<u>DMLZ</u>
2Q19	20,000 <i>+25% Above Forecast</i>	4,468 <i>4% Above Forecast</i>
Cumulative	40,000	58,000

#### Production Blocks

	<u>Grasberg BC</u>	<u>DMLZ</u>
1Q19	1	1
2Q19	3	2
At Full Production	5	3

#### Drawbells

	<u>Grasberg BC</u>	<u>DMLZ</u>
2Q19	18 <i>+60% Above Forecast</i>	4 <i>In Line</i>
Cumulative	29	74
YE 2019e	74	93
YE 2020e	216	149

#### Ore Extraction (t/d)

	<u>Grasberg BC</u>	<u>DMLZ</u>
1Q19	5,000	6,800
2Q19	7,400 <i>+10% Above Forecast</i>	7,700 <i>+15% Above Forecast</i>
June 2019	9,100	9,062
2019e Exit Rate	15,000	11,000

### Cave Propagation Data Providing Increased Confidence in Growing Production Rates

e = estimate. See Cautionary Statement.

# Lone Star Leach Development in Arizona

## Building Value in New U.S. Cornerstone Asset

- Low-Risk Development in Established Mining District; Wholly owned
- Located 8 miles North of Safford; 18 miles Southwest of Morenci
- \$850mm Initial Project (~50% Complete)
- Estimated Production: 200 mm lbs/annum
- First Copper on Track by YE 2020
- Oxide Expansion Opportunities with Low Capital Intensity Under Evaluation



See Cautionary Statement.



### Positive Exploration Results Support Longer-Term Potential

- Completed 192 km of Drilling since 2015

Number of Holes	Number of Intercepts	Minimum Intercept (meters)	Cu Grade (% Cu)	
			Minimum	Average
57	80	150	0.30%	0.54%
25	36	61	0.60%	0.83%

- Significantly Larger than Expected
- Higher Grade Zones (+0.7% Cu) in NE & SW Areas of Deposit

***Tax-Adjusted Equivalent Copper Grade***

***~0.45% = 0.6%-0.7% Equiv.***

(Equivalent based on 0-10% US v. 35% international tax rate)



# Driving Productivity Through Innovation

## Leveraging Data Analytics

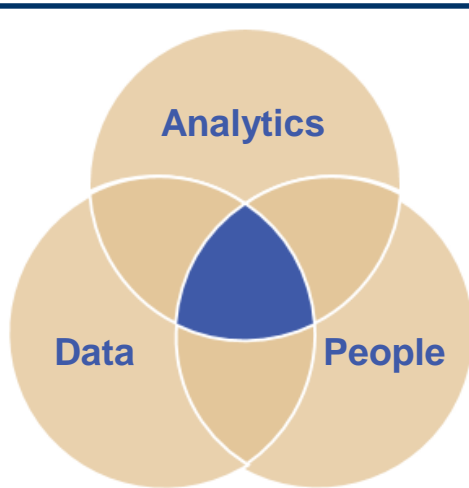
- Rapid Data Analysis
- Agile Methodology
- Empowers Multi-disciplined Teams with Tools and Data
- Quickly Unlock Bottlenecks

## Bagdad Case Study

- +10-15% Increase in Throughput
- +1% Point Recovery Increase (avg. 90% in 2Q19)
- 10-15% Unit Cost Reduction
- Improved Safety/Retention
- Time to Value: ~ 6 Months

## Additional Opportunity

- Implement Across Portfolio
- Potential to Add 200 mm lbs of Copper per annum
- Reduce Unit Costs
- Minimal Capital
- High Return/Value Creation



## One Cross-Functional Team

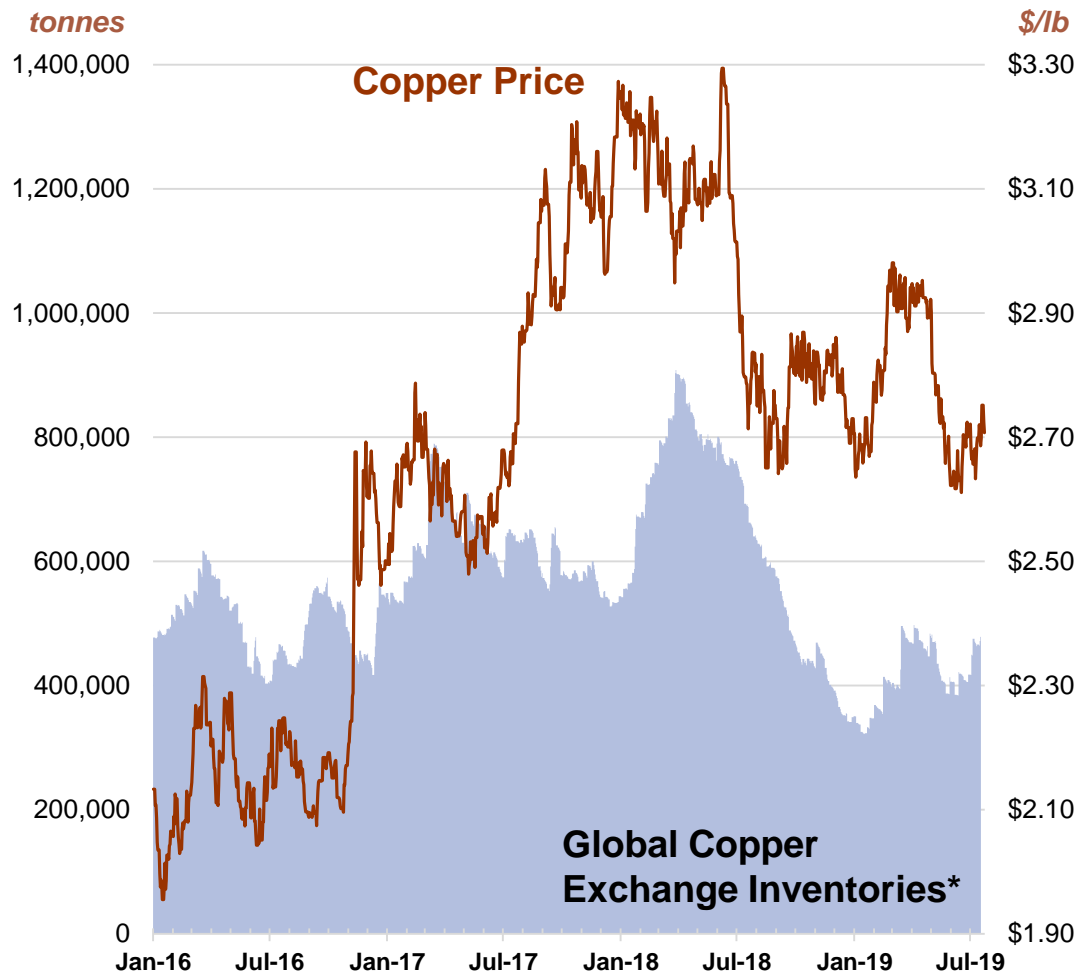


See Cautionary Statement.

# Copper Market

## Favorable Fundamental Outlook

- Trade Issues and Macro Sentiment Impacting Price and Short-term Demand
- Market Remains Relatively Balanced
- Mine Disruptions in First Half Double Year Ago Period
- 2019 Global Mine Supply Expected to Decline; Annual Deficit Expected
- Significant New Supply Needed to Meet Long-term Demand - Higher Prices Will Be Required



\* Includes LME, COMEX and Shanghai exchanges  
Source: Bloomberg as of 7/23/19

# “Proven Assets. Fundamental Value.”

## High-Quality Assets with Proven Track Record - Difficult to Replicate



- **FCX is Well Positioned**
- **Strong/Motivated Team**
- **Focused on Execution**

(1) Copper Equivalent (CuEq) factors: assume \$2.50/lb Cu, \$10/lb Mo (CuEq factor: 4 lbs CuEq per lb Mo) and \$1,250/oz Au (CuEq factor: 500 lbs CuEq per oz Au).  
See Cautionary Statement.



# Financial Outlook



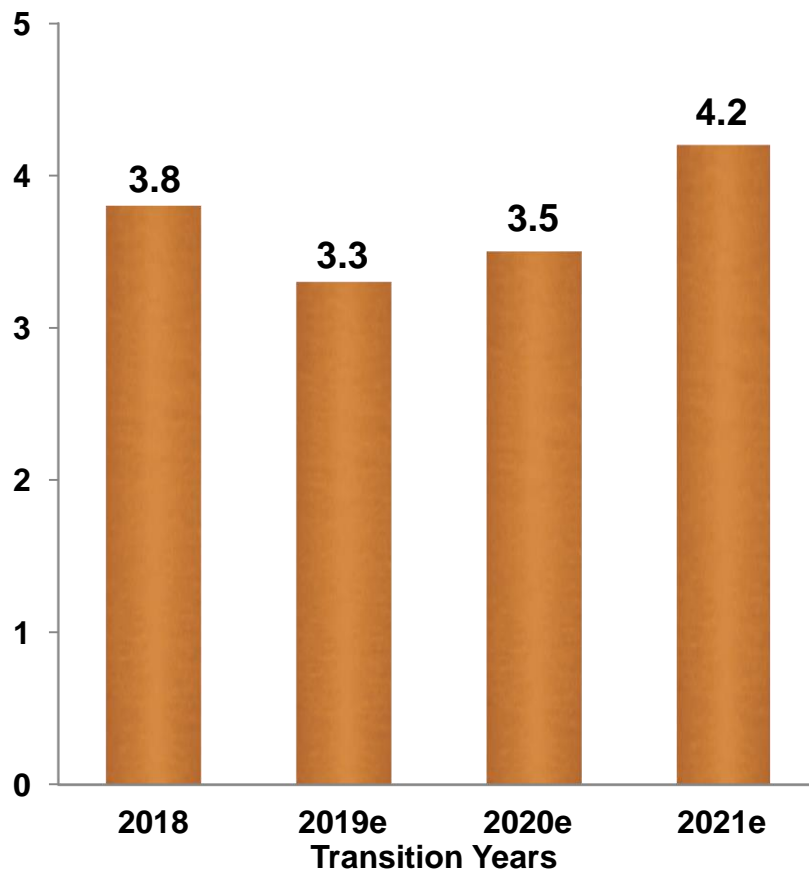
PROVEN ASSETS.  
FUNDAMENTAL VALUE.



# Sales Profile

## Copper Sales

(billion lbs)

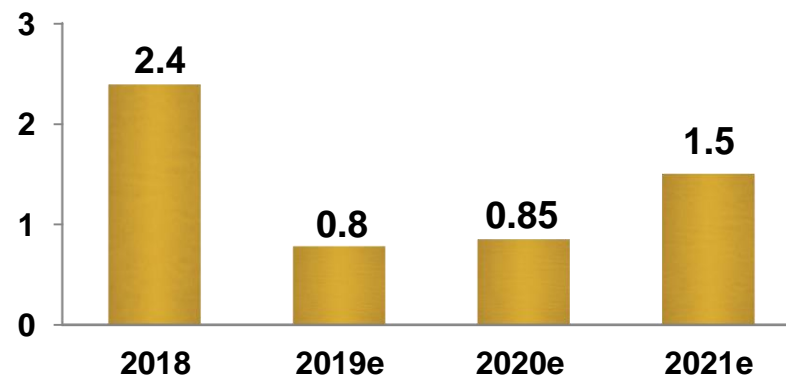


Note: Consolidated copper sales include 694 mm lbs in 2018, 698 mm lbs in 2019e, 715 mm lbs in 2020e and 875 mm in 2021e for noncontrolling interest; excludes purchased copper.

e = estimate. See Cautionary Statement.

## Gold Sales

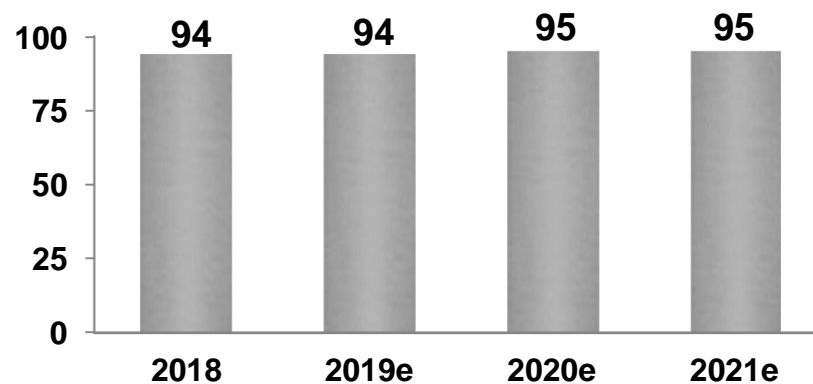
(million ozs)



Note: Consolidated gold sales include 223k ozs in 2018, 156k ozs in 2019e, 155k ozs in 2020e and 275k ozs in 2021e for noncontrolling interest.

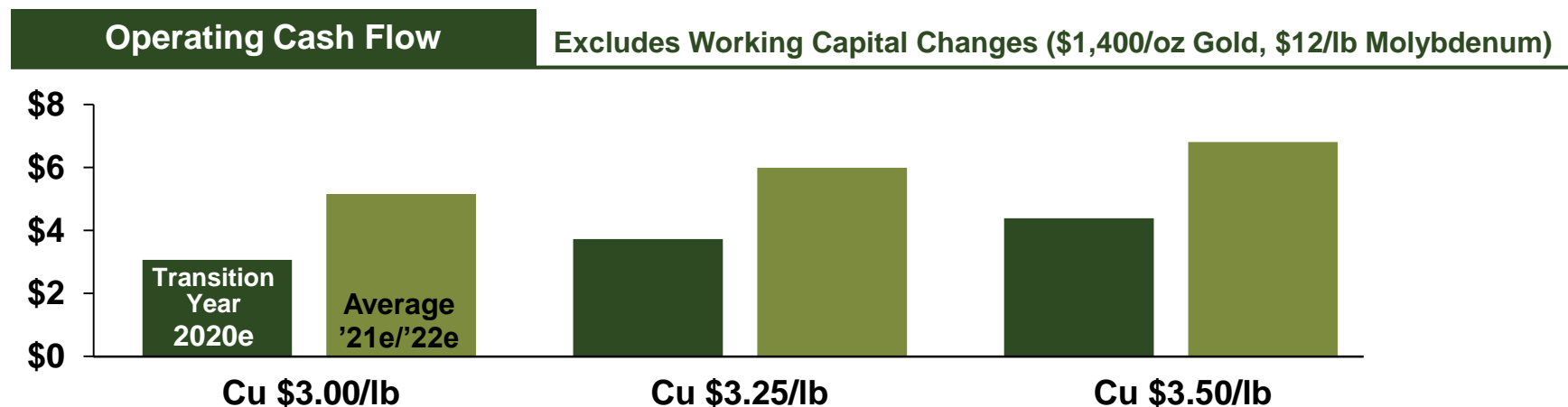
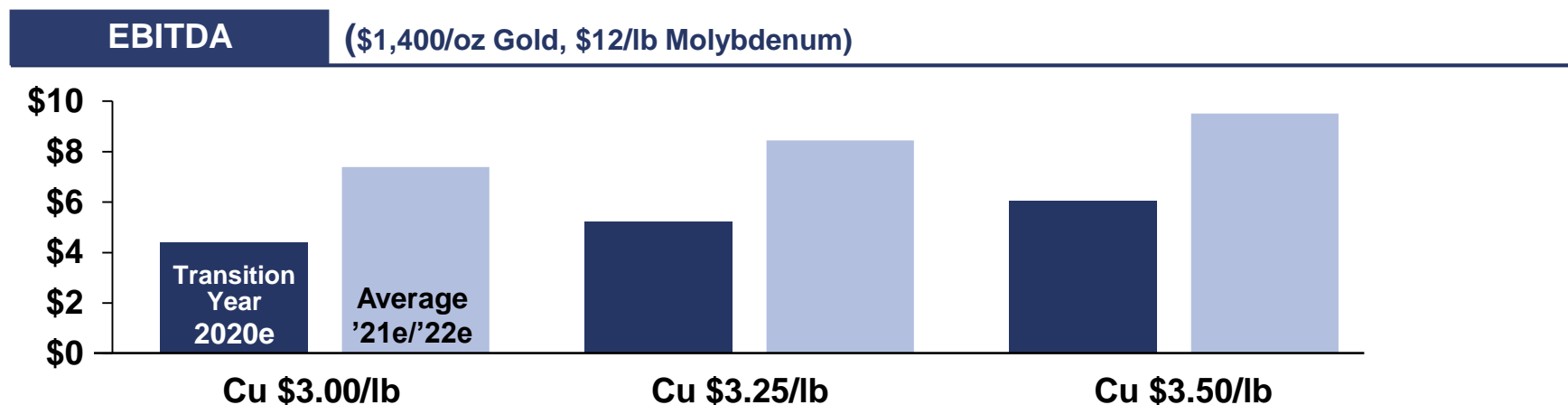
## Molybdenum Sales

(million lbs)



# EBITDA and Cash Flow at Various Copper Prices

(\$ in bn)



NOTE: For 2020e and 2021e – 2022e average price sensitivities, see slide 26.

EBITDA equals operating income plus depreciation, depletion and amortization. e = estimate. See Cautionary Statement.

# Consolidated Capital Expenditures

(\$ in bn)

--- Net of Scheduled Contributions



(1) Major mining projects include CAPEX associated with Grasberg underground development (\$1.0 bn in 2019e and \$0.95 bn in 2020e), supporting mill and power capital costs at Grasberg (\$0.3 bn in 2020e) and Lone Star (\$0.4 bn in 2019e and \$0.2 bn in 2020e).

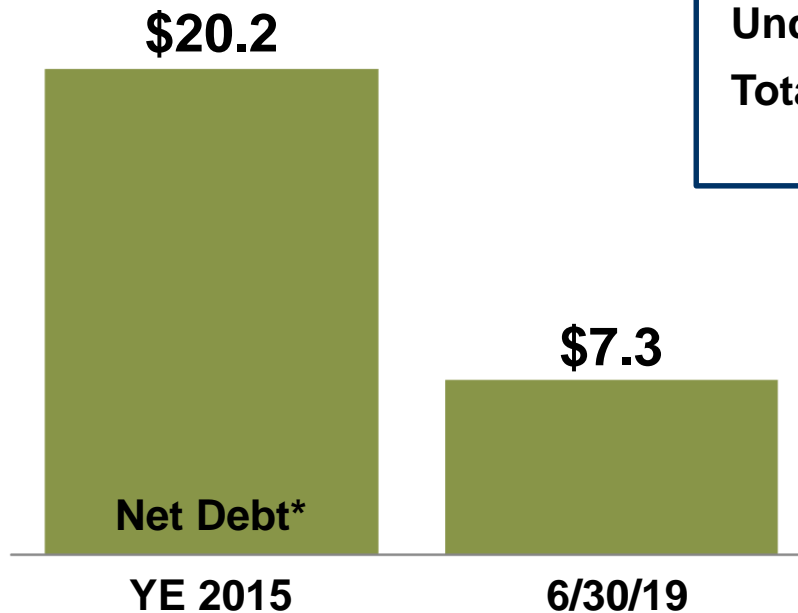
(2) Net of scheduled contributions from PT Inalum for expansion capital spending that will be reflected in financing on the cash flow statement.

NOTE: Amounts include capitalized interest; excludes capital spending for the new Indonesia smelter project that is currently in the early stages of planning and expected to be constructed by year-end 2023. PT-FI is pursuing financing, commercial and potential partner arrangements for this approximate \$3 bn project. The economics of the smelter will be shared by PT-FI's shareholders according to their share ownership percentages.

e= estimate. See Cautionary Statement.

# Strong Financial Position & Liquidity

(\$ in bn)



## Liquidity Position as of 6/30/19

Consolidated Cash	\$2.6
Undrawn Credit Facility	<u>\$3.5</u>
Total Liquidity	<u><u>\$6.1</u></u>

**No Debt Maturities Through 2020**

\* Net debt equals consolidated debt less consolidated cash. See Cautionary Statement.

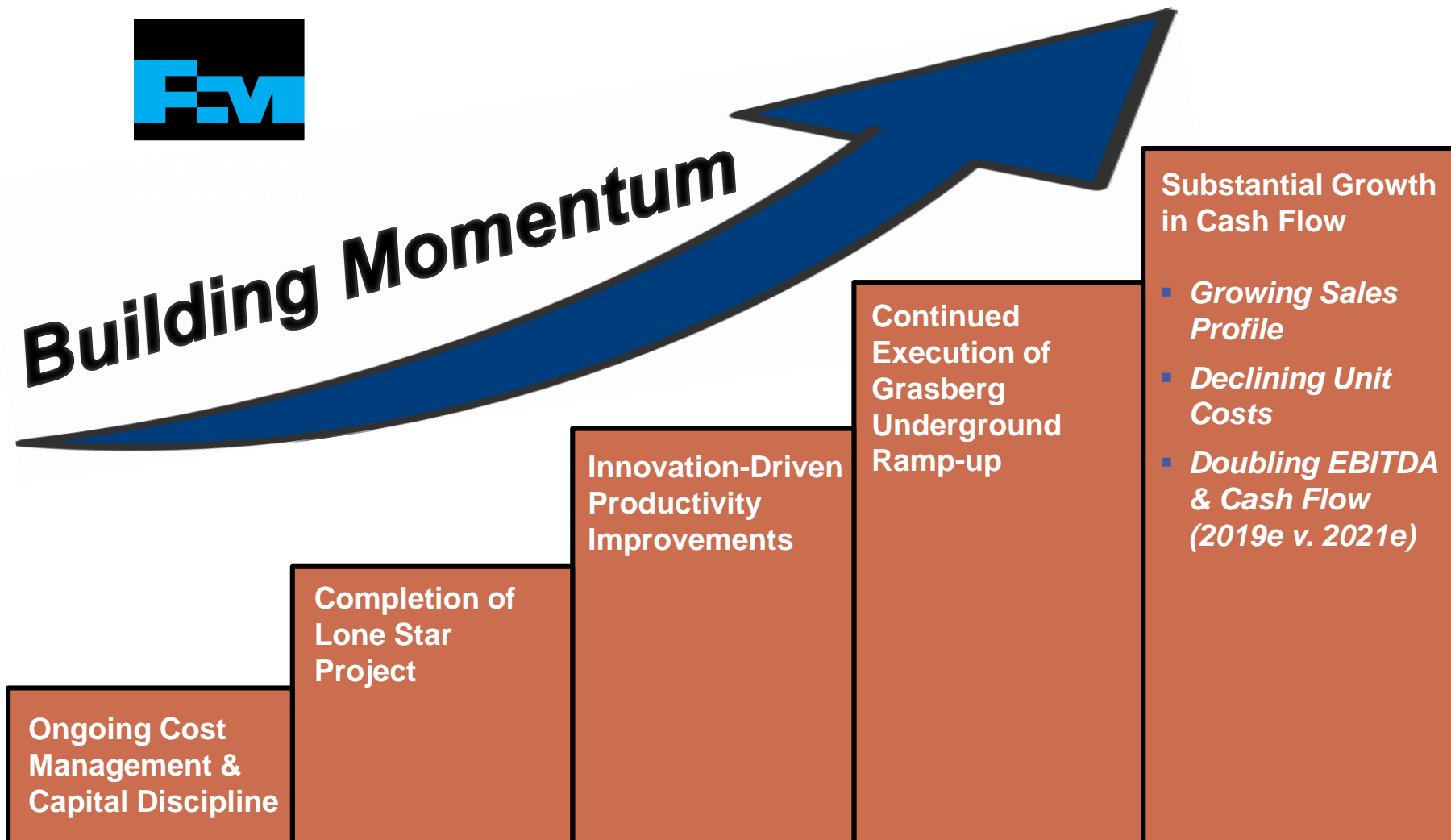


# Executing Clearly Defined Strategy to Build Value for Shareholders



FREEPORT-MCMORAN  
CORPORATION

**Building Momentum**



e= estimate. See Cautionary Statement.



# Reference Slides



PROVEN ASSETS.  
FUNDAMENTAL VALUE.

# Financial Highlights

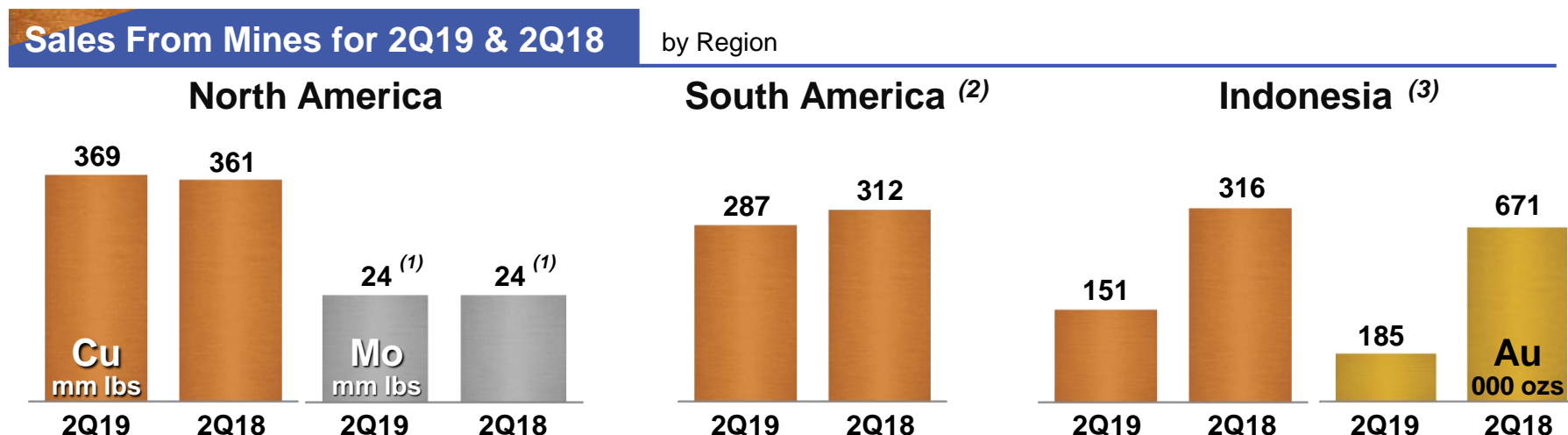
Sales Data	2Q19	1H19
<b>Copper</b>		
Consolidated Volumes ( <i>mm lbs</i> )	807	1,591
Average Realization ( <i>per lb</i> )	\$2.75	\$2.78
Site Production & Delivery Costs ( <i>per lb</i> )	\$2.26	\$2.21
Unit Net Cash Costs ( <i>per lb</i> )	\$1.92	\$1.85
<b>Gold</b>		
Consolidated Volumes ( <i>000's ozs</i> )	189	431
Average Realization ( <i>per oz</i> )	\$1,351	\$1,315
<b>Molybdenum</b>		
Consolidated Volumes ( <i>mm lbs</i> )	24	46
Average Realization ( <i>per lb</i> )	\$13.15	\$12.93

Financial Results	(in billions, except per share amounts)	
Revenues	\$3.5	\$7.3
Net Loss Attributable to Common Stock	\$(0.1)	\$(0.0)
Diluted Net Loss Per Share	\$(0.05)	\$(0.03)
Operating Cash Flows <sup>(1)</sup>	\$0.6	\$1.1
Capital Expenditures	\$0.6	\$1.3
Total Debt	\$9.9	\$9.9
Consolidated Cash	\$2.6	\$2.6

<sup>(1)</sup> Includes working capital sources and timing of other tax payments of \$0.3 bn for 2Q19 and \$0.3 bn for 1H19.

# 2Q19 Mining Operating Summary

2Q19 Unit Production Costs	(per lb of Cu)	North America	South America	Indonesia	Consolidated
<b>Cash Unit Costs</b>					
Site Production & Delivery, excluding adjustments		\$2.05	\$1.92	\$3.40	\$2.26
By-product Credits		(0.26)	(0.28)	(1.69)	(0.54)
Treatment Charges		0.11	0.18	0.26	0.16
Royalties & Export Duties		-	0.01	0.18	0.04
<b>Unit Net Cash Costs</b>		<b>\$1.90</b>	<b>\$1.83</b>	<b>\$2.15</b>	<b>\$1.92</b>



(1) Includes 7 mm lbs in 2Q19 and 2Q18 from South America.

(2) Silver sales totaled 1.2 mm ozs in 2Q19 and 1.1 mm ozs in 2Q18.

(3) Silver sales totaled 0.5 mm ozs in 2Q19 and 1.1 mm ozs in 2Q18.

NOTE: For a reconciliation of unit net cash costs per pound to production and delivery costs applicable to sales reported in FCX's consolidated financial statements, refer to "Product Revenues and Production Costs" in the supplemental schedules of FCX's 2Q19 press release, which is available on FCX's website.



# 2019e Outlook

Sales Outlook	<ul style="list-style-type: none"> <li>■ Copper: 3.3 Billion lbs.</li> <li>■ Gold: 0.8 Million ozs.</li> <li>■ Molybdenum: 94 Million lbs.</li> </ul>
Unit Cost of Copper	<ul style="list-style-type: none"> <li>■ Site Production &amp; Delivery 2019e: \$2.10/lb (3Q19e: \$1.98/lb)</li> <li>■ After By-product Credits 2019e: \$1.75/lb<sup>(1)</sup> (3Q19e: \$1.63/lb)</li> </ul>
Operating Cash Flows <sup>(2)</sup>	<ul style="list-style-type: none"> <li>■ ~\$1.9 Billion @ \$2.75/lb Copper for 2H19e</li> <li>■ Each 10¢/lb Change in Copper in 2H19e = \$185 Million</li> </ul>
Capital Expenditures	<ul style="list-style-type: none"> <li>■ <b>\$2.6 Billion</b> (consolidated, prior to scheduled contribution to replicate JV economics) <sup>(3)</sup> <ul style="list-style-type: none"> <li>• \$1.6 Billion for Major Projects, Including \$1.4 Billion for Indonesia Underground Development and the Lone Star Leach Project</li> <li>• \$1.0 Billion for Other Mining</li> <li>• A Large Portion Relates to Projects that Are Expected to Add Significant Production and Cash Flow in Future Periods</li> </ul> </li> </ul>

(1) Assumes average prices of \$1,400/oz gold and \$12/lb molybdenum in 2H19e.

(2) Assumes average prices of \$1,400/oz gold and \$12/lb molybdenum in 2H19e; each \$100/oz change in gold would have an approximate \$40 mm impact and each \$2/lb change in molybdenum would have an approximate \$55 mm impact.

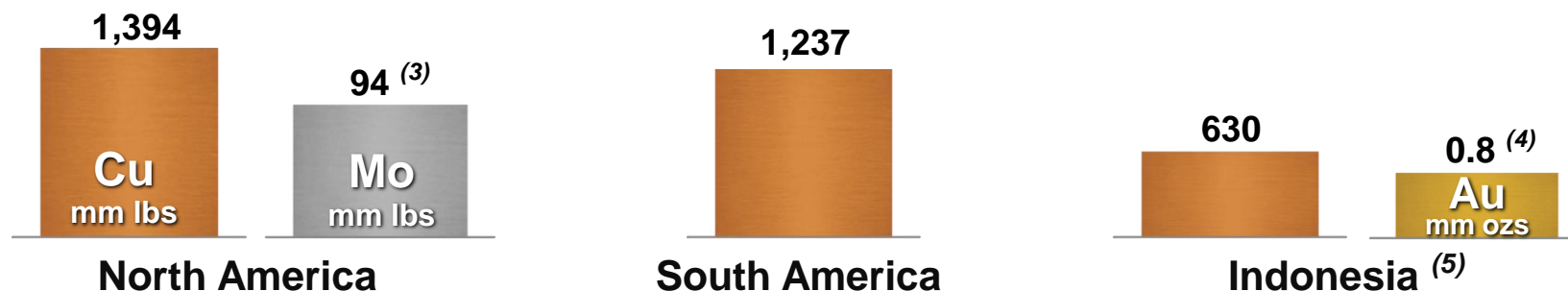
(3) PT Inalum scheduled contributions in 2019e approximate \$0.1 bn.

e = estimate. See Cautionary Statement.

# 2019e Operating Estimates

2019e Unit Production Costs	(per lb of Cu)	North America	South America	Indonesia	Consolidated
<b>Cash Unit Costs <sup>(1)</sup></b>					
Site Production & Delivery <sup>(2)</sup>		\$2.05	\$1.78	\$2.85	\$2.10
By-product Credits		(0.25)	(0.29)	(1.77)	(0.56)
Treatment Charges		0.11	0.18	0.25	0.17
Royalties & Export Duties		-	0.01	0.22	0.04
<b>Unit Net Cash Costs</b>		<b>\$1.91</b>	<b>\$1.68</b>	<b>\$1.55</b>	<b>\$1.75</b>

## 2019e Sales by Region



(1) Estimates assume average prices of \$2.75/lb for copper, \$1,400/oz for gold and \$12/lb for molybdenum for 2H19e. Quarterly unit costs will vary significantly with quarterly metal sales volumes.

(2) Production costs include profit sharing in South America and severance taxes in North America.

(3) Includes molybdenum produced in South America.

(4) Includes gold produced in North America.

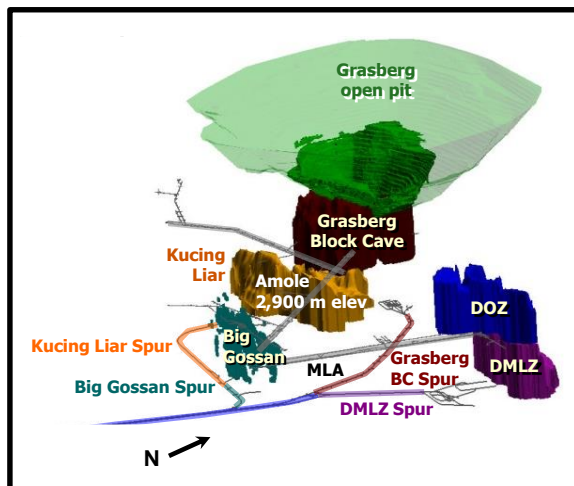
(5) 2019e sales assumes Indonesian government's approval of the increase in PT-FI's export quota for current export period.

Note: e = estimate. See Cautionary Statement.

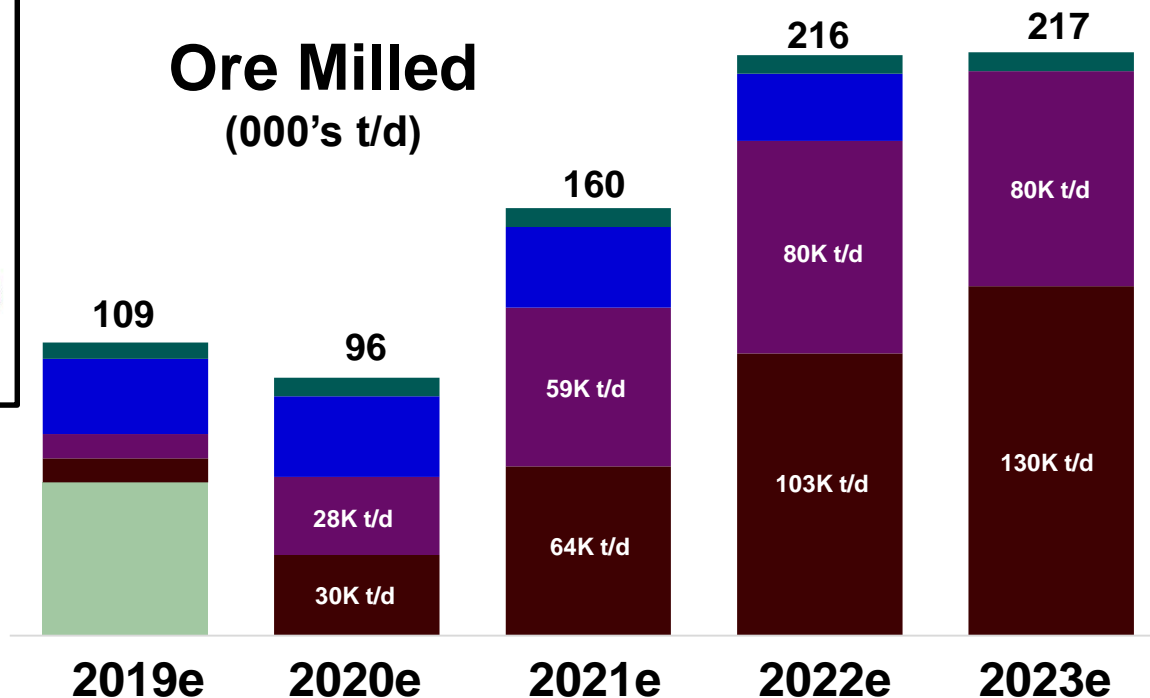
# PT-FI Underground Ramp-up

## Contribution by Deposit

Grasberg open pit DOZ Big Gossan DMLZ Grasberg Block Cave



### Ore Milled (000's t/d)



Cu (bn lbs)	0.63	0.78	1.4	1.7	1.7
Au (mm ozs)	0.83	0.83	1.5	1.8	1.8

Note: Timing of annual sales will depend upon operational performance, mine sequencing, shipping schedules, export quotas and other factors.  
e = estimate. Amounts are projections; see Cautionary Statement.

# PT-FI Mine Plan

## Metal Sales, 2019e-2023e

### Copper

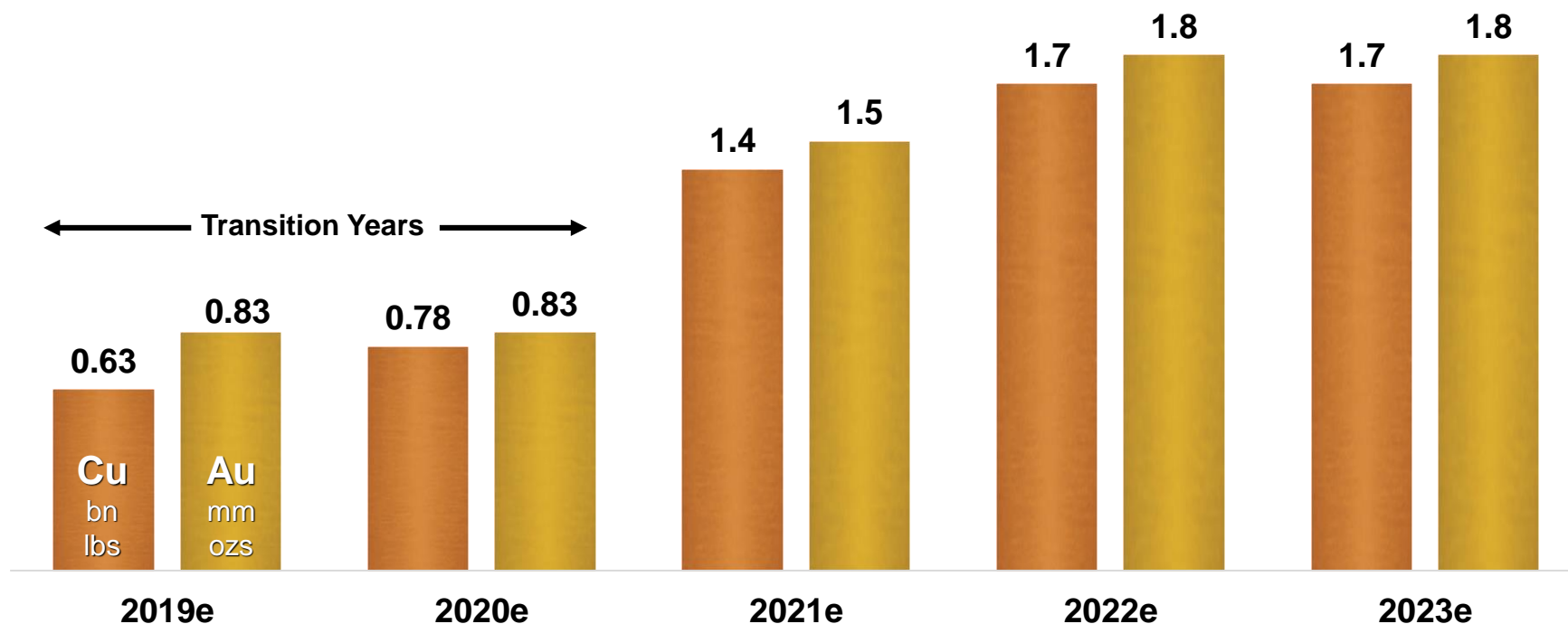
2019e – 2023e

Total: 6.2 billion lbs copper  
Annual Average: 1.24 billion lbs

### Gold

2019e – 2023e

Total: 6.8 million ozs gold  
Annual Average: 1.35 million ozs



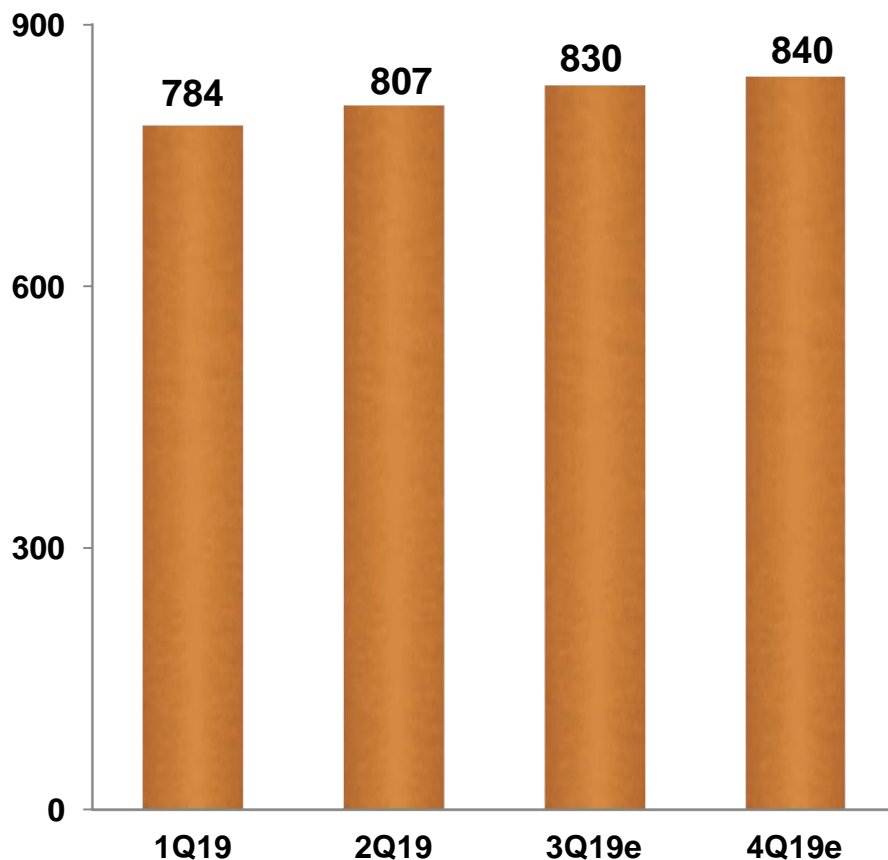
*Note: Amounts are projections. Timing of annual sales will depend on a number of factors, including mine sequencing, operational performance, timing of shipments, export quotas, and other factors. See Cautionary Statement. e = estimate*

*FCX's economic interest in PT-FI approximates 81% through 2022 and 48.76% thereafter.*



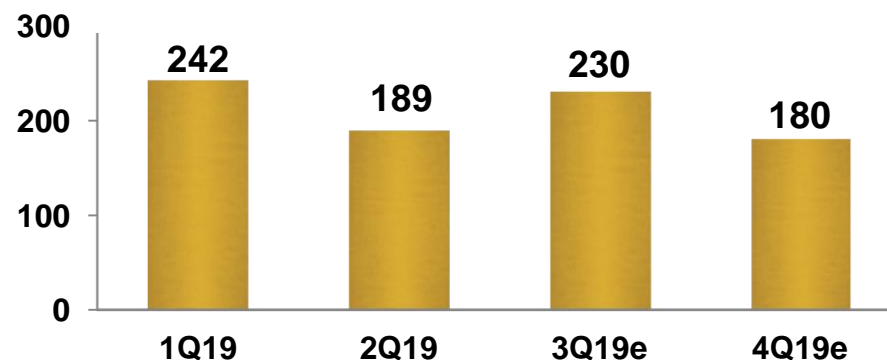
# 2019e Quarterly Sales

## Copper Sales (million lbs)



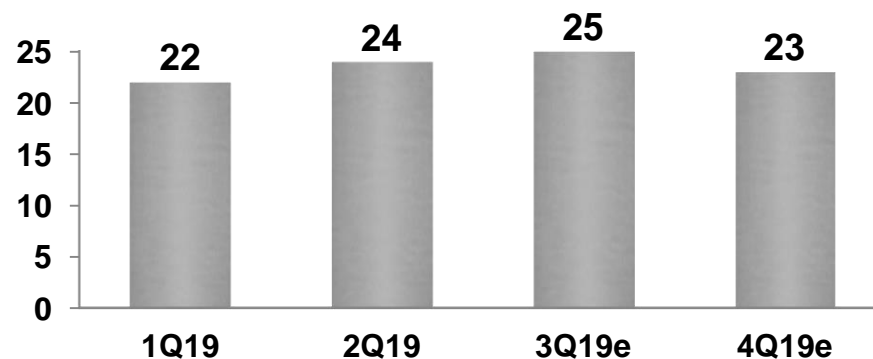
*Note: Consolidated copper sales include approximately 168 mm lbs in 1Q19, 163 mm lbs in 2Q19, 175 mm lbs in 3Q19e and 192 mm lbs in 4Q19e for noncontrolling interests; excludes purchased copper.*

## Gold Sales (thousand ozs)



*Note: Consolidated gold sales include approximately 44k ozs in 1Q19, 35k ozs in 2Q19, 43k ozs in 3Q19e and 34k ozs in 4Q19e for noncontrolling interests.*

## Molybdenum Sales (million lbs)



e = estimate. See Cautionary Statement.

# Sensitivities

(US\$ millions)

2020e Change	EBITDA	Operating Cash Flow
<b>Copper:</b> +/- \$0.10/lb	\$335	\$265
<b>Molybdenum:</b> +/- \$1.00/lb	\$85	\$75
<b>Gold:</b> +/- \$50/ounce	\$40	\$20
<b>Currencies:</b> <sup>(1)</sup> +/- 10%	\$195	\$135
2021e-2022e Avg. Change		
<b>Copper:</b> +/- \$0.10/lb	\$425	\$330
<b>Molybdenum:</b> +/- \$1.00/lb	\$90	\$85
<b>Gold:</b> +/- \$50/ounce	\$80	\$50
<b>Currencies:</b> <sup>(1)</sup> +/- 10%	\$195	\$135

(1) U.S. Dollar Exchange Rates: 669 Chilean peso, 14,300 Indonesian rupiah, \$0.71 Australian dollar, \$1.12 Euro, 3.30 Peruvian Nuevo Sol base case assumption. Each +10% equals a 10% strengthening of the U.S. dollar; a strengthening of the U.S. dollar against forecasted expenditures in these foreign currencies equates to a cost benefit of noted amounts.

NOTE: EBITDA equals operating income plus depreciation, depletion and amortization costs. Operating cash flow amounts exclude working capital changes.  
e = estimate. See Cautionary Statement.

# 2Q19 Copper Realization & 3Q19 Guidance

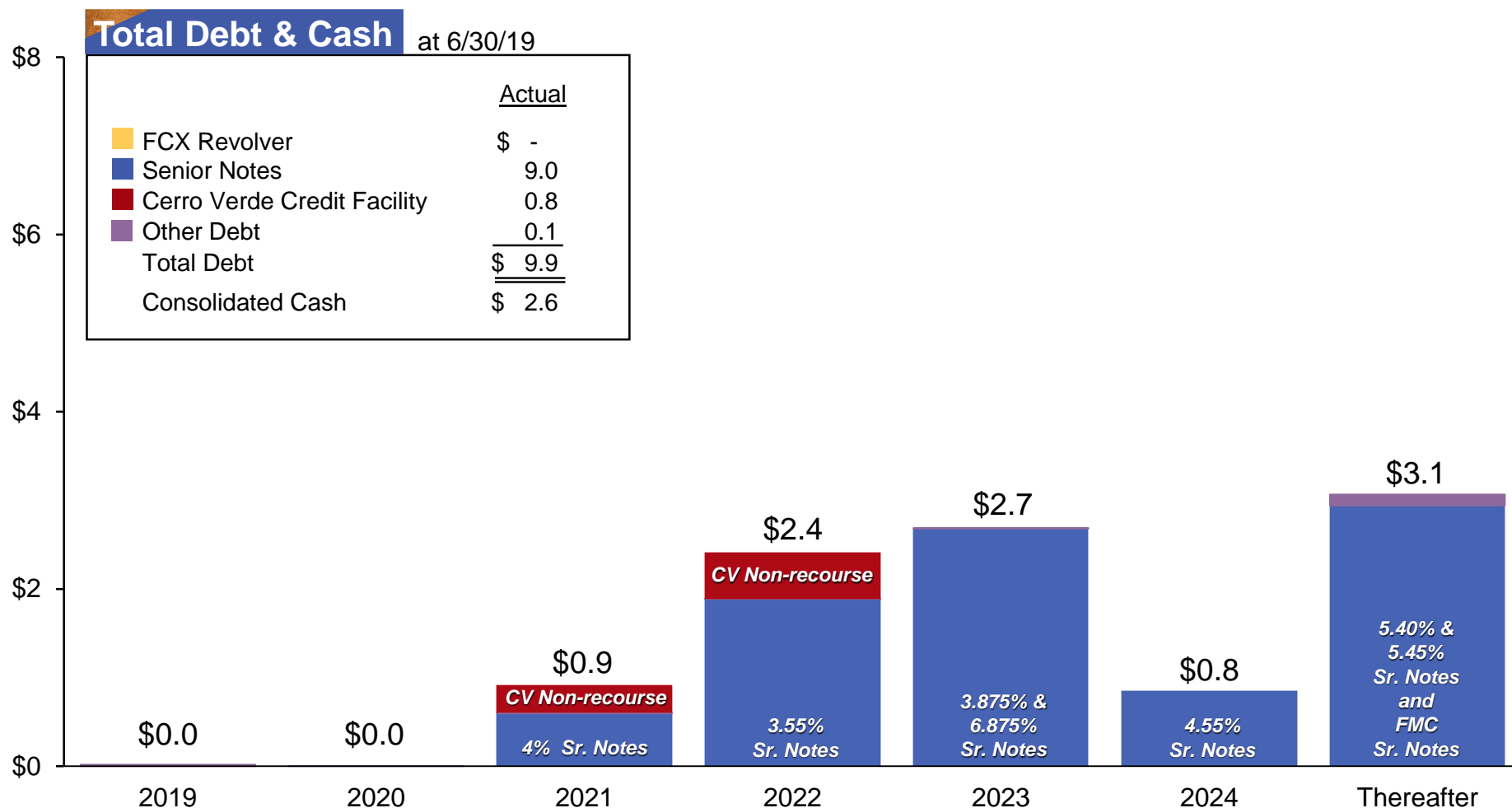
<b>2Q19 LME Average Copper Price</b>	<b>\$2.77/lb</b>
<b>3-Mo. Fwd Price for Copper at the End of June</b>	<b>\$2.71/lb</b>
<b>FCX 2Q19 Consolidated Copper Price Realization</b>	<b>\$2.75/lb<sup>(1)</sup></b> (Generally, 50/50 Weight of Qtrly Avg and 3-mo Forward Price at End of Period)
<b>FCX 2Q19 Prior Period Open Lb Adj. (aka Provisional Price Adj.)</b>	<b>Revenue/EBITDA: \$(83) mm</b> <b>Net Income: \$(35) mm</b> <b>Earnings/Share: \$(0.02)</b>
<b>3Q19 Open Pound Guidance<sup>(2)</sup></b>	<ul style="list-style-type: none"> <li>▪ <b>2Q19 Open Lbs Priced at \$2.72/lb on 6/30/19</b></li> <li>▪ <b>Each \$0.05 Change in Avg Copper Price in 3Q19 = \$10 mm Impact to 2019 Net Income</b></li> <li>▪ <b>LME Copper Settled at \$2.71/lb on 7/23/19</b></li> </ul>

(1) Note that when the average quarter-end forward curve price is below the average quarterly spot price, FCX's consolidated quarterly copper realization can be expected to be below the quarterly average (and vice versa if quarter-end forward curve price is above the quarterly average spot price). Quarterly copper realizations by region may vary from the consolidated average.

(2) In 3Q19, FCX also expects increased intercompany sales volumes to Atlantic Copper and PT Smelting, resulting in the deferral of ~\$30 mm of net income until final sales occur. See Cautionary Statement.

# FCX Debt Maturities as of 6/30/19

(US\$ billions)



# Adjusted EBITDA Reconciliation

(in millions)

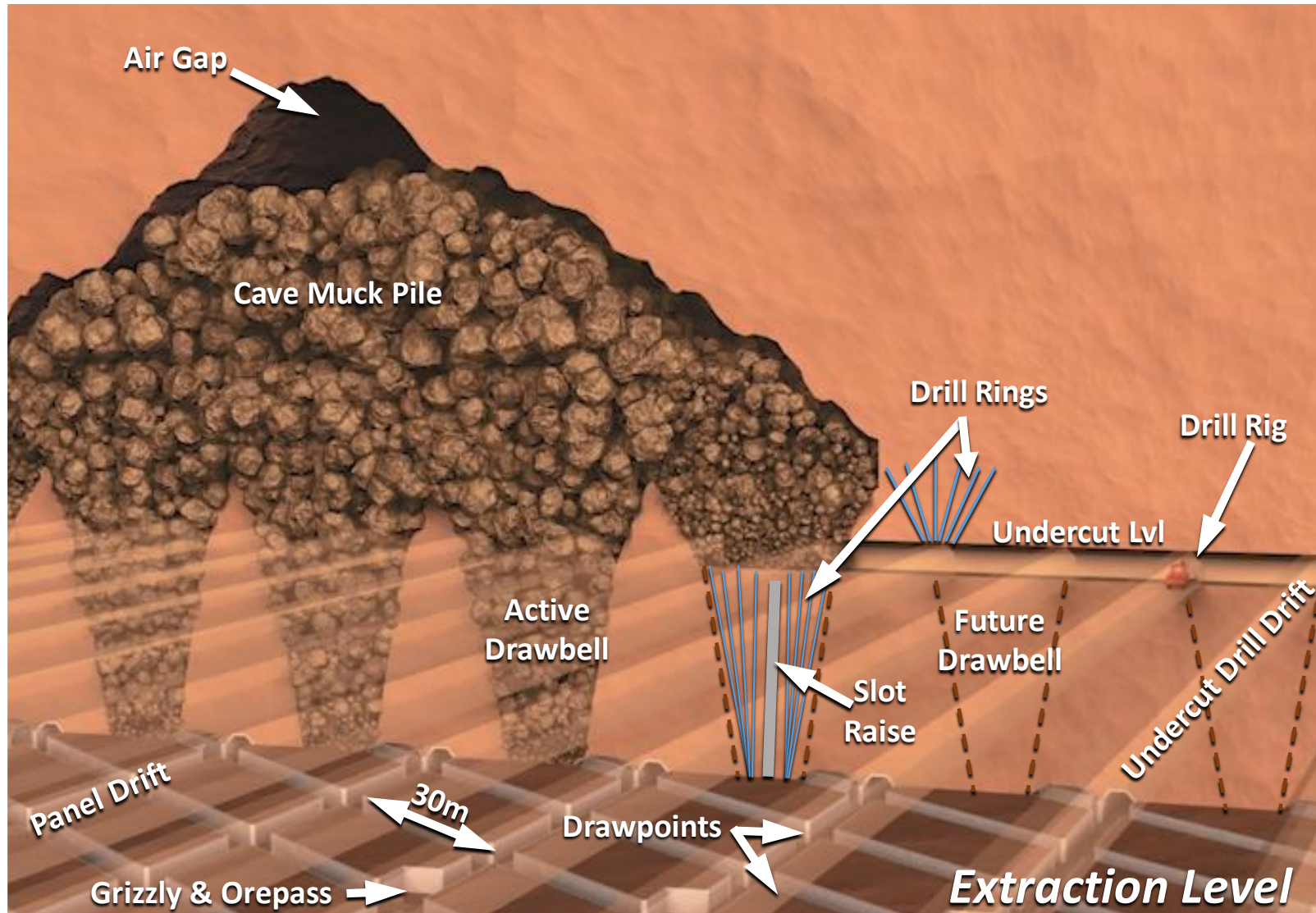
	2Q19	12 mos ended 6/30/19
Net (Loss) Income Attributable to Common Stock – Continuing Operations	\$ (72)	\$999
Interest expense, net	132	930
Income tax (benefit) provision	(15)	60
Depreciation, depletion and amortization	352	1,560
Net loss (gain) on sales of assets	8	(177)
Accretion	31	115
Other net charges <sup>(1)</sup>	41	489
Loss on early extinguishment of debt	-	7
Other income, net	(5)	(46)
Net (loss) income attributable to noncontrolling interests	(2)	44
Equity in affiliated companies' net earnings	(5)	(9)
<b>FCX Adjusted EBITDA – Continuing Operations <sup>(2)</sup></b>	<b>\$465</b>	<b>\$3,972</b>

(1) Other net charges for 2Q19 primarily include PT-FI charges associated with an adjustment to the settlement of the historical surface water tax disputes (\$28 mm) and net adjustments to environmental obligations and litigation reserves (\$9 mm). Other net charges for the 12 months ended 6/30/19 primarily include PT-FI charges (\$251 mm), charges associated with Cerro Verde's three-year Collective Labor Agreement (\$69 mm), metals inventory adjustments (\$61 mm) and net adjustments to environmental obligations and litigation reserves (\$51 mm). For further discussion of net charges, refer to "Adjusted Net (Loss) Income" on page VII in the supplemental schedules of FCX's 2Q19 press release, which is available on FCX's website.

(2) Adjusted EBITDA is a non-GAAP financial measure that is frequently used by securities analysts, investors, lenders and others to evaluate companies' performance, including, among other things, profitability before the effect of financing and similar decisions. Because securities analysts, investors, lenders and others use Adjusted EBITDA, management believes that our presentation of Adjusted EBITDA affords them greater transparency in assessing our financial performance. Adjusted EBITDA should not be considered as a substitute for measures of financial performance prepared in accordance with GAAP. Adjusted EBITDA may not necessarily be comparable to similarly titled measures reported by other companies, as different companies calculate such measures differently.

# Underground Block Cave Mine Development

## *Block Cave Development Diagram*





# Underground Block Cave Mine Development

## Glossary of Key Terms

<b>Air Gap</b>	space between the cave muck pile and the uncaved ore above it
<b>Block Caving</b>	<p>a mass mining method that primarily utilizes the action of gravity for extraction and fragmentation of the ore</p> <p><i>By undercutting about 3-5% of the bottom of the ore body to be mined using drill and blast methods, the vertical base support of the ore column is removed and the ore then caves by gravity. As broken ore is drawn from the base of the ore column, the ore above continues to break and propagate vertically. Caving methods are typically applied to massive and continuous ore bodies with significant horizontal footprints and large vertical extensions (~150 to 500 meters). The ore must be caveable based upon geometry, geological features and in-situ stress regimes.</i></p>
<b>Cave</b>	the area of broken rock and void above the Extraction level that was induced by undercutting and drawing of the ore
<b>Cave Front</b>	<p>the leading edge of the active undercut area located within each production block; also known as the “Cave Face”</p> <p><i>The cave front is moved across the PB over time. The direction, length and shape of the cave front is dictated by geotechnical constraints and ore valuation.</i></p>
<b>Cave Muck Pile</b>	caved ore sitting above the “Extraction Level” waiting to be extracted (or drawn) from the drawpoints
<b>Drawbelling</b>	<p>formation of rock funnels from the “Extraction Level” that connect to the Undercut and the caved ore above</p> <p><i>Drawbells are used to draw down the caved ore by means of Load Haul Dump equipment (LHDs) or loaders. Each drawbell has two drawpoints associated with it.</i></p>
<b>Drawpoints</b>	reinforced openings connected to the drawbell that the LHDs draw the ore from
<b>Drill Ring</b>	a fan of drill holes used to blast the undercut or drawbell
<b>Extraction Level</b>	<p>level used to draw the caved ore from the ore body as it propagates upwards</p> <p><i>The “Extraction Level” needs to last through the life of the drawpoints it contains. The level usually includes heavy ground support, steel sets and concrete at the drawpoint brows to improve longevity, and has constructed roadways for efficient loader operations. The drawbells are excavated from the “Extraction Level”. The Extraction drifts have ore passes, grizzlies and rock breakers installed within them to allow the LHDs to efficiently load ore from the drawpoints for transport to the “Haulage Level”.</i></p>
<b>Haulage Level</b>	dedicated level below “Extraction Level” to handle the ore from the LHDs and transfer it to a primary crusher and onto a conveyor or production shaft, these are typically large truck or rail systems
<b>Ore pass</b>	<p>Vertical or inclined raise or shaft from the “Extraction Level” down to the “Haulage Level”</p> <p><i>LHDs dump the ore into the ore pass which is then loaded into a truck or train via a chute on the “Haulage Level” and transported to the primary crusher.</i></p>
<b>Production Block (PB)</b>	<p>a designated zone of the production footprint</p> <p><i>The location of a PB depends on the value of the ore, interaction with other mines or PBs and interaction with underlying infrastructure. The dimensions of a PB are primarily dictated by geotechnical factors that impose constraints on width and direction. PBs can be operated simultaneously.</i></p>
<b>Slot Raise</b>	a vertical excavation or raise used to assist in the blasting of the drawbell and undercut rings
<b>Undercut Level</b>	<p>a relatively short-lived level, typically 15 to 20 meters above the “Extraction Level” used to undercut the ore body and form the rock pillars that protect the long-lived panels and drawpoints on the “Extraction Level”</p> <p><i>Conventional long-hole drill and blast techniques are employed to undercut the ore body completely.</i></p>
<b>Undercutting</b>	<p>drilling and blasting of approximately 10-15 meters of rock at the base of the ore body (from the “Undercut Level”)</p> <p><i>Undercutting causes the intact rock above to become unstable and cave.</i></p>