



Management's Discussion and Analysis of
Results of Operations and Financial Condition

For the year ended
December 31, 2019

February 20, 2020



TABLE OF CONTENTS

Page

Introduction	1
Our Business	1
Strategy	2
Summary	3
Key Financial Results	6
Key Production Results	7
Recent Developments	8
Constancia Operations Review	10
Manitoba Operations Review	13
Outlook	20
Financial Review	26
Liquidity and Capital Resources	33
Financial Risk Management	38
Trend Analysis and Quarterly Review	40
Non-IFRS Financial Performance Measures	42
Accounting Changes	53
Critical Accounting Judgments and Estimates	53
Disclosure Controls and Procedures and Internal Control over Financial Reporting	55
Notes to Reader	56



INTRODUCTION

This Management's Discussion and Analysis ("MD&A") dated February 20, 2020 is intended to supplement Hudbay Minerals Inc.'s audited consolidated financial statements and related notes for the year ended December 31, 2019 and 2018 (the "consolidated financial statements"). The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

References to "Hudbay", the "Company", "we", "us", "our" or similar terms refer to Hudbay Minerals Inc. and its direct and indirect subsidiaries as at December 31, 2019.

Readers should be aware that:

- This MD&A contains certain "forward-looking statements" and "forward-looking information" (collectively, "forward-looking information") that are subject to risk factors set out in a cautionary note contained in our MD&A.
- This MD&A has been prepared in accordance with the requirements of the securities laws in effect in Canada, which may differ materially from the requirements of United States securities laws applicable to US issuers.
- We use a number of non-IFRS financial performance measures in our MD&A.
- The technical and scientific information in this MD&A has been approved by qualified persons based on a variety of assumptions and estimates.

For a discussion of each of the above matters, readers are urged to review the "Notes to Reader" discussion beginning on page 56 of this MD&A.

Additional information regarding Hudbay, including the risks related to our business and those that are reasonably likely to affect our financial statements in the future, is contained in our continuous disclosure materials, including our most recent Annual Information Form ("AIF"), consolidated financial statements and Management Information Circular available on SEDAR at www.sedar.com and on EDGAR at www.sec.gov.

As of January 1, 2019 we have adopted IFRS 16, Leases ("IFRS 16"). The Company applied this amendment prospectively. A reconciliation from the December 31, 2018 previously reported balances to the revised January 1, 2019 opening balances is disclosed in Note 4(b) of the consolidated financial statements.

All amounts are in US dollars unless otherwise noted.

OUR BUSINESS

We are a diversified mining company primarily producing copper concentrate (containing copper, gold, and silver) and zinc metal. Directly and through our subsidiaries, we own three polymetallic mines, four ore concentrators and a zinc production facility in northern Manitoba and Saskatchewan (Canada) and Cusco (Peru), and copper projects in Arizona and Nevada (United States). Our growth strategy is focused on the exploration, development, operation and optimization of properties we already control, as well as other mineral assets we may acquire that fit our strategic criteria. Our vision is to be a responsible, top-tier operator of long-life, low-cost mines in the Americas. We are governed by the *Canada Business Corporations Act* and our shares are listed under the symbol "HBM" on the Toronto Stock Exchange, New York Stock Exchange and Bolsa de Valores de Lima.

STRATEGY

Our mission is to create sustainable value through acquisition, development and operation of high quality, long life deposits with exploration potential in jurisdictions that support responsible mining, and to see the regions and communities in which we operate benefit from our presence.

We believe that the greatest opportunities for shareholder value creation in the mining industry are in the discovery and successful development of new mineral deposits, and through highly efficient low-cost operations to profitably extract ore from those deposits. We also believe that our successful development, ramp-up and operation of the Constancia open-pit mine in Peru, along with our long history of underground mining and full life-cycle experience in northern Manitoba provide us with a competitive advantage in these respects relative to other mining companies of similar scale.

Over the past decade, we have built a world-class asset base by employing a consistent long-term growth strategy. We intend to sustainably grow Hudbay through exploration and development of our robust project pipeline, as well as through the acquisition of other properties that fit our stringent strategic criteria. Furthermore, we continuously work to generate strong free cash flow and optimize the value of our producing asset portfolio through exploration, and efficient and safe operations.

To ensure that any capital allocation or acquisition we undertake creates sustainable value for stakeholders, we have established a number of criteria for evaluating mineral property opportunities. These include the following:

- Geography: Potential acquisitions should be located in jurisdictions that support responsible mining activity and have acceptable levels of political and social risk. Given our current scale and geographic footprint, our current geographic focus is on select investment grade countries in the Americas, with strong rule of law and respect for human rights consistent with our long-standing focus on environmental, social and governance ("ESG") principles;
- Commodity: Among the metals we produce, we believe copper has the best long-term supply/demand fundamentals and the greatest opportunities for sustained risk-adjusted returns. While our primary focus is on copper, we appreciate the polymetallic nature of deposits and, in particular, the counter-cyclical nature of gold production in our portfolio;
- Quality: We are focused on adding long-life, low-cost assets to our existing portfolio of high quality assets. Long life assets can capture peak pricing of multiple commodity price cycles and low cost assets can generate free cash flow even through the trough of price cycles;
- Potential: We consider the full spectrum of acquisition and investment opportunities from early-stage exploration to producing assets, but they must meet our stringent risk-adjusted criteria for growth and value creation. Regardless of the stage of development, we look for mineral assets that we believe offer significant incremental potential for exploration, development and optimization beyond the stated resources and mine plan;
- Process: Through a robust due diligence and capital allocation process, we develop a clear understanding of how we can create value from the investment or the acquired property through the application of our technical, social, operational and project execution expertise, as well as through the provision of necessary financial capacity and other operational optimization opportunities;
- Operatorship: We believe real value is created through leading efficient project development and operations. Hudbay's leadership team is well positioned to drive value and deliver effective capital allocation with our proven track record of successful project development and operational excellence.
- Financial: Investments and acquisitions should be accretive to Hudbay on a per share basis. Given that our strategic focus includes the capital allocation to non-producing assets at various stages of development, when evaluating accretion, we will consider measures such as internal rate of return ("IRR"), return on invested capital ("ROIC"), net asset value per share and the contained value of reserves and resources per share.

Our key objectives for 2020 are to:

- Maintain our industry-leading low-cost business to continue to generate positive cash flow;
- Update and upgrade the reserve and resource estimate for the Snow Lake operations including our 100% owned Lator, Pen, Wim, and New Britannia properties, and advance plans for the refurbishment of the New Britannia mill;

- Maintain Constancia targeted recoveries and throughput, while identifying areas of upside through continuous improvement initiatives;
- Secure surface rights, permits and community agreements to commence the development of the Pampacancha satellite deposit;
- Test promising gold exploration targets near Lalor and plan near-term copper exploration programs in Peru and Nevada; and,
- Continue to evaluate exploration and acquisition opportunities that meet our criteria described above and pursue those opportunities that create sustainable value for the Company and our stakeholders.

SUMMARY

- Achieved 2019 production and unit cost guidance in Peru and Manitoba; strong performance at the Lalor and 777 mines resulted in zinc production exceeding the top end of the guidance range.
- Constancia achieved record mill throughput and copper recoveries in 2019.
- Lalor and 777 increased mine output by 22% and 15%, respectively, year-over-year.
- Cash generated from operating activities decreased to \$98.7 million in the fourth quarter of 2019 from \$137.3 million in the same quarter of 2018, while operating cash flow before change in non-cash working capital decreased to \$69.1 million in the fourth quarter from \$104.3 million in the same quarter of 2018.
- Cash and cash equivalents of \$396.1 million as at December 31, 2019 was relatively unchanged during the quarter and positions us well for executing future growth initiatives.
- 2020 production guidance of 107,500¹ tonnes of copper and 172,500¹ ounces of precious metals with copper and precious metals production expected to grow by 18%¹ and 67%¹, respectively, by 2022.
- Reached a community agreement to acquire Pampacancha surface rights.
- The New Britannia gold mill refurbishment remains on track to be completed before the end of 2021, which is expected to increase Lalor's annual gold production to approximately 140,000 ounces starting in 2022.
- Hudbay's Manitoba operations received the Towards Sustainable Mining Leadership Award in 2019.

Summary of Fourth Quarter Results

Cash generated from operating activities decreased to \$98.7 million in the fourth quarter of 2019 from \$137.3 million in the same quarter of 2018. Operating cash flow before change in non-cash working capital was \$69.1 million during the fourth quarter of 2019, reflecting a decrease of \$35.1 million compared to the fourth quarter of 2018. The decrease in operating cash flow is primarily the result of lower realized base metal prices and base metal sales volumes compared to the fourth quarter of 2018.

Copper-equivalent production in the fourth quarter of 2019 decreased by 2% compared to the same period in 2018 primarily as a result of lower copper grades and lower ore production in Peru, offset by higher ore production in Manitoba.

Net loss and loss per share in the fourth quarter of 2019 were \$1.5 million and \$0.01, respectively, compared to a net loss and loss per share of \$3.5 million and \$0.01, respectively, in the fourth quarter of 2018.

Net loss and loss per share in the fourth quarter of 2019 were affected by, among other things, the following items:

<i>(in \$ millions, except per share amounts)</i>	Pre-tax gain (loss)	After-tax gain (loss)	Per share gain (loss)
Mark-to-market adjustments	(9.0)	(6.6)	(0.03)
Non-cash deferred tax adjustments	—	30.4	0.12

In the fourth quarter of 2019, consolidated cash cost per pound of copper produced, net of by-product credits², was \$1.23, an increase compared to \$0.94 in the same period last year. This increase was a result of lower copper and precious metals production and lower realized zinc prices, leading to lower by-product credits. Incorporating sustaining capital, capitalized exploration, royalties, selling, administrative and regional costs, consolidated all-in sustaining cash cost per pound of copper produced, net of by-product credits², in the fourth quarter of 2019 was \$2.55, which increased from \$1.80 in the same period last year, driven mainly by increased sustaining capital expenditures and the same factors noted above affecting consolidated cash costs.

Summary of Full Year Results

Cash generated from operating activities decreased to \$310.9 million in 2019 from \$479.6 million in 2018. Operating cash flow before change in non-cash working capital decreased to \$307.3 million from \$501.4 million in 2018. The decrease is the result of lower copper sales volumes and lower margins mainly from lower realized base metal prices.

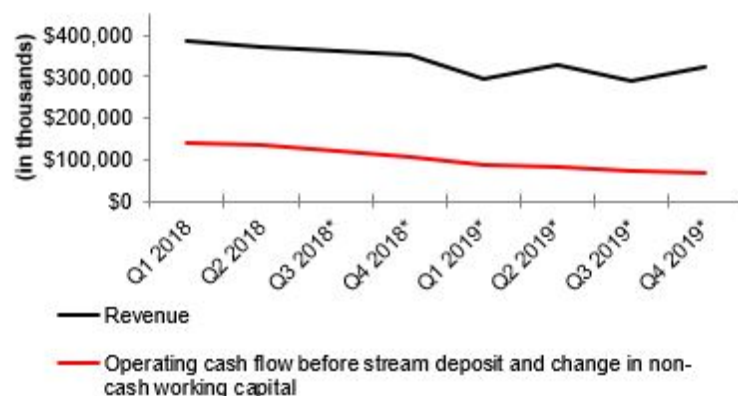
Net loss and loss per share for 2019 were \$343.8 million and \$1.32, respectively. This compares to a net profit and earnings per share of \$85.4 million and \$0.33, respectively, in 2018. The decline in profitability follows mainly from an after-tax, non-cash impairment charge of \$242.1 million recorded in the third quarter of 2019 following the U.S. District Court for the District of Arizona ("Court") decision on July 31, 2019 to vacate and remand the U.S. Forest Service's issuance of the Final Record of Decision ("FROD") for the Rosemont project in Arizona. In addition, gross margins declined due to pressure on base metal prices throughout most of the year. Cash costs per pound of copper produced, net of by-product credits, were 21% higher, mainly as a result of lower copper production.

On a consolidated basis, our copper and precious metals production met 2019 guidance and production of zinc and molybdenum exceeded 2019 guidance ranges. Production of copper benefited from increased throughput and recoveries at Constancia despite expected lower planned grades. Strong zinc production was a result of Lalor achieving its ramp up to 4,500 tonnes per day and the 777 mine implementing operational improvements. Combined unit costs in both Peru and Manitoba were within 2019 guidance ranges. Total capital expenditures were above 2019 guidance due primarily to increased sustaining capital expenditures related to mining equipment that is now accounted for as a capitalized lease under IFRS.

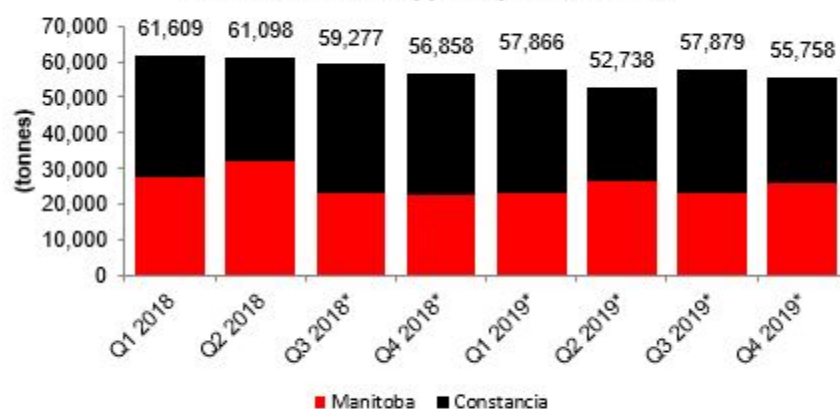
¹ Year-over-year forecast changes assume the mid-point of the respective guidance range is achieved.

² Cash cost, all-in sustaining cash cost per pound of copper produced, net of by-product credits, and net debt are non-IFRS financial performance measures with no standardized definition under IFRS. For further information and a detailed reconciliation, please see the discussion under the "Non-IFRS Financial Reporting Measures" section of this MD&A.

Revenue & operating cash flow before change in non-cash working capital



Production on a copper equivalent basis



*Mining activities in Reed were completed in August 2018

KEY FINANCIAL RESULTS

Financial Condition	Dec. 31, 2019	Dec. 31, 2018
<i>(in \$ thousands)</i>		
Cash and cash equivalents	396,146	515,497
Total long-term debt	985,255	981,030
Net debt ¹	589,109	465,533
Working capital	271,284	445,228
Total assets	4,455,961	4,685,635
Equity	1,848,123	2,178,856

¹ Net debt is a non-IFRS financial performance measure with no standardized definition under IFRS. For further information and a detailed reconciliation, please see discussion under the "Non-IFRS Financial Reporting Measures" section of this MD&A.

Financial Performance	Three months ended		Year ended	
<i>(in \$ thousands, except per share amounts)</i>	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Revenue	324,485	351,773	1,237,439	1,472,366
Cost of sales	298,852	276,547	1,085,897	1,098,626
(Loss) profit before tax	(42,352)	17,650	(452,763)	170,837
(Loss) profit	(1,455)	(3,510)	(343,810)	85,416
Basic and diluted (loss) earnings per share	(0.01)	(0.01)	(1.32)	0.33
Operating cash flow before change in non-cash working capital	69,141	104,264	307,284	501,352

KEY PRODUCTION RESULTS

		Three months ended			Three months ended		
		Dec. 31, 2019			Dec. 31, 2018		
		Peru	Manitoba	Total	Peru	Manitoba	Total
Contained metal in concentrate produced ¹							
Copper	tonnes	26,659	5,763	32,422	30,834	6,404	37,238
Gold	oz	5,007	27,705	32,712	7,522	20,529	28,051
Silver	oz	631,774	298,363	930,137	750,747	263,937	1,014,684
Zinc	tonnes	—	30,592	30,592	—	27,408	27,408
Molybdenum	tonnes	372	—	372	329	—	329
Payable metal sold							
Copper	tonnes	28,430	5,285	33,715	31,252	5,098	36,350
Gold	oz	4,824	25,520	30,344	7,262	18,599	25,861
Silver	oz	666,839	242,584	909,423	672,756	236,744	909,500
Zinc ²	tonnes	—	28,001	28,001	—	31,134	31,134
Molybdenum	tonnes	199	—	199	447	—	447
Cash cost ³	\$/lb	1.66	(0.76)	1.23	1.31	(0.87)	0.94
Sustaining cash cost ³	\$/lb	2.47	2.33		1.66	1.76	
All-in sustaining cash cost ³	\$/lb			2.55			1.80

		Year ended			Year ended		
		Dec. 31, 2019			Dec. 31, 2018		
		Peru	Manitoba	Total	Peru	Manitoba	Total
Contained metal in concentrate produced ¹							
Copper	tonnes	113,825	23,354	137,179	122,178	32,372	154,550
Gold	oz	19,723	94,969	114,692	24,189	95,693	119,882
Silver	oz	2,504,769	1,080,561	3,585,330	2,729,859	1,224,610	3,954,469
Zinc	tonnes	—	119,106	119,106	—	115,588	115,588
Molybdenum	tonnes	1,272	—	1,272	904	—	904
Payable metal sold							
Copper	tonnes	106,184	22,335	128,519	116,449	31,474	147,923
Gold	oz	18,956	90,043	108,999	20,420	92,677	113,097
Silver	oz	2,452,496	1,000,430	3,452,926	2,255,700	1,116,653	3,372,353
Zinc ²	tonnes	—	104,319	104,319	—	115,723	115,723
Molybdenum	tonnes	1,186	—	1,186	819	—	819
Cash cost ³	\$/lb	1.41	(0.18)	1.14	1.36	(0.64)	0.94
Sustaining cash cost ³	\$/lb	1.90	2.63		1.59	1.18	
All-in sustaining cash cost ³	\$/lb			2.17			1.60

¹ Metal reported in concentrate is prior to deductions associated with smelter contract terms.

² Includes refined zinc metal sold and payable zinc in concentrate sold.

³ Cash cost, sustaining cash cost and all-in sustaining cash cost per pound of copper produced, net of by-product credits are non-IFRS financial performance measures with no standardized definition under IFRS. For further information and a detailed reconciliation, please see the discussion under the "Non-IFRS Financial Reporting Measures" section of this MD&A.



RECENT DEVELOPMENTS

Leadership Announcements

After assisting with the Chair transition and the CEO search, Alan Hibben is stepping down as a Director. Mr. Hibben joined the Board in 2009 and served as Chair from 2017 to 2019. The Board thanks Mr. Hibben for his dedicated service as a Director and former Chair of the company.

On January 22, 2020, Peter Kukielski was appointed as Hudbay's President and CEO. Mr. Kukielski had been serving as Interim President and CEO since July 2019. Mr. Kukielski has more than 30 years of extensive global experience in the base metals, precious metals and bulk materials sectors.

David Bryson, Hudbay's Senior Vice President and Chief Financial Officer, is retiring from the Company, effective March 31, 2020, to pursue family and personal commitments. A search for a new CFO is underway, and Eugene Lei, currently Hudbay's Senior Vice President, Corporate Development and Strategy, will act as Interim CFO until the search process is concluded, after which he is expected to return to focusing on his current responsibilities. As a member of the executive committee, Mr. Lei has been working closely with Mr. Bryson on financial matters over the last several years, and they will continue to work closely together with Mr. Kukielski through this period to provide continuity and support a seamless transition. The Board and management team are grateful for Mr. Bryson's 11 years of service as Hudbay's CFO and wish him well on his future personal endeavors.

Execution of Pampacancha Surface Rights Agreement

On February 18, 2020, we announced that the community of Chilloroya formally approved a surface rights agreement with the Company for the Pampacancha satellite deposit located near the Constancia mine in Peru. With the completion of this agreement, we expect to be mining ore from the deposit in late 2020. The Company expects growth capital expenditures associated with project development and acquiring the surface rights for Pampacancha to be approximately \$70 million in 2020. In accordance with Peru's Consulta Previa law, additional consultation between the Peruvian government and the local community is required before we can begin development activities. Some additional capital costs remain outstanding in recognition of current uses of the land by certain community members and the Company intends to enter into agreements to address these matters prior to commencing mining activities. With the community's endorsement of the agreement, we believe these processes will be concluded in the first half of 2020.

Logistics Update

We are closely monitoring the development of the Covid-19 coronavirus outbreak in China, but at this time there has been no impact on the timing of copper concentrate sales to customers in China or elsewhere. In Canada, recent protests involving blockades of CN rail service have affected shipments of zinc metal and copper concentrate from our Manitoba operations, and may result in elevated inventories in the first quarter of 2020.

Towards Sustainable Mining Leadership Award

Our Manitoba operations received the Mining Association of Canada's Towards Sustainable Mining ("TSM") Leadership Award for meeting or exceeding a Level A ranking in their results across all of the six areas of performance. The performance areas are aboriginal and community outreach, crisis management, safety and health, tailings management, biodiversity conservation management, and energy use and greenhouse gas emissions management. Hudbay is extremely proud of this achievement as it further demonstrates the Company's commitment and successful track record of strong environmental, social and governance performance.

Rosemont Litigation Update

On July 31, 2019, the Court issued a ruling in two of the lawsuits challenging the U.S. Forest Service's issuance of the FROD for the Rosemont project in Arizona. The Court ruled to vacate and remand the FROD thereby delaying



the expected start of construction of Rosemont. In December of 2019, Hudbay and the U.S. Department of Justice each filed a notice of appeal in respect of the Court's decision to the U.S. Ninth Circuit Court of Appeals.

On February 10, 2020, the Court issued a ruling in the third lawsuit challenging the U.S. Forest Service's issuance of the FROD for the Rosemont mine. In this lawsuit, the plaintiffs challenged the Biological Opinion that was issued by the U.S. Fish and Wildlife Service and relied on by the U.S. Forest Service as part of the permitting process. The Court ruled to remand certain aspects of the U.S. Fish and Wildlife Service's analysis and findings related to the Biological Opinion back to the agencies for further review. While this ruling did not come as a surprise to Hudbay in light of the Court's previous ruling on the FROD for Rosemont, the Company believes remanding these issues is unnecessary as the federal agencies' research and studies concluded that the potential impacts to endangered species would comply with the regulations. Hudbay is reviewing the decision and will continue following the direction of the government agencies through the permitting process.

Other Key Strategic Initiatives

New Britannia mill refurbishment activities are progressing in line with the development schedule laid out in the February 2019 mine plan. Detailed engineering is on track to be completed in the first quarter of 2020 and environmental permits are expected in the second quarter of 2020. Construction activities are expected to commence mid-2020 and continue until the third quarter of 2021, with plant commissioning and ramp-up during the fourth quarter of 2021. Once the New Britannia mill is commissioned, average annual gold production from Snow Lake is expected to be approximately 140,000 ounces during the first five years at a sustaining cash cost, net of by-product credits, of approximately \$450 per ounce of gold.

Exploration activities in the Snow Lake region continue to progress, including exploration and engineering studies at the Lalor in-mine exploration targets and other 100%-owned deposits in the region, with results expected to be incorporated in the annual mineral reserve and resource estimate in March 2020. The Company is also continuing drilling activities on the recently discovered 1901 Deposit, which contains an initial inferred resource of 2.1 million tonnes at 9.67% zinc, as announced in August 2019. Drilling on the 1901 Deposit continues to test the size of the deposit and to confirm the presence of gold and copper-gold mineralization, with the intention to publish an initial inferred resource estimate on the gold mineralization and upgrade the zinc mineral resource estimate to a higher confidence category in 2020.

In the fourth quarter of 2019, the Company acquired a prospective package of patented and unpatented mining claims contiguous to its Mason project near Yerington, Nevada. The land package, known as the Mason Valley properties, is an exploration stage project that includes past producing mines and has the potential to provide additional mineral resources to Hudbay's Mason project.

We have also entered into an option agreement to acquire an 80% interest in the Gray Hills unpatented mining claims in Lyon County, Nevada, located approximately 25 kilometres southeast of the Mason project, as part of its land consolidation in the Yerington district.

Dividend Declared

A semi-annual dividend of C\$0.01 per share was declared on February 20, 2020. The dividend will be paid out on March 27, 2020 to shareholders of record as of March 10, 2020.

CONSTANCIA OPERATIONS REVIEW

		Three months ended		Year ended		Guidance	
		Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018	Annual 2019	Annual 2020
Ore mined ¹	<i>tonnes</i>	8,049,063	7,329,423	33,308,369	34,372,156		
Copper	<i>%</i>	0.41	0.47	0.43	0.49		
Gold	<i>g/tonne</i>	0.04	0.05	0.04	0.05		
Silver	<i>g/tonne</i>	3.87	4.16	3.76	4.15		
Ore milled	<i>tonnes</i>	7,474,136	7,657,943	31,387,281	31,282,610		
Copper	<i>%</i>	0.42	0.48	0.42	0.47		
Gold	<i>g/tonne</i>	0.04	0.06	0.04	0.05		
Silver	<i>g/tonne</i>	3.86	4.26	3.64	4.08		
Copper concentrate	<i>tonnes</i>	114,201	131,076	487,772	512,984		
Concentrate grade	<i>% Cu</i>	23.34	23.52	23.34	23.82		
Copper recovery	<i>%</i>	85.6	84.8	85.7	82.6		
Gold recovery	<i>%</i>	50.0	48.5	48.1	47.4		
Silver recovery	<i>%</i>	68.2	71.6	68.2	66.5		
Combined unit operating costs ^{2,3}	<i>\$/tonne</i>	10.20	9.88	9.50	9.44	7.90 - 9.70	8.30 - 10.25

¹ Reported tonnes and grade for ore mined are estimates based on mine plan assumptions and may not reconcile fully to ore milled.

² Reflects combined mine, mill and general and administrative ("G&A") costs per tonne of ore milled. Reflects the deduction of expected capitalized stripping costs.

³ Combined unit costs is a non-IFRS financial performance measure with no standardized definition under IFRS. For further information and a detailed reconciliation, please see the discussion under the "Non-IFRS Financial Reporting Measures" section of this MD&A.

Ore mined at our Constancia mine during the fourth quarter of 2019 was 10% higher compared to the same period in 2018, which was partially offset by stockpiling of lower grade ore in line with the mine plan. Milled copper grades in the fourth quarter were approximately 13% lower than the same period in 2018 as lower grade phases continue to be mined, in line with the mine plan. Mill throughput in the fourth quarter of 2019 was 2% lower compared to the same period in 2018 to comply with full year permit limitations.

Copper and gold recoveries in the fourth quarter of 2019 improved by 1% and 3%, respectively, compared to the same period in 2018. While recoveries of individual metals vary from quarter to quarter depending on the complexity and grade of the ore feed, we are seeing consistent results from ongoing recovery optimization initiatives. Highlights of the initiatives include the continued integration of an automated, advanced process control system and the installation of enhanced classification and flotation equipment in the grinding and bulk flotation circuits.

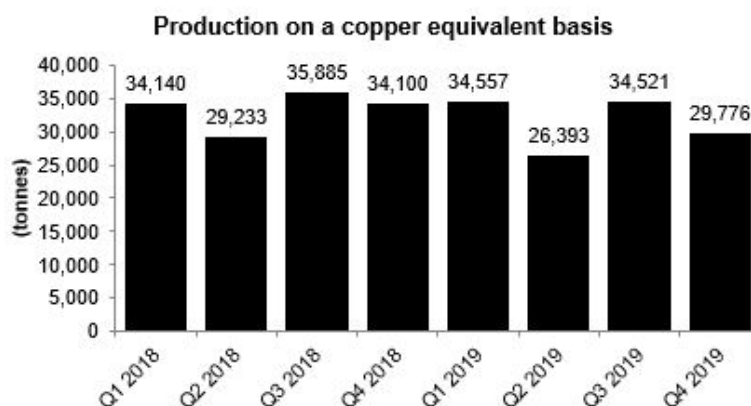
Combined mine, mill and G&A unit operating costs in the fourth quarter of 2019 were higher than the same period in 2018, reflecting lower ore throughput and higher mine and plant costs, partially offset by higher capitalized stripping costs.

Contained metal in concentrate produced		Three months ended		Year ended		Guidance	
		Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018	Annual	
						2019	2020
Copper	tonnes	26,659	30,834	113,825	122,178	100,000 - 125,000	80,000 - 95,000
Gold	oz	5,007	7,522	19,723	24,189		
Silver	oz	631,774	750,747	2,504,769	2,729,859		
Molybdenum	tonnes	372	329	1,272	904	1,100 - 1,200	1,300 - 1,600
Precious metals ¹	oz	14,033	18,247	55,506	63,187	45,000 - 55,000	45,000 - 55,000

¹ Precious metals production includes gold and silver production on a gold-equivalent basis. For 2018 and 2019, silver is converted to gold at a ratio of 70:1. For 2020 guidance, silver is converted to gold at a ratio of 89:1.

In the fourth quarter of 2019 production of copper was lower than the same period in 2018, mainly due to lower copper grade mined and milled, as per the mine plan, partially offset by higher mill throughput and copper recoveries as discussed above. Production of gold and silver during the fourth quarter of 2019 was similarly lower than the same period in 2018 due to lower grades in line with the mine plan. Molybdenum production was higher compared to the same period in 2018 due to higher head grades. Year-over-year production variances in 2019 were driven by the same factors as the fourth quarter variances versus prior year.

Full year production of copper was within 2019 guidance ranges, while precious metals and molybdenum production exceeded the guidance ranges.



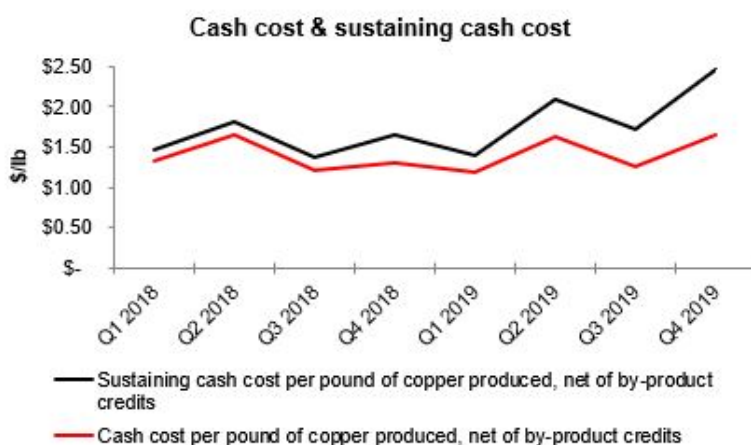
Peru Cash Cost and Sustaining Cash Cost

		Three months ended		Year ended	
		Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Cash cost per pound of copper produced, net of by-product credits ¹	\$/lb	1.66	1.31	1.41	1.36
Sustaining cash cost per pound of copper produced, net of by-product credits ¹	\$/lb	2.47	1.66	1.90	1.59

¹ Cash cost and sustaining cash costs per pound of copper produced, net of by-product credits, are not recognized under IFRS. For more detail on these non-IFRS financial performance measures, please see the discussion under the "Non-IFRS Financial Performance Measures" section of this MD&A.

Cash cost per pound of copper produced, net of by-product credits, for the three months and year ended December 31, 2019 were \$1.66 and \$1.41, respectively. This represents an increase of 27% and 4%, respectively, from the same period in 2018 primarily due to lower copper production, in line with the mine plan, higher combined operating costs, partially offset by lower treatment and refining charges.

Sustaining cash costs per pound of copper produced, net of by-product credits, for the three months and year ended December 31, 2019 were \$2.47 and \$1.90, respectively. This represents an increase of 49% and 19%, respectively, from the same periods in 2018 primarily due to higher sustaining costs in heavy civil works and capitalized stripping costs, as well as timing of payments on long-term community agreements and leases.



Metal Sold

		Three months ended		Year ended	
		Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Payable metal in concentrate					
Copper	tonnes	28,430	31,252	106,184	116,449
Gold	oz	4,824	7,262	18,956	20,420
Silver	oz	666,839	672,756	2,452,496	2,255,700
Molybdenum	tonnes	199	447	1,186	819

Copper concentrate inventory levels in Peru returned to normal levels in the fourth quarter of 2019 following disruptions in the third quarter of 2019 related to protests against the granting of a permit for another company's mining project.

MANITOBA OPERATIONS REVIEW

Mines

		Three months ended		Year ended	
		Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
777					
Ore	tonnes	269,342	244,613	1,109,782	966,567
Copper	%	1.17	1.76	1.37	1.47
Zinc	%	3.33	3.46	3.22	4.43
Gold	g/tonne	1.52	1.61	1.61	1.83
Silver	g/tonne	18.52	24.37	18.67	28.34
Lalor					
Ore	tonnes	390,140	317,616	1,536,780	1,260,241
Copper	%	0.80	0.82	0.75	0.74
Zinc	%	6.20	6.80	6.36	6.25
Gold	g/tonne	2.63	2.09	2.16	2.19
Silver	g/tonne	28.38	24.66	25.51	25.39
Reed¹					
Ore	tonnes	—	—	—	326,363
Copper	%	—	—	—	3.35
Zinc	%	—	—	—	0.90
Gold	g/tonne	—	—	—	0.77
Silver	g/tonne	—	—	—	9.08
Total Mines					
Ore	tonnes	659,482	562,229	2,646,562	2,553,171
Copper	%	0.95	1.23	1.01	1.35
Zinc	%	5.03	5.35	5.04	4.87
Gold	g/tonne	2.18	1.88	1.93	1.87
Silver	g/tonne	24.35	24.53	22.64	24.42

¹ Mining activities at Reed were completed in August 2018. Comparable 2018 numbers include 100% of Reed mine production. Hudbay purchased 30% of the Reed ore production from its joint venture partner on market-based terms.

		Three months ended		Year ended	
		Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Unit Operating Costs^{1,2}					
Mines					
777	C\$/tonne	82.35	87.29	79.02	80.59
Lalor	C\$/tonne	99.90	110.98	104.42	94.73
Reed	C\$/tonne	—	—	—	72.62
Total Mines	C\$/tonne	92.73	100.67	93.77	87.11

¹ Reflects costs per tonne of ore mined.

² Unit costs is a non-IFRS financial performance measure with no standardized definition under IFRS. For further information and a detailed reconciliation, please see the discussion under the "Non-IFRS Financial Reporting Measures" section of this MD&A.

Ore mined at our Manitoba operations during the fourth quarter of 2019 increased by 17% compared to the same period in 2018 due to higher production volumes at both 777 and Lalor.

Overall, copper, zinc, and silver grades were 23%, 6%, and 1%, lower, respectively, in the fourth quarter of 2019 compared to the same period of 2018 while gold grades were 16% higher. Metal grade variances are due to planned stope sequencing based on life of mine production schedules at 777 and Lalor. Higher gold grades at Lalor were due to mining of gold enriched base metal stopes in the fourth quarter of 2019.

Ore mined at 777 in the fourth quarter of 2019 increased by 10%, compared to the same period last year. The higher production is attributable to implementation of management systems designed to improve mobile equipment availability and key performance indicators for drilling, blasting and backfilling processes. Unit operating costs for 777 decreased by 6% for the fourth quarter of 2019 when compared to the same period in 2018 due to higher production volumes.

Ore mined at Lalor in the fourth quarter of 2019 increased by 23% compared to the same period last year. The higher production is attributable to a number of initiatives implemented as part of the production ramp up to 4,500 tonnes per day, including mine design changes, contract strategies, asset integrity and work management programs. Unit operating costs for Lalor for the fourth quarter of 2019 decreased by 10% compared to the same period in 2018 due to higher production volumes.

Total ore mined at our Manitoba operations during the full year was 4% higher than 2018 due to higher production volumes at both 777 and Lalor, partially offset by the closure of the Reed mine in August 2018. Copper and silver grades were 25% and 7% lower, respectively, compared to 2018. Zinc and gold grades were both 3% higher in 2019 compared to 2018. Total mine unit costs were 8% higher than in 2018 due to spending associated with the ramp up to 4,500 tonnes per day at Lalor, which were partially offset by lower costs at 777.

Processing Facilities

		Three months ended		Year ended	
		Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Flin Flon Concentrator					
Ore	tonnes	374,529	259,569	1,362,006	1,423,744
Copper	%	1.11	1.73	1.27	1.90
Zinc	%	4.05	3.55	3.78	3.71
Gold	g/tonne	1.75	1.62	1.72	1.63
Silver	g/tonne	20.56	24.79	19.84	23.48
Copper concentrate	tonnes	15,640	16,618	65,508	107,972
Concentrate grade	% Cu	23.18	24.42	23.27	23.11
Zinc concentrate	tonnes	25,482	15,510	86,329	89,289
Concentrate grade	% Zn	51.09	49.75	50.92	49.74
Copper recovery	%	86.9	90.4	88.0	92.3
Zinc recovery	%	85.8	83.7	85.5	84.2
Gold recovery	%	56.1	62.8	59.4	64.5
Silver recovery	%	49.2	54.8	50.8	60.2
Contained metal in concentrate produced					
Copper	tonnes	3,625	4,059	15,241	24,947
Zinc	tonnes	13,018	7,717	43,962	44,415
Precious metals ¹	oz	13,573	10,116	51,012	57,227
Stall Concentrator					
Ore	tonnes	310,622	313,995	1,290,300	1,201,466
Copper	%	0.80	0.84	0.73	0.72
Zinc	%	6.24	6.83	6.39	6.38
Gold	g/tonne	2.60	2.09	2.13	2.15
Silver	g/tonne	28.12	24.58	25.48	25.27
Copper concentrate	tonnes	10,930	11,498	40,856	37,047
Concentrate grade	% Cu	19.56	20.39	19.86	20.04
Zinc concentrate	tonnes	35,173	38,296	147,227	139,268
Concentrate grade	% Zn	49.96	51.42	51.04	51.10
Copper recovery	%	85.9	88.6	85.9	85.7
Zinc recovery	%	90.7	91.9	91.1	92.8
Gold recovery	%	61.1	57.1	56.8	57.6
Silver recovery	%	62.9	60.7	60.4	59.2
Contained metal in concentrate produced					
Copper	tonnes	2,138	2,345	8,113	7,425
Zinc	tonnes	17,574	19,691	75,144	71,173
Precious metals ¹	oz	18,394	14,184	59,394	55,961

¹ Precious metals production includes gold and silver production on a gold-equivalent basis. Silver is converted to gold at a ratio of 70:1.

		Three months ended		Year ended		Guidance	
		Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018	Annual 2019	2020
Unit Operating Costs ¹							
Concentrators							
Flin Flon	C\$/tonne	22.90	35.13	22.91	25.29		
Stall	C\$/tonne	29.31	27.23	26.47	26.71		
Combined mine/mill unit operating costs ^{2,3}							
Manitoba	C\$/tonne	128	143	134	130	115 - 135	130 - 140

¹ Reflects costs per tonne of milled ore.

² Reflects combined mine, mill and G&A costs per tonne of milled ore. Comparable 2018 numbers include the cost of ore purchased from our joint venture partner at Reed mine.

³ Combined unit costs is a non-IFRS financial performance measure with no standardized definition under IFRS. For further information and a detailed reconciliation, please see the discussion under the "Non-IFRS Financial Reporting Measures" section of this MD&A.

Ore processed in Flin Flon in the fourth quarter of 2019 was 44% higher than the same period of 2018 due to increased production from the 777 mine and mine feed from Lalor. Copper, gold and silver recoveries in the fourth quarter of 2019 were 4%, 11%, and 10% lower, respectively, compared with the same period in 2018 due to lower copper head grades. Unit operating costs at the Flin Flon concentrator were 35% lower in the fourth quarter of 2019 compared to the same period in 2018 due to higher plant throughput.

Ore processed in 2019 in Flin Flon was 4% lower than in 2018 due to the Reed mine closure, partially offset by increased production from the 777 mine. Copper, gold and silver recoveries for the full year declined as a result of lower copper head grades. Full year operating costs at the Flin Flon concentrator were 9% lower in 2019 due to higher plant efficiencies.

The Stall concentrator ore throughput for the fourth quarter was in line with the same period in 2018. Copper and zinc recoveries in the fourth quarter of 2019 were 3% and 1% lower, respectively, compared with the same period in 2018 due to the head grades milled. Gold and silver recoveries in the fourth quarter of 2019 were 7% and 4% higher, respectively, compared with the same period in 2018. Unit operating costs were 8% higher in the fourth quarter of 2019 compared to the same period in 2018 due to higher costs in the grinding circuit. Ore processed for the full year in 2019 at Stall was 7% higher than 2018 due to ongoing operational and maintenance improvements. Full year unit operating costs at the Stall concentrator were also in line with the prior year.

Manitoba combined mine, mill and G&A unit operating costs in the fourth quarter of 2019 were 10% lower than in the same period in 2018 mainly due to Lalor's ramp up, with fourth quarter unit costs well below the levels reported in the first half of 2019.

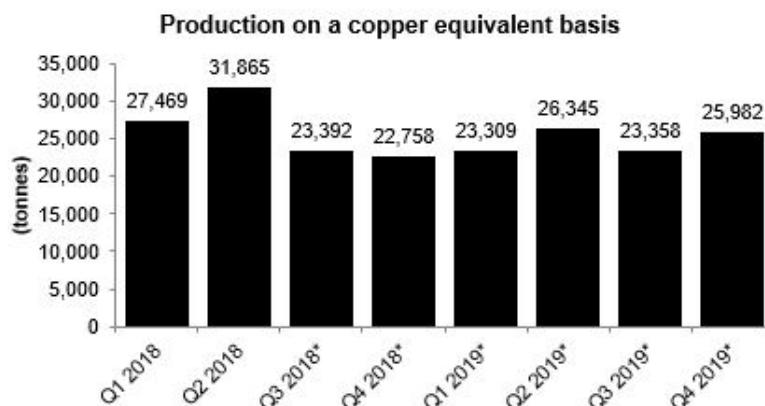
		Three months ended		Year ended		Guidance	
		Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018	Annual 2019	Annual 2020
Manitoba contained metal in concentrate produced^{1,2}							
Copper	tonnes	5,763	6,404	23,354	32,372	22,000 - 25,000	18,000 - 22,000
Gold	oz	27,705	20,529	94,969	95,693		
Silver	oz	298,363	263,937	1,080,561	1,224,610		
Zinc	tonnes	30,592	27,408	119,106	115,588	100,000 - 115,000	105,000 - 125,000
Precious metals ³	oz	31,967	24,300	110,406	113,188	105,000 - 125,000	110,000 - 135,000

¹ Includes 100% of Reed mine production.

² Metal reported in concentrate is prior to deductions associated with smelter terms.

³ Precious metals production includes gold and silver production on a gold-equivalent basis. For 2018 and 2019, silver is converted to gold at a ratio of 70:1. For 2020 guidance, silver is converted to gold at a ratio of 89:1.

In the fourth quarter of 2019, copper production was 10% lower compared to the same period in 2018 due to the lower copper head grades at 777, partially offset by increased production at 777 and Lalor. Gold, silver, and zinc production increased by 35%, 13%, and 12%, respectively, in the fourth quarter of 2019. Annual guidance for all metals was achieved, with zinc production exceeding the upper range of guidance.



*Mining activities in Reed were completed in August 2018

Zinc Plant

	Three months ended		Year ended		Guidance	
	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018	Annual 2019	Annual 2020
Zinc Production						
Zinc Concentrate Treated						
Domestic tonnes	58,884	59,838	217,484	220,960		
Refined Metal Produced						
Domestic tonnes	27,816	26,885	103,340	102,053	95,000 - 105,000	100,000 - 112,000

		Three months ended		Year ended		Guidance	
		Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018	Annual 2019	Annual 2020
Unit Operating Costs							
Zinc Plant ^{1,2}	C\$/lb	0.48	0.49	0.49	0.50	0.47 - 0.55	0.45 - 0.52

¹ Zinc unit operating costs include G&A costs.

² Zinc unit costs is a non-IFRS financial performance measure with no standardized definition under IFRS. For further information and a detailed reconciliation, please see the discussion under the "Non-IFRS Financial Reporting Measures" section of this MD&A.

Production of cast zinc in the fourth quarter of 2019 and full year was higher than the same periods in 2018 and full year production was within our annual guidance range. Operating costs per pound of zinc metal produced in the fourth quarter of 2019 and full year were in line with the same periods in 2018 and full year operating costs were within our annual guidance range.

Manitoba Cash Cost and Sustaining Cash Cost

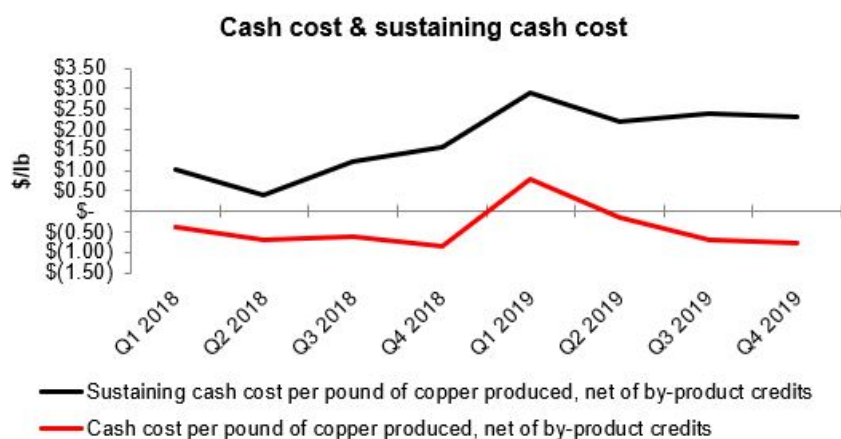
		Three months ended		Year ended	
		Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Cost per pound of copper produced					
Cash cost per pound of copper produced, net of by-product credits ¹	\$/lb	(0.76)	(0.87)	(0.18)	(0.64)
Sustaining cash cost per pound of copper produced, net of by-product credits ¹	\$/lb	2.33	1.76	2.63	1.18
Cost per pound of zinc produced					
Cash cost per pound of zinc produced, net of by-product credits ¹	\$/lb	0.43	0.75	0.53	0.46
Sustaining cash cost per pound of zinc produced, net of by-product credits ¹	\$/lb	1.01	1.36	1.08	0.97

¹ Cash cost and sustaining cash cost per pound of copper & zinc produced, net of by-product credits, are not recognized under IFRS. For more detail on this non-IFRS financial performance measure, please see the discussion under the "Non-IFRS Financial Performance Measures" section of this MD&A.

Cash cost per pound of copper produced, net of by-product credits, for the three and twelve months ended December 31, 2019 were negative \$0.76 and negative \$0.18, respectively. These costs were higher compared to the same period in 2018, primarily as a result of higher mining costs and lower by-product credits, partially offset by lower treatment and refining costs.

Sustaining cash cost per pound of copper produced, net of by-product credits, for the three and twelve months ended December 31, 2019 were \$2.33 and \$2.63, respectively. These costs were higher compared to the same period in 2018, primarily due to higher cash costs and higher sustaining capital expenditures.

Cash cost and sustaining cash cost per pound of zinc produced, net of by-product credits, in the fourth quarter of 2019 were lower than the same period last year as a result of higher by-product revenue and lower treatment refining costs, partially offset by higher mining costs and higher sustaining capital expenditures.



Metal Sold

		Three months ended		Year ended	
		Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Payable metal in concentrate					
Copper	<i>tonnes</i>	5,285	5,098	22,335	31,474
Gold	<i>oz</i>	25,520	18,599	90,043	92,677
Silver	<i>oz</i>	242,584	236,744	1,000,430	1,116,653
Zinc	<i>tonnes</i>	—	5,259	—	12,593
Refined zinc	<i>tonnes</i>	28,001	25,875	104,346	103,130

OUTLOOK

This outlook includes forward-looking information about our operations and financial expectations based on our expectations and outlook as of February 20, 2020. This outlook, including expected results and targets, is subject to various risks, uncertainties and assumptions, which may impact future performance and our achievement of the results and targets discussed in this section. For additional information on forward-looking information, refer to the "Forward-Looking Information" section of this MD&A. We may update our outlook depending on changes in metals prices and other factors. In addition to this section, refer to the "Operations Review" and "Financial Review" sections for additional details on our outlook for 2020. For information on our sensitivity to metals prices, refer below to the "Commodity Markets" and "Sensitivity Analysis" sections of this MD&A.

Material Assumptions

Our annual production and operating cost guidance, along with our annual capital and exploration expenditure forecasts and three-year production outlook are discussed in detail below.

Production Guidance

Contained Metal in Concentrate ¹		2020 Guidance	Year ended Dec. 31, 2019	2019 Guidance
Manitoba				
Copper	tonnes	18,000 - 22,000	23,354	22,000 - 25,000
Zinc	tonnes	105,000 - 125,000	119,106	100,000 - 115,000
Precious metals ²	oz	110,000 - 135,000	110,406	105,000 - 125,000
Peru				
Copper	tonnes	80,000 - 95,000	113,825	100,000 - 125,000
Precious metals ²	oz	45,000 - 55,000	55,506	45,000 - 55,000
Molybdenum	tonnes	1,300 - 1,600	1,272	1,100 - 1,200
Total				
Copper	tonnes	98,000 - 117,000	137,179	122,000 - 150,000
Zinc	tonnes	105,000 - 125,000	119,106	100,000 - 115,000
Precious metals ²	oz	155,000 - 190,000	165,912	150,000 - 180,000
Molybdenum	tonnes	1,300 - 1,600	1,272	1,100 - 1,200

¹ Metal reported in concentrate is prior to refining losses or deductions associated with smelter terms.

² Precious metals production includes gold and silver production on a gold-equivalent basis. For 2019, silver was converted to gold at a ratio of 70:1. For 2020 guidance, silver is converted to gold at a ratio of 89:1.

On a consolidated basis, our copper and precious metals production met 2019 guidance and production of zinc and molybdenum exceeded 2019 guidance ranges. Production of copper benefited from increased throughput and recoveries at Constancia despite expected lower grades year-over-year. Zinc production increased over 2018 levels despite lower zinc grades at both Lalor and 777 as Lalor completed its ramp up to 4,500 tonnes per day and the 777 mine implemented operational improvements.

3-Year Production Outlook Contained Metal in Concentrate ¹		2020 Guidance	2021 Guidance	2022 Guidance
Manitoba²				
Copper	tonnes	18,000 - 22,000	19,000 - 23,000	13,000 - 15,000
Zinc	tonnes	105,000 - 125,000	115,000 - 140,000	75,000 - 90,000
Precious metals ³	oz	110,000 - 135,000	110,000 - 135,000	150,000 - 190,000
Peru				
Copper	tonnes	80,000 - 95,000	80,000 - 100,000	100,000 - 125,000
Precious metals ³	oz	45,000 - 55,000	85,000 - 100,000	105,000 - 130,000
Molybdenum	tonnes	1,300 - 1,600	1,000 - 1,200	1,500 - 1,800
Total				
Copper	tonnes	98,000 - 117,000	99,000 - 123,000	113,000 - 140,000
Zinc	tonnes	105,000 - 125,000	115,000 - 140,000	75,000 - 90,000
Precious metals ³	oz	155,000 - 190,000	195,000 - 235,000	255,000 - 320,000
Molybdenum	tonnes	1,300 - 1,600	1,000 - 1,200	1,500 - 1,800

¹ Metal reported in concentrate is prior to refining losses or deductions associated with smelter terms.

² Manitoba production guidance assumes the 777 mine is depleted in the second quarter of 2022, resulting in lower copper and zinc production after its closure.

³ Precious metals production includes gold and silver production on a gold-equivalent basis. Silver is converted to gold at a ratio of 89:1.

In 2020, consolidated production of copper contained in concentrate is forecast to decrease by approximately 22%¹ compared to 2019 production, primarily due to planned lower copper grades at Constancia, in line with the mine plan. However, with the addition of the higher-grade Pampacancha satellite deposit in Peru, total copper production is expected to increase by 18%¹ from 2020 to 2022.

Production of zinc contained in concentrate in 2020 is forecast to be strong with the 2020 guidance range slightly higher than the range in 2019. That trend is expected to continue into 2021 with Lalor maintaining steady production at 4,500 tonnes per day and the Company continuing to maximize the output from the 777 mine as it nears the end of its mine life in the second quarter of 2022.

Consolidated production of precious metals contained in concentrate in 2020 is forecast to increase by approximately 4%¹ compared to 2019 production, primarily due to higher precious metals production at Lalor from the planned mining of approximately 90,000 tonnes from the gold zones in 2020 as part of stope sequencing in preparation for the restart of the New Britannia gold mill. By 2022, consolidated precious metals production is expected to increase by 67%¹ following the restart of the New Britannia gold mill in Manitoba and the addition of the Pampacancha high-grade satellite deposit in Peru.

¹ Year-over-year forecast changes assume the mid-point of the respective guidance range is achieved.

Capital Expenditure Guidance

Capital Expenditures¹ <i>(in \$ millions)</i>	2020 Guidance	Year ended Dec. 31, 2019	2019 Guidance
Sustaining capital			
Manitoba ²	100.0	126.3	100.0
Peru ³	100.0	84.9	95.0
Total sustaining capital	200.0	211.2	195.0
Growth capital			
Manitoba	80.0	14.1	10.0
Peru ⁴	70.0	2.1	45.0
Arizona ⁵	20.0	36.4	40.0
Total growth capital	170.0	52.6	95.0
Capitalized exploration	15.0	15.7	15.0
Total capital expenditures	385.0	279.5	305.0

¹ Excludes capitalized costs not considered to be sustaining or growth capital expenditures.

² Manitoba sustaining capital expenditures for the year ended December 31, 2019 include a new capitalized release related to sustaining capital expenditures of \$14.3 million not included in 2019 annual guidance. Excluded from sustaining capital is the anticipated \$20 million expected to be spent on improvements to the legacy Flin Flon tailings facilities, as described below.

³ Includes capitalized stripping costs.

⁴ Peru growth capital expenditures of \$45.0 million in 2019 related to expected expenditures for developing the Pampacancha deposit and acquiring surface rights, which has been deferred to 2020. 2020 expected growth capital expenditures include costs associated with project development and acquiring the surface rights. Some additional capital costs remain outstanding in recognition of current uses of land and the Company intends to enter into agreements to address these matters prior to commencing mining activities.

⁵ Arizona spending includes capitalized costs associated with the Rosemont and Mason projects. Rosemont's 2019 guidance was revised to include \$20 million of project costs and \$20 million of non-project costs as announced on November 11, 2019.

Total planned sustaining capital expenditures in 2020 are expected to slightly decrease from 2019 levels due to lower spending in Manitoba, offset by higher planned spending in Peru primarily related to higher capitalized stripping costs. In Manitoba, we continue to implement improvements on the legacy Flin Flon tailings impoundment area, in line with higher industry-wide standards for tailings dam safety following the failure of other tailings dams in recent years. This spending is expected to be approximately \$20 million per year from 2020 to 2022, but these expenditures will not impact sustaining capital expenditures since they are associated with the updated decommissioning and restoration liability, and therefore, will be accounted for as a drawdown of the liability.

Manitoba growth capital spending of \$80 million relates to a significant portion of the New Britannia mill refurbishment costs as construction activities are on track to commence in the second quarter of 2020. The New Britannia mill refurbishment costs are expected to total approximately \$115 million over 2020 and 2021, higher than the original estimate of approximately \$95 million primarily due to the introduction of new instruments expected to further improve mill efficiency, as well as labour cost inflation and some cost escalation on equipment. The capital investment in the New Britannia mill offers high returns and a short payback period, based on current reserves at Lalor. Once the New Britannia gold mill is in operation by 2022, gold is expected to account for over 60% of revenues at Lalor with annual gold production expected to grow to approximately 140,000 ounces at a sustaining cash cost of approximately \$450 per ounce over the first five years.

Peru growth capital of \$70 million includes initial expenditures for developing the Pampacancha deposit and acquiring surface rights from the local community, but excludes the costs associated with recognizing the current uses of the land by certain community members, which are subject to pending agreements with those individuals. Our patient approach to community negotiations has proven successful, demonstrating our strong relationships with the neighbouring communities and positioning us well to unlock future value on our other regional growth targets in Peru. Arizona spending of \$20 million is intended to support ongoing matters on the Rosemont project and advance preliminary economic studies at the Mason project in Nevada.

Exploration Guidance

Exploration Expenditures (in \$ millions)	2020 Guidance	Year ended Dec. 31, 2019	2019 Guidance
Peru	15.0	17.1	20.0
Manitoba	10.0	22.9	10.0
Generative and other	—	6.5	10.0
Total exploration expenditures	25.0	46.5	40.0
Capitalized spending	(15.0)	(15.7)	(15.0)
Total exploration expense	10.0	30.8	25.0

Our exploration portfolio of owned or optioned mineral properties consists of approximately 850,000 hectares across Canada, Peru, the United States and Chile. Our 2020 exploration budget of \$25 million, which includes option payments, will be focused on exploration near existing processing infrastructure in Peru and Manitoba.

In Peru, we continue permitting, community relations and technical activities required to access and conduct drilling activities on properties near Constancia. In 2020, drilling activities will be focused on the Llaguen greenfield project located 56 kilometres northeast of the city of Trujillo, in northern Peru, and on the Quehuincha North skarn target located approximately 11 kilometres from the Constancia mill, where we have recently obtained a drilling permit and have an exploration agreement in place with the local community. At Lalor, we expect to conduct additional underground drilling, continuing efforts to convert existing mineral resources to reserves and to identify additional gold resources at underground targets. In addition, surface drilling planned for 2020 in Manitoba will aim to confirm an initial mineral resource estimate for the gold and copper-gold mineralization intersected in 2019 at the 1901 Deposit.

Unit Operating Cost Guidance

Combined Mine/Mill Unit Operating Cost ^{1,2}	2020 Guidance	Year ended Dec. 31, 2019	2019 Guidance
Manitoba C\$/tonne	130 - 140	134	115 - 135
Peru \$/tonne	8.30 - 10.25	9.50	7.90 - 9.70

¹ Reflects combined mine, mill and G&A costs per tonne of milled ore. Peru costs reflect the deduction of expected capitalized stripping costs.

² Combined unit costs are non-IFRS financial performance measures with no standardized definition under IFRS. For further information and a detailed reconciliation, please see the discussion under the "Non-IFRS Financial Reporting Measures" section of this MD&A.

Combined unit costs for Manitoba in 2020 are forecast to be similar to 2019 levels as Lalor's costs have normalized after the ramp up to 4,500 tonnes per day. Combined unit costs for Peru in 2020 are also expected to be similar to 2019 levels as the plant continues to operate at full capacity.

Flin Flon Zinc Plant Guidance	2020 Guidance	Year ended Dec. 31, 2019	2019 Guidance
Zinc metal produced tonnes	100,000 - 112,000	103,340	95,000 - 105,000
Unit operating costs¹ C\$/lb	0.45 - 0.52	0.49	0.47 - 0.55

¹ Unit costs are non-IFRS financial performance measures with no standardized definition under IFRS. For further information and a detailed reconciliation, please see the discussion under the "Non-IFRS Financial Reporting Measures" section of this MD&A.

Metal production in any particular quarter may vary from the implied annual guidance rate based on variations in grades and recoveries due to the areas mined in that quarter, the timing of planned maintenance, and other factors. Mining and processing costs in any particular quarter can also vary from the annual guidance rate above based on a variety of factors, including the scheduling of maintenance events and seasonal heating requirements, particularly in Manitoba. In Peru, the semi-annual mill maintenance shutdowns at Constancia typically occur during the second

and fourth quarters each year. In Manitoba, we expect to perform maintenance on the Stall concentrator during the second quarter of 2020 and on the Lalor mine hoist facilities in the third quarter of 2020.

Commodity Markets

Our 2020 operational and financial performance will be influenced by a number of factors. At the macro-level, the general performance of the Chinese, North American and global economies will influence the demand for our products. The realized prices we achieve in the commodity markets significantly affect our financial performance. Our general expectations regarding metals prices and foreign exchange rates are included below and in the “Sensitivity Analysis” section of this MD&A.

In addition to our production, financial performance is directly affected by a number of factors, including metals prices, foreign exchange rates, and input costs, including energy prices. Average prices for copper and zinc declined significantly in 2019 from 2018 as concerns about the trade dispute between the U.S. and China, and the resulting drag on Chinese economic growth, outweighed reasonable supportive fundamentals in the physical copper and zinc markets.

We have developed the following market analysis from various information sources including analyst and industry experts.

Copper

In 2019, the London Metal Exchange (“LME”) copper price averaged \$2.72 per pound (“/lb”), with prices ranging between \$2.51/lb and \$2.98/lb. For the second year in a row, copper refined metal markets remained relatively balanced although additions to the smelting and refining capacity during 2019 pushed the annual benchmark for treatment and refining charges to a cyclical low of \$62.62 per tonne for 2020. After a rally in copper prices following the December 2019 announcement of a phase 1 trade agreement between the United States and China, copper prices dropped approximately 12% to the \$2.50/lb - \$2.60/lb range in January due to the uncertainty and economic disruption caused by the Covid-19 coronavirus (“coronavirus”) outbreak in China.

Global refined copper markets were initially forecast to remain relatively balanced in 2020 with most market participants projecting prices to average between \$2.75/lb and \$3.00/lb. The coronavirus outbreak in China will reduce both smelter and refinery utilization and copper fabrication plant production and increase spot concentrate treatment and refining charges in the first quarter of 2020 but once the Chinese workforce returns to work and industrial production returns to normal, copper prices are expected to recover.

Over the longer term there are several macro economic trends which are expected to increase the demand for copper. The drive towards the goals of greater renewable energy (wind, hydro, solar) and carbon neutrality in the world’s economy are expected to result in stronger demand for copper because the structural changes necessary to deliver on these goals are very copper intensive. In addition, the adoption of carbon taxes and associated trade tariffs are projected to dramatically increase the production cost of aluminium and its selling price relative to copper because copper has a much smaller carbon footprint per pound of production. As all metal producers are increasingly forced to pay a price for their carbon emissions, the resultant decline in the copper/aluminium price ratio should make copper relatively more competitive in many applications which will drive substitution from aluminium to copper and increase copper demand.

Strong future demand for copper will necessitate the development of new mines from the world’s existing inventory of undeveloped deposits which are inherently higher cost than those mines currently in production due to their lower grades, higher strip ratios and higher development costs. The end result should be a prolonged period of higher copper prices.

Zinc

In 2019, the LME zinc price averaged \$1.16/lb, with prices ranging from \$1.00/lb to \$1.37/lb. The zinc metal market has been in a structural deficit for the past several years and this trend continued in 2019 when demand outstripped supply by approximately 0.5 million tonnes.

For the next several years, the zinc metal market is anticipated to be in relative balance and with zinc metal inventories at historically low levels after many years of supply versus demand deficits. Zinc prices over the next few years are expected to be supported in the range of \$1.00/lb - \$1.20/lb. As has been the case with all commodities, the coronavirus outbreak in China caused a dramatic drop in the price of zinc in early 2020 but most observers expect prices to rebound once the situation in China normalized.

The recent annual surpluses in zinc concentrate production over smelter demand are expected to persist well in 2022. This smelter bottleneck propelled zinc concentrate treatment charges for annual contracts to \$245 per tonne in 2019 and is expected to push 2020 treatment charges close to \$300 per tonne.

Sensitivity Analysis

The following table displays the estimated impact of changes in metals prices and foreign exchange rates on our 2020 net profit, earnings per share and operating cash flow, assuming that our operational performance is consistent with our guidance for 2020². The effects of a given change in an assumption are isolated.

	2020 Base	Change of 10% represented by:	Impact on Profit	Impact on EPS ¹	Impact on Operating CF before WC changes
Metals Prices					
Copper price ²	US\$2.75/lb	+/- US\$0.28/lb	+/- US\$40M	+/- 0.15	+/- US\$62M
Zinc price	US\$1.10/lb	+/- US\$0.11/lb	+/- US\$12M	+/- 0.04	+/- US\$27M
Gold price ³	US\$1,500/oz	+/- US\$150/oz	+/- US\$7M	+/- 0.03	+/- US\$15M
Exchange Rates⁴					
C\$/US\$	1.30	+/- 0.13	+/- US\$25M	+/- 0.09	+/- US\$32M

¹ Based on 261.3 million common shares outstanding as at December 31, 2019.

² Quotational period hedging program neutralizes provisional pricing adjustments.

³ Gold price sensitivity also includes an impact of a +/- 10% change in the silver price (2020 assumption: \$16.00/oz of silver).

⁴ Change in profit from operational performance only, does not include change in profit arising from translation of balance sheet accounts.

² Year-over-year forecasted changes to unit costs assume the mid-point of the respective guidance range is achieved.

FINANCIAL REVIEW

Financial Results

In the fourth quarter of 2019, we recorded a net loss of \$1.5 million compared to a loss of \$3.5 million for the same period in 2018, an increase in profit of \$2.0 million.

For the full year in 2019, we recorded a net loss of \$343.8 million compared to a profit of \$85.4 million in the same period in 2018, a decrease in profit of \$429.2 million.

The following table provides further details on these variances:

<i>(in \$ millions)</i>	Three months ended December 31, 2019	Year ended December 31, 2019
(Decrease) increase in components of profit or loss:		
Revenues	(27.3)	(235.0)
Cost of sales		
Mine operating costs	(10.6)	24.6
Depreciation and amortization	(11.7)	(11.9)
Selling and administrative expenses	3.0	(8.9)
Other operating expenses	1.9	(32.0)
Impairment	—	(322.2)
Net finance expense	(11.6)	(36.0)
Other	(3.7)	(2.2)
Tax	62.0	194.4
(Decrease) increase in profit for the period	2.0	(429.2)

Revenue

Revenue for the fourth quarter of 2019 was \$324.5 million, \$27.3 million lower than the same period in 2018, primarily as a result of lower metal prices and sales volumes for copper and zinc.

Full year revenue in 2019 was \$1,237.4 million, \$235.0 million lower than 2018, due to the same reasons as described for the quarterly variance above.

<i>(in \$ millions)</i>	Three months ended December 31, 2019	Year ended December 31, 2019
Metals prices¹		
Lower copper prices	(6.1)	(63.2)
Lower zinc prices	(5.2)	(34.9)
(Lower) higher gold prices	(1.5)	6.3
Higher silver prices	3.3	2.0
Sales volumes		
Lower copper sales volumes	(15.6)	(120.1)
Lower zinc sales volumes	(8.7)	(34.9)
Higher (lower) gold sales volumes	7.4	(5.3)
Higher silver sales volumes	—	2.6
Other		
(Lower) higher derivative mark-to-market gains	(0.6)	0.7
Molybdenum and other volume and pricing differences	(9.3)	7.2
Variable consideration adjustments	2.8	(13.7)
Effect of lower treatment and refining charges	6.2	18.3
Decrease in revenue in 2019 compared to 2018	(27.3)	(235.0)

¹ See discussion below for further information regarding metals prices.

Our revenue by significant product type is summarized below:

<i>(in \$ millions)</i>	Three months ended		Year ended	
	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Copper	201.7	225.9	786.3	963.1
Zinc	72.1	86.5	284.9	357.4
Gold	45.1	33.4	152.4	149.0
Silver	24.5	21.4	89.7	85.8
Molybdenum	4.7	11.9	31.3	21.0
Other metals	1.3	1.4	4.8	4.7
Gross revenue	349.4	380.5	1,349.4	1,581.0
Variable consideration adjustments	—	(2.8)	(16.3)	(2.6)
Pricing and volume adjustments ¹	(3.7)	1.5	(12.1)	(4.1)
Treatment and refining charges	(21.2)	(27.4)	(83.6)	(101.9)
Revenue	324.5	351.8	1,237.4	1,472.4

¹ Pricing and volume adjustments represents mark-to-market adjustments on provisionally prices sales, realized and unrealized changes to fair value for non-hedge derivative contracts and adjustments to originally invoiced weights and assays.

For further detail on variable consideration adjustments, refer to note 18 of our consolidated financial statements.

Realized sales prices

This measure is intended to enable management and investors to understand the average realized price of metals sold to third parties in each reporting period. The average realized price per unit sold does not have any standardized meaning prescribed by IFRS, is unlikely to be comparable to similar measures presented by other issuers, and should not be considered in isolation or a substitute for measures of performance prepared in accordance with IFRS.

For sales of copper, gold and silver we may enter into non-hedge derivatives ("QP hedges") which are intended to manage the provisional pricing risk arising from quotational period terms in concentrate sales agreements. The QP hedges are not removed from the calculation of realized prices. We expect that gains and losses on QP hedges will offset provisional pricing adjustments on concentrate sales contracts.

Our realized prices for the fourth quarter and full year in 2019 and 2018, respectively, are summarized below:

		Realized prices ¹ for the Three months ended			Realized prices ¹ for the Year ended		
		LME QTD 2019 ²	Dec. 31, 2019	Dec. 31, 2018	LME YTD 2019 ²	Dec. 31, 2019	Dec. 31, 2018
Prices							
Copper	\$/lb	2.67	2.69	2.77	2.72	2.73	2.93
Zinc ³	\$/lb	1.08	1.17	1.25	1.16	1.24	1.39
Gold ⁴	\$/oz		1,490	1,554		1,439	1,359
Silver ⁴	\$/oz		27.19	22.50		25.64	25.52
Molybdenum ⁵	\$/lb		6.37	12.17		11.03	12.06

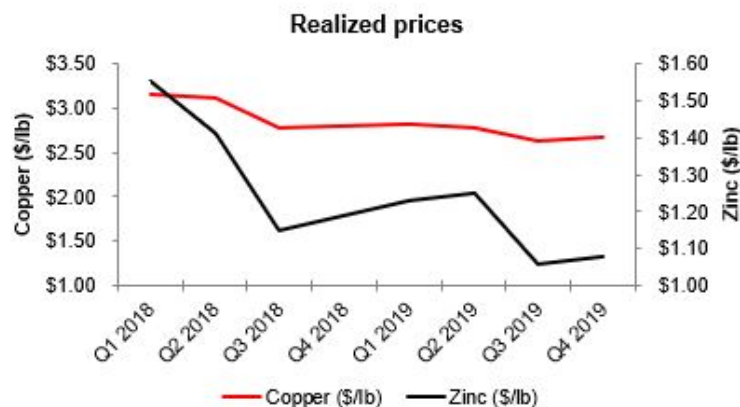
¹ Realized prices exclude refining and treatment charges and are on the sale of finished metal or metal in concentrate. Realized prices include the effect of provisional pricing adjustments on prior period sales.

² London Metal Exchange average for copper and zinc prices.

³ This amount includes a realized sales price of \$1.27 and \$1.41 for cast zinc metal and \$1.19 and \$1.25 for zinc concentrate sold for the three and twelve months ended December 31, 2018, respectively. Zinc realized prices include premiums paid by customers for delivery of refined zinc metal, but exclude unrealized gains and losses related to non-hedge derivative contracts that are included in zinc revenues.

⁴ Sales of gold and silver from our 777 and Constancia mines are subject to our precious metals stream agreement with Wheaton Precious Metals, pursuant to which we recognize deferred revenue for precious metals deliveries and also receive cash payments. Stream sales are included within realized prices and their respective deferred revenue and cash payment rates can be found on page 30.

⁵ Realized prices for molybdenum for the three months ended December 31, 2019 were low due to unfavourable provisional pricing adjustments from prior quarter's sales quantities that were significantly larger than the fourth quarter's sales quantity.



The following table provides a reconciliation of average realized price per unit sold, by metal, to revenues as shown in the consolidated financial statements.

Three months ended December 31, 2019							
(in \$ millions) ¹	Copper	Zinc	Gold	Silver	Molybdenum	Other	Total
Revenue per financial statements	201.7	72.1	45.1	24.5	4.7	1.3	349.4
Pricing and volume adjustments ²	(1.7)	(0.4)	0.1	0.2	(1.9)	—	(3.7)
Derivative mark-to-market ³	—	0.3	—	—	—	—	0.3
Revenue, excluding mark-to-market on non-QP hedges	200.0	72.0	45.2	24.7	2.8	1.3	346.0
Payable metal in concentrate sold ⁴	33,715	28,001	30,344	909,423	199	—	—
Realized price ⁵	5,930	2,573	1,490	27.19	14,046	—	—
Realized price ⁶	2.69	1.17	—	—	6.37	—	—
Twelve Months Ended December 31, 2019							
(in \$ millions) ¹	Copper	Zinc	Gold	Silver	Molybdenum	Other	Total
Revenue per financial statements	786.3	284.9	152.4	89.7	31.3	4.8	1,349.4
Pricing and volume adjustments ²	(12.9)	(0.1)	4.5	(1.2)	(2.4)	—	(12.1)
Derivative mark-to-market ³	—	—	—	—	—	—	—
Revenue, excluding mark-to-market on non-QP hedges	773.4	284.8	156.9	88.5	28.9	4.8	1,337.3
Payable metal in concentrate sold ⁴	128,519	104,319	108,999	3,452,926	1,186	—	—
Realized price ⁵	6,018	2,730	1,439	25.64	24,312	—	—
Realized price ⁶	2.73	1.24	—	—	11.03	—	—
Three months ended December 31, 2018							
(in \$ millions) ¹	Copper	Zinc	Gold	Silver	Molybdenum	Other	Total
Revenue per financial statements	225.9	86.5	33.4	21.4	11.9	1.4	380.5
Pricing and volume adjustments ²	(4.2)	(0.3)	6.8	(0.9)	0.1	—	1.5
Derivative mark-to-market ³	—	(0.3)	—	—	—	—	(0.3)
Revenue, excluding mark-to-market on non-QP hedges	221.7	85.9	40.2	20.5	12.0	1.4	381.7
Payable metal in concentrate sold ⁴	36,350	31,134	25,861	909,500	447	—	—
Realized price ⁵	6,098	2,760	1,554	22.50	26,833	—	—
Realized price ⁶	2.77	1.25	—	—	12.17	—	—
Year ended December 31, 2018							
(in \$ millions) ¹	Copper	Zinc	Gold	Silver	Molybdenum	Other	Total
Revenue per financial statements	963.1	357.4	149.0	85.8	21.0	4.7	1,581.0
Pricing and volume adjustments ²	(6.4)	(3.5)	4.7	0.3	0.8	—	(4.1)
Derivative mark-to-market ³	—	0.7	—	—	—	—	0.7
Revenue, excluding mark-to-market on non-QP hedges	956.7	354.6	153.7	86.1	21.8	4.7	1,577.6
Payable metal in concentrate sold ⁴	147,923	115,723	113,097	3,372,353	819	—	—
Realized price ⁵	6,468	3,065	1,359	25.52	26,592	—	—
Realized price ⁶	2.93	1.39	—	—	12.06	—	—

¹ Average realized price per unit sold may not calculate based on amounts presented in this table due to rounding.

² Pricing and volume adjustments represents mark-to-market adjustments on provisionally priced sales, realized and unrealized changes to fair value for non-hedge derivative contracts and adjustments to originally invoiced weights and assays.

³ Derivative mark-to-market excludes mark-to-market on QP hedges.

⁴ Copper and zinc shown in metric tonnes and gold and silver shown in ounces.

⁵ Realized price for copper, zinc and molybdenum in \$/metric tonne and realized price for gold and silver in \$/oz.

⁶ Realized price for copper, zinc and molybdenum in \$/lb.

The price, quantity and mix of metals sold, affect our revenue, operating cash flow and profit. Revenue from metals sales can vary from quarter to quarter due to production levels, shipping volumes and transfer of risk and title to customers.

Stream Sales

The following table shows stream sales included within realized prices and their respective deferred revenue and cash payment rates:

		Three months ended		Year ended	
		Dec. 31, 2019		Dec. 31, 2019	
		Manitoba	Peru	Manitoba	Peru
Gold	oz	4,160	3,103	17,740	11,750
Silver	oz	61,487	671,742	355,468	2,405,554
Gold deferred revenue drawdown rate ^{1,2}	\$/oz	1,183	948	1,177	948
Gold cash rate ³	\$/oz	420	404	418	402
Silver deferred revenue drawdown rate ^{1,2}	\$/oz	22.63	21.77	22.51	21.77
Silver cash rate ³	\$/oz	6.20	5.96	6.17	5.93

		Three months ended		Year ended	
		Dec. 31, 2018		Dec. 31, 2018	
		Manitoba	Peru	Manitoba	Peru
Gold	oz	4,353	3,645	19,217	12,044
Silver	oz	129,268	628,936	515,183	2,180,098
Gold deferred revenue drawdown rate ¹	\$/oz	1,241	967	1,262	967
Gold cash rate ³	\$/oz	416	400	414	400
Silver deferred revenue drawdown rate ¹	\$/oz	24.22	21.79	24.54	21.79
Silver cash rate ³	\$/oz	6.14	5.90	6.11	5.90

¹ For the three months ended December 31, 2019 deferred revenue amortization is recorded in Manitoba at C\$1,589/oz and C\$30.40/oz for gold and silver (December 31, 2018 - C\$1,635/oz and C\$31.88/oz for gold and silver), respectively, and converted to US dollars at the exchange rate in effect at the time of revenue recognition.

² Deferred revenue drawdown rates for gold and silver do not include variable consideration adjustments.

³ The gold and silver cash rate for Manitoba increased by 1% from \$400/oz and \$5.90/oz effective August 1, 2015. Subsequently every year, on August 1, the cash rate will increase by 1% compounded. The weighted average cash rate is disclosed.

Cost of Sales

Our detailed cost of sales is summarized as follows:

(in thousands)	Three months ended		Year ended	
	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Peru				
Mining	18,533	21,721	82,417	91,324
Milling	43,860	39,590	159,913	150,016
Changes in product inventory	7,410	3,453	(3,313)	(4,141)
Depreciation and amortization	56,938	52,510	209,126	211,152
G&A	15,074	15,057	57,426	56,358
Freight, royalties and other charges	17,273	16,905	59,740	59,642
Total Peru cost of sales	159,088	149,236	565,309	564,351
Manitoba				
Mining	46,335	42,825	186,972	165,108
Milling	13,396	13,372	49,269	52,544
Zinc plant	19,464	18,837	72,259	73,008
Purchased ore and concentrate (before inventory changes)	—	—	—	20,804
Changes in product inventory	3,267	2,935	(4,413)	11,395
Depreciation and amortization	37,007	29,733	135,429	121,515
G&A	11,500	9,392	47,119	46,139
Freight, royalties and other charges	8,795	10,217	33,953	43,762
Total Manitoba cost of sales	139,764	127,311	520,588	534,275
Cost of sales	298,852	276,547	1,085,897	1,098,626

Total cost of sales for the fourth quarter of 2019 was \$298.9 million, reflecting an increase of \$22.3 million from the fourth quarter of 2018. Cost of sales related to Peru increased for the fourth quarter of 2019 compared to the same period of 2018 by \$9.9 million. The increase is primarily the result of an increase in milling costs, depreciation and product inventory changes in the fourth quarter of 2019. In Manitoba, cost of sales increased by \$12.5 million compared to the fourth quarter of 2018 primarily as a result of higher mining costs, depreciation, and G&A expenses associated with higher mining activities.

For details on unit operating costs refer to the respective tables in the “Operations Review” section of this MD&A.

For the fourth quarter of 2019, other significant variances in expenses from operations, compared to the same period in 2018, include the following:

- **Selling and administrative expenses** decreased by \$3.0 million compared to the same period in 2018. This decrease was mainly due to lower administration costs and lower stock compensation charges as a result of the relative impact of the revaluation of previously issued share units.
- **Other operating expenses** decreased by \$1.9 million compared to the fourth quarter of 2018 primarily as a result of a non-cash charge of \$2.2 million related to a pension de-risking transaction we recorded in the fourth quarter of 2018.
- **Net finance expense** increased by \$11.6 million compared to the same period in 2018 principally as a result of losses recorded for our embedded derivatives, as well as higher costs due to the cessation of capitalizing interest costs as of October 1, 2019 on the Rosemont project.

For the full year 2019, other significant variances in expenses from operations, compared to 2018, include the following:

- **Selling and administrative expenses** increased by \$8.9 million compared to 2018. This increase was due mainly to costs associated with the proxy contest earlier in the year and higher depreciation charges related

to the requirement to depreciate certain corporate administrative assets under the new leasing standard effective January 1, 2019.

- **Other operating expenses** increased by \$32.0 million primarily as a result of the write down of the receivable from United Copper & Moly LLC ("UCM") for \$26.0 million in the second quarter of 2019 as part of the acquisition of the remaining interest in the Rosemont copper project, as well as losses on disposition of certain fixed assets, changes in closure cost estimates related to Manitoba's non-operating mines and certain allocated costs pertaining to community agreements in Peru.
- **Impairment losses** increased by \$322.2 million as a result of the impairment charge recorded in the third quarter of 2019 relating to the Arizona business unit.
- **Finance expenses** increased by \$10.9 million primarily due to an increase in non-cash financing charges for our precious metals stream contracts in 2019. This charge was the result of the deferred revenue adjustments for the 777 stream arrangement driven by an increase in 777's reserve and resource estimates. The increase is also due to the cessation of capitalizing certain interest costs associated with the Rosemont project as of October 1, 2019.
- **Other finance loss** increased by \$25.2 million as a result of:
 - increased foreign exchange losses of \$12.5 million when compared to the same period last year, related to foreign exchange rate movements impacting certain monetary assets in the Manitoba business unit;
 - net losses on our embedded derivatives and investments recognized at fair value through profit or loss which increased by \$6.0 million when compared to the same period last year; and,
 - mark-to-market gains on warrants, which expired in July 2018, were \$6.7 million in 2018, compared to nil in the corresponding period of 2019.

Tax Expense (Recovery)

For the three months and year ended December 31, 2019, tax expense decreased by \$62.0 million and \$194.4 million compared to the same period in 2018. The following table provides further details:

(in \$ thousands)	Three months ended		Year ended	
	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Deferred tax expense (recovery) - income tax ¹	\$ (48,476)	\$ 12,577	\$ (132,479)	\$ 40,961
Deferred tax expense (recovery) - mining tax ¹	(12,498)	326	(12,386)	(716)
Total deferred tax expense (recovery)	(60,974)	12,903	(144,865)	40,245
Current tax expense - income tax	19,067	5,122	30,201	25,245
Current tax (recovery) expense - mining tax	1,010	3,135	5,711	19,931
Total current tax expense	20,077	8,257	35,912	45,176
Tax (recovery) expense	\$ (40,897)	\$ 21,160	\$ (108,953)	\$ 85,421

¹ Deferred tax expense (recovery) represents our draw down/increase of non-cash deferred income and mining tax assets/liabilities.

Income Tax Expense

Applying the estimated Canadian statutory income tax rate of 27.0% to our loss before taxes of \$452.8 million for the full year in 2019 would have resulted in a tax recovery of approximately \$122.2 million; however, we recorded an income tax recovery of \$102.3 million. The significant items causing our effective income tax rate to be different than the 27.0% estimated Canadian statutory income tax rate include:

- Certain previously unrecognized deductible temporary differences with respect to Manitoba, mostly relating to decommissioning and restoration liabilities, were recognized in the current year as we have determined that it is probable that we will realize the recovery of these deferred tax assets through the reversals of taxable

temporary differences and future projected taxable profit of the Manitoba operations. This resulted in a decrease in deferred tax expense of approximately \$16.3 million;

- Certain deductible temporary differences with respect to our foreign operations are recorded using an income tax rate other than the Canadian statutory income tax rate of 27%, resulting in an increase in deferred tax expense of \$20.3 million;
- The write down of the UCM receivable of \$26.0 million is not deductible for local income tax purposes and therefore results in an increase in deferred tax expense of approximately \$7.0 million; and
- An intercompany dividend payment being subject to withholding tax that is classified as current income tax of \$6.8 million.

Applying the estimated Canadian statutory income tax rate of 27.0% to our income before taxes of \$170.8 million for the full year in 2018 would have resulted in a tax expense of approximately \$46.1 million; however, we recorded an income tax expense of \$66.2 million. The significant items causing our effective income tax rate to be different than the 27.0% estimated Canadian statutory income tax rate include:

- Certain temporary differences with respect to our foreign operations are recorded using an income tax rate other than the Canadian statutory income tax of 27.0%, resulting in an increase in deferred tax expense of \$9.6 million; and,
- Increase in deferred tax expense of approximately \$11.4 million since certain Canadian non-monetary assets are recognized at historical cost while the tax bases of the assets change as exchange rates fluctuate, which creates a taxable temporary difference.

Mining Tax Expense

Applying the estimated Manitoba mining tax rate of 10.0% to our loss before taxes of \$452.8 million for 2019 would have resulted in a tax recovery of approximately \$45.3 million and we recorded a mining tax recovery of \$6.7 million. Effective mining tax rates can vary significantly based on the composition of our earnings and the expected amount of mining taxable profits. Corporate costs and other costs not related to mining operations are not deductible in computing mining profits. A brief description of how mining taxes are calculated in our various business units is discussed below.

Manitoba

The Province of Manitoba imposes mining tax on profit related to the sale of mineral products mined in the Province of Manitoba (mining taxable profit) at the following rates:

- 10% of total mining taxable profit if mining profit is C\$50 million or less;
- 15% of total mining taxable profit if mining profits are between C\$55 million and C\$100 million; and
- 17% of total mining taxable profit if mining profits exceed C\$105 million.

We estimate that the tax rate that will be applicable when temporary differences reverse will be approximately 10.0%.

Peru

The Peruvian government imposes two parallel mining tax regimes, the Special Mining Tax and the Modified Royalty, on companies' operating mining income on a sliding scale, with progressive rates ranging from 2.0% to 8.4% and 1.0% to 12.0%, respectively. Based on financial forecasts, we have recorded a deferred tax liability as at December 31, 2019, at the tax rate we expect to apply when temporary differences reverse.

LIQUIDITY AND CAPITAL RESOURCES

Senior Secured Revolving Credit Facilities and Surety Bonds

We have two revolving credit facilities (the "Credit Facilities") for our Canadian and Peruvian businesses, with combined total availability of \$550 million and substantially similar terms and conditions. As at December 31, 2019, between our Credit Facilities we have drawn \$129.4 million in letters of credit, leaving total undrawn availability of \$420.6 million. As at December 31, 2019, we were in compliance with our covenants under the Credit Facilities.

The Credit Facilities were amended on February 12, 2020 primarily to revise the financial maintenance covenants. The amended covenants will provide us with additional flexibility during the development of the New Britannia and Pampacancha projects. The revised covenants are as follows:

- Maintaining net total debt to EBITDA of less than:
 - 4.50 from January 1, 2020 to March 31, 2021;
 - 4.00 from April 1, 2021 to December 31, 2021; and,
 - 3.50 from January 1, 2022 to maturity.
- Maintaining an interest coverage ratio of greater than:
 - 2.75 from April 1, 2020 to December 31, 2020; and,
 - 3.00 from January 1, 2021 to maturity.

As at December 31, 2019, the Arizona business unit had \$8.6 million in surety bonds and the Peru business unit had \$40.0 million in surety bonds, issued to support future reclamation and closure obligations. The Peru business unit also had \$45.0 in letters of credit issued with various Peruvian financial institutions.

No cash collateral is required to be posted.

Financial Condition

Financial Condition as at December 31, 2019 compared to December 31, 2018

Cash and cash equivalents decreased by \$119.4 million year-over-year to \$396.1 million as at December 31, 2019. This decrease was mainly a result of \$259.2 million of funding for capital investments primarily at our Peru and Manitoba operations, interest payments and financing activities of \$137.8 million and our acquisition of the remaining interest in the Rosemont project for \$45.0 million. This decrease was partially offset by cash flow from operating activities of \$310.9 million. We hold the majority of our cash and cash equivalents in low-risk, liquid investments with major Canadian and Peruvian financial institutions.

Working capital decreased by \$173.9 million to \$271.3 million from December 31, 2018 to December 31, 2019, primarily due to the decrease in our cash and cash equivalents position by \$119.4 million, as well as an increase in our current liabilities of \$64.6 million due to higher trade payables, planned reclamation spending related to Manitoba tailings management and higher derivative liabilities.

Cash Flows

The following table summarizes our cash flows for the three months and year ended December 31, 2019 and December 31, 2018:

<i>(in \$ thousands)</i>	Three months ended		Year ended	
	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Operating cash flow before changes in non-cash working capital	69,141	104,264	307,284	501,352
Change in non-cash working capital	29,524	33,060	3,572	(21,800)
Cash generated from operating activities	98,665	137,324	310,856	479,552
Cash (used in) generated by investing activities	(86,689)	(73,762)	(292,370)	(202,136)
Cash (used in) generated by financing activities	(14,386)	(9,592)	(137,778)	(120,354)
Effect of movement in exchange rates on cash and cash equivalents	118	1,664	(59)	1,936
(Decrease) increase in cash and cash equivalents	(2,292)	55,634	(119,351)	158,998

Cash Flow from Operating Activities

Cash generated from operating activities was \$98.7 million during the fourth quarter of 2019, a decrease of \$38.7 million compared with the same period last year. Operating cash flow before change in non-cash working capital was \$69.1 million during the fourth quarter of 2019, reflecting a decrease of \$35.1 million compared to the fourth quarter of 2018. The decrease in operating cash flow is the result of lower realized prices and lower sales volumes of copper and zinc when compared to the fourth quarter of 2018.



Cash generated from operating activities for the full year was \$310.9 million in 2019, a decrease of \$168.7 million compared to 2018. Operating cash flow before changes in non-cash working capital for the full year was \$307.3 million in 2019, a decrease of \$194.1 million compared to 2018. The decrease in operating cash flow is primarily due to the same reasons described above for the quarter over quarter change.

Cash Flow from Investing and Financing Activities

During the fourth quarter of 2019, we used \$101.1 million in investing and financing activities, primarily driven by \$88.7 million of capital expenditures, capitalized lease payments of \$9.1 million and net financing fees paid of \$5.3 million.

For the full year in 2019, we used \$430.1 million of cash in investing and financing activities, primarily driven by \$259.2 million of capital expenditures, interest payments of \$74.8 million, \$44.7 million paid for the acquisition of the remaining interest in the Rosemont project, capitalized lease payments of \$33.0 million and net financing fees paid of \$26.1 million.

Capital Expenditures

The following summarizes accrued and cash additions to capital assets for the periods indicated:

(in \$ millions)	Three months ended		Year ended		Guidance	
	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018	Annual ¹	2020
Manitoba sustaining capital expenditures ²	30.0	31.9	126.3	104.4	100.0	100.0
Peru sustaining capital expenditures ³	31.4	12.2	84.9	40.0	95.0	100.0
Total sustaining capital expenditures	61.4	44.1	211.2	144.4	195.0	200.0
Arizona capitalized costs ⁴	7.0	5.1	36.4	19.7	40.0	20.0
Peru growth capitalized expenditures ⁵	1.2	0.3	2.1	2.3	45.0	70.0
Manitoba growth capitalized expenditures	7.8	0.2	14.1	18.1	10.0	80.0
Other capitalized costs ⁶	49.3	16.3	91.9	12.3		
Capitalized exploration	8.9	10.2	15.7	11.7	15.0	15.0
Capitalized interest	—	3.3	9.9	13.2		
Total other capitalized costs	74.2	35.4	170.1	77.3		
Total capital additions	135.6	79.5	381.3	221.7		
Reconciliation to cash capital additions:						
Decommissioning and restoration obligation	(46.6)	(15.4)	(89.4)	(9.0)		
Capitalized interest	—	(3.3)	(9.9)	(13.2)		
Right-of-use asset additions	(2.4)	—	(22.2)	—		
Changes in capital accruals and other	2.1	(3.4)	(0.6)	(8.6)		
Total cash capital additions	88.7	57.4	259.2	190.9		

¹ Sustaining capital expenditure guidance excludes capitalized interest.

² Manitoba sustaining capital expenditures for the twelve months ended December 31, 2019 include a new capitalized lease related to sustaining capital expenditures of \$14.3 million not included in annual guidance.

³ Peru sustaining capital expenditures includes capitalized stripping costs.

⁴ Initial guidance of \$20.0 million in 2019.

⁵ Peru growth capital expenditures of \$45.0 million in 2019 related to expenditures for developing the Pampacancha deposit and acquiring surface rights, which has been deferred to 2020.

⁶ Other capitalized costs include decommissioning and restoration adjustments.

Sustaining capital expenditures in Manitoba for the fourth quarter ended December 31, 2019 were \$30.0 million, a decrease of \$1.9 million compared to the same period in 2018. Sustaining capital expenditures for Manitoba for the year ended December 31, 2019 were \$126.3 million, an increase of \$21.9 million compared to the same periods in 2018. This increase in Manitoba sustaining capital expenditures compared to the last year was due to negotiated amendments to a contract with an existing Lalor mine contractor as the contractor's equipment is now accounted for as a capitalized lease under IFRS, resulting in additional reported sustaining capital expenditures of \$14.3 million, as well as higher sustaining capital expenditures for Snow Lake.

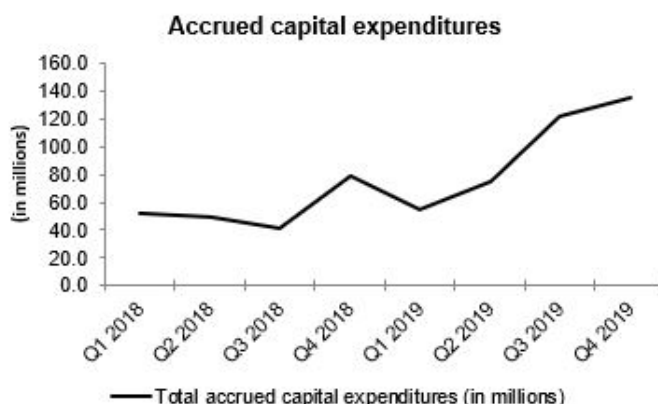
Sustaining capital expenditures in Peru for the fourth quarter and year ended December 31, 2019 were \$31.4 million and \$84.9 million, respectively, which is an increase of \$19.2 million and \$44.9 million respectively, from the same periods in 2018. The increase in Peru sustaining capital expenditures compared to the same periods last year was the mainly due to timing of mine equipment repair overhauls, deferred stripping and plant projects partially offset by tailings management construction.

During 2019, the increase in the other capitalized costs line item to \$91.9 million was mostly due to additional provisions recognized for higher estimated decommissioning and restoration activities at the Manitoba operations. These costs mainly relate to work required to enhance the factor of safety associated with our legacy Flin Flon tailings impoundment area in line with higher industry-wide standards for tailings dam safety that are being implemented following the failure of other tailings dams in recent years. Construction work to implement these improvements is underway, and will

involve spending of approximately \$20 million per year from 2020 to 2022. For accounting purposes, as these expenditures are associated with the decommissioning and restoration liability, they will be accounted for as a drawdown of the liability and will not directly impact either operating costs or reported capital expenditures. These expenditures are expected to be reflected in cash generated from operating activities in the consolidated statements of cash flows.

As disclosed in March 2019, the Board approved a \$122 million early works program for Rosemont in addition to the \$20 million of initial guidance for Arizona capitalized costs. As a result of the Court's ruling issued on July 31, 2019, we suspended most of the early works activities and reduced 2019 guidance for Rosemont spending to \$40 million in aggregate.

Consolidated sustaining capital expenditures in 2019 were above the upper range of the full year guidance due mainly to the accounting impact of negotiated amendments to a contract with an existing Lalor mine contractor as described above.



Capital Commitments

As at December 31, 2019, we had outstanding capital commitments in Canada of approximately \$3.7 million of which \$1.9 million can be terminated, approximately \$34.6 million in Peru primarily related to exploration option agreements, all of which can be terminated, and approximately \$180.4 million in Arizona, primarily related to our Rosemont project, of which approximately \$89.4 million can be terminated.

Contractual Obligations

The following table summarizes our significant contractual obligations as at December 31, 2019:

<i>Payment Schedule (in \$ millions)</i>	Total	Less than 12 months	13 - 36 months	37 - 60 months	More than 60 months
Long-term debt obligations ¹	1,366.0	79.7	157.4	506.0	622.9
Lease obligations	172.3	85.4	74.9	7.8	4.2
Purchase obligation - capital commitments	218.7	16.2	51.6	5.6	145.3
Purchase obligation - other commitments ²	644.7	249.8	212.6	128.5	53.8
Pension and other employee future benefits obligations ³	158.3	15.1	35.8	7.2	100.2
Decommissioning and restoration obligations ⁴	272.7	23.8	42.1	13.2	193.6
Total	2,832.7	470.0	574.4	668.3	1,120.0

¹ Long-term debt obligations include scheduled interest payments, as well as principal repayments.

² Primarily made up of long-term agreements with operational suppliers, obligations for power purchase, concentrate handling, fleet and port services, as well as deferred consideration arising from the acquisition of Rosemont's minority interest.

³ Discounted.

⁴ Before inflation.

In addition to the contractual obligations included in the above payment schedule, we also have the following commitments which impact our financial position:

- A profit-sharing plan with most Manitoba employees;
- A profit-sharing plan with all Peru employees;
- Wheaton Precious Metals precious metals stream agreements for the 777 mine and Constancia mines;
- A net smelter returns royalty agreement related to the 777 mine; and,
- Various royalty agreements related to the Constancia mine.

Liquidity

As at December 31, 2019, we had \$396.1 million in cash and cash equivalents, as well as \$420.6 million in undrawn availability under our Credit Facilities. We expect that our current liquidity and future cash flows will be sufficient to meet our obligations in the coming year.

Outstanding Share Data

As of February 19, 2020, there were 261,272,151 common shares of Hudbay issued and outstanding.

FINANCIAL RISK MANAGEMENT

From time to time, we maintain price protection programs and conduct commodity price risk management to reduce risk through the use of financial instruments.

Base Metals Price Strategic Risk Management

Our strategic objective is to provide our investors with exposure to base metals prices, unless a reason exists to implement a hedging arrangement. In the normal course, we typically consider base metal price hedging:

- In conjunction with a major capital commitment to a growth opportunity for which operating cash flow is a key funding source;
- To ensure the viability of a shorter life and/or higher cost mine;
- To manage the risk associated with provisional pricing terms in concentrate purchase and sale agreements;
- To offset fixed price zinc sales contracts with customers.

During 2019, we entered into copper hedging transactions intended to manage the risk associated with provisional pricing terms in concentrate sales agreements.

As at December 31, 2019, we had 30,000 tonnes of copper fixed for floating swaps outstanding at an average fixed receivable price of \$2.67/lb associated with provisional pricing risk in concentrate sales agreements. These swaps settle across January to April 2020.

To provide a service to customers who purchase zinc from our plants and require known future prices, we enter into fixed price sales contracts. To ensure that we continue to receive a floating or unhedged realized zinc price, we enter into forward zinc purchase contracts that effectively offset the fixed price sales contracts with our customers.

From time to time, we enter into gold and silver forward sales contracts to hedge the commodity price risk associated with the future settlement of provisionally priced deliveries. We are generally obligated to deliver gold and silver to Wheaton prior to the determination of final settlement prices. These forward sales contracts are entered into at the time we deliver gold and silver to Wheaton, and are intended to mitigate the risk of subsequent adverse gold and silver price changes. Gains and losses resulting from the settlement of these derivatives are recorded directly to revenue, as the forward sales contracts do not achieve hedge accounting, and the associated cash flows are classified in operating activities. Our swap agreements are with counterparties we believe to be creditworthy and do not require us to provide collateral.



Interest Rate and Foreign Exchange Risk Management

To the extent that we incur indebtedness at variable interest rates to fund our growth objectives, we may enter into interest rate hedging arrangements to manage our exposure to short-term interest rates. To the extent that we make commitments to capital expenditures denominated in foreign currencies, we may enter into foreign exchange forwards or acquire foreign currency outright, which may result in foreign exchange gains or losses in our consolidated income statements.

At December 31, 2019, approximately \$373.9 million of our cash and cash equivalents was held in US dollars, approximately \$13.3 million of our cash and cash equivalents was held in Canadian dollars, and approximately \$8.9 million of our cash and cash equivalents was held in Peruvian soles.

TREND ANALYSIS AND QUARTERLY REVIEW

The following table sets forth selected consolidated financial information for each of our eight most recently completed quarters:

	2019				2018			
(in \$ millions)	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Revenue	324.5	291.3	329.4	292.3	351.8	362.6	371.3	386.7
Gross margin	25.6	31.0	43.1	51.8	75.2	85.3	92.5	120.8
Profit (loss) before tax	(42.4)	(348.4)	(43.9)	(18.1)	17.7	30.3	49.8	73.1
(Loss) profit	(1.5)	(274.8)	(54.1)	(13.4)	(3.5)	22.8	24.7	41.4
(Loss) earnings per share:								
Basic and Diluted	(0.01)	(1.05)	(0.21)	(0.05)	(0.01)	0.09	0.09	0.16
Operating cash flow ¹	69.1	71.2	81.3	85.7	104.3	122.9	134.0	140.2

¹ Operating cash flow before changes in non-cash working capital

After peaking in the first half of 2018, copper and zinc prices have gradually declined through the second half of 2018 and calendar 2019. This has combined with a trend towards lower copper grades in the Constancia mine plan and the closure of the Reed copper mine in August 2018 to result in lower revenues and gross margin, although the lower Constancia grades have been partially offset by higher mill throughput and recoveries. Earnings in the third quarter of 2019 also included an after-tax impairment charge of \$242.1 million, net of tax for the Arizona business unit as a result of the Court's decision related to the Rosemont project permits. Earnings in the second quarter of 2019 were impacted by a write down of \$26.0 million related to the UCM receivable which was exchanged for higher ownership in the Rosemont project prior to purchasing the remaining interest from UCM on April 25, 2019. In the first quarter of 2019, pre-tax revenue and finance expenses were negatively impacted by a \$22.3 million charge due to a deferred revenue adjustment arising from higher reserves and resources. In addition, in the first quarter of 2019, an additional delivery obligation of \$7.5 million was recognized related to the expectation that mining of the Pampacancha deposit will not begin until 2020.

The following table sets forth selected consolidated financial information for each of the three most recently completed years:

<i>(in \$ millions, except for earnings (loss) per share and dividends declared per share)</i>	2019	2018	2017 (Restated)
Revenue	1,237.4	1,472.4	1,402.3
Gross Margin	151.5	373.7	409.1
Profit (loss) before tax	(452.8)	170.8	172.9
Profit (loss)	(343.8)	85.4	139.7
Earnings (loss) per share:			
Basic and diluted	(1.32)	0.33	0.57
Total assets	4,456.0	4,685.6	4,728.0
Operating cash flow ¹	307.3	501.4	569.9
Total non-current financial liabilities ²	1,074.2	1,053.6	1,066.6
Dividends declared per share - C\$ ³	0.02	0.02	0.02

¹ Operating cash flow before change in non-cash working capital.

² Total long-term financial liabilities include non-current portions of net long-term debt, other financial liabilities and finance lease obligations.

³ Dividend paid during March and September of each year.

In 2019, realized prices for copper and zinc decreased by 7% and 11%, respectively, compared to prices in 2018. Realized prices for gold increased by 6% compared to prices in 2018. Mill throughput at Constancia reached annual record levels, contributing to higher milling costs, however milled grades dropped in accordance with the mine plan and these factors drove the overall reduction in operating cash flow before changes in non-cash working capital. Revenues decreased by 16% due to lower metals prices and sales volumes for copper and zinc. Profit before tax decreased by \$623.6 million mainly due to a \$322.2 million impairment charge recorded in the third quarter of 2019 relating to the Arizona business unit, as well as a write down of the receivable from UCM for \$26.0 million in the second quarter of 2019.

In 2018, realized prices for copper and gold rose by 4% and 7%, respectively, compared to prices in 2017. Comparable prices for other metals resulted in relatively consistent revenues, year-over-year. Mill throughput at Constancia reached annual record levels, contributing to higher milling costs, and was the primary driver for the overall reduction in operating cash flow before changes in non-cash working capital. Revenues rose by 5%, despite lower sales volumes for copper, gold and zinc, and profit before tax remained consistent with prior year, although operating costs rose due to the aforementioned higher production costs.

In addition to the items noted above which impacted gross margin, net profit (loss) was impacted by the following items:

Year	Significant non-recurring items affecting net income	Before tax net income impact (in \$ millions)	After tax net income impact (in \$ millions)
2017	Non-cash deferred tax adjustments	—	45.4
2018	Non-cash deferred tax adjustments	—	(21.7)
2019	Non-cash deferred tax adjustments	—	16.3
2019	Write-down on UCM receivable	(26.0)	(26.0)
2019	Rosemont impairment	(322.2)	(242.1)

NON-IFRS FINANCIAL PERFORMANCE MEASURES

Net debt is shown because it is a performance measure used by the Company to assess our financial position. Cash cost, sustaining and all-in sustaining cash cost per pound of copper produced are shown because we believe they help investors and management assess the performance of our operations, including the margin generated by the operations and the Company. Cash cost and sustaining cash cost per pound of zinc produced are shown because we believe they help investors and management assess the performance of our Manitoba operations. These measures do not have a meaning prescribed by IFRS and are therefore unlikely to be comparable to similar measures presented by other issuers. These measures should not be considered in isolation or as a substitute for measures prepared in accordance with IFRS and are not necessarily indicative of operating profit or cash flow from operations as determined under IFRS. Other companies may calculate these measures differently.

Net Debt

The following table presents our calculation of net debt as at December 31, 2019 and December 31, 2018:

(in \$ thousands)	Dec. 31, 2019	Dec. 31, 2018
Total long-term debt, as per IFRS financial statements	985,255	981,030
Cash and cash equivalents, as per IFRS financial statements	(396,146)	(515,497)
Net debt	589,109	465,533

Cash Cost, Sustaining and All-in Sustaining Cash Cost (Copper Basis)

Cash cost per pound of copper produced ("cash cost") is a non-IFRS measure that management uses as a key performance indicator to assess the performance of our operations. Our calculation designates copper as our primary metal of production as it has been the largest component of revenues. The calculation is presented in four manners:

- **Cash cost, before by-product credits** - This measure is gross of by-product revenues and is a function of the efforts and costs incurred to mine and process all ore mined. However, the measure divides this aggregate cost over only pounds of copper produced, our primary metal of production. This measure is generally less volatile from period to period, as it is not affected by changes in the price received for by-product metals. It is, however, significantly affected by the relative mix of copper concentrate and finished zinc production, where the sale of the zinc will occur later, and an increase in production of zinc metal will tend to result in an increase in cash cost under this measure.
- **Cash cost, net of by-product credits** - In order to calculate the net cost to produce and sell copper, the net of by-product credits measure subtracts the revenues realized from the sale of the metals other than copper. The by-product revenues from zinc, gold, and silver are significant and are integral to the economics of our operations. The economics that support our decision to produce and sell copper would be different if we did not receive revenues from the other significant metals being extracted and processed. This measure provides management and investors with an indication of the minimum copper price consistent with positive operating cash flow and operating margins, assuming realized by-product metal prices are consistent with those prevailing during the reporting period. It also serves as an important operating statistic that management and investors utilize to measure our operating performance versus that of our competitors. However, it is important to understand that if by-product metal prices decline alongside copper prices, the cash cost net of by-product credits would increase, requiring a higher copper price than that reported to maintain positive cash flows and operating margins.
- **Sustaining cash cost, net of by-product credits** - This measure is an extension of cash cost that includes cash sustaining capital expenditures, including payments on capitalized leases, capitalized sustaining exploration, net smelter returns royalties, payments on long term community agreements, as well as accretion and amortization for expected decommissioning activities for producing assets. It does not include corporate selling and administrative expenses. It provides a more fulsome measurement of the cost of sustaining production than cash cost, which is focused on operating costs only.
- **All-in sustaining cash cost, net of by-product credits** - This measure is an extension of sustaining cash cost that includes corporate G&A, regional costs, accretion and amortization for community agreements relating to current operations, and accretion and amortization for expected decommissioning activities for non-producing assets. Due to the inclusion of corporate selling and administrative expenses, all-in sustaining cash cost is presented on a consolidated basis only.

The tables below present a detailed build-up of cash cost and sustaining cash cost, net of by-product credits, by business unit in addition to consolidated all-in sustaining cash cost, net of by-product credits, and reconciliations between cash cost, net of by-product credits, to the most comparable IFRS measures of cost of sales for the three months and year ended December 31, 2019 and 2018. Cash cost, net of by-product credits may not calculate exactly based on amounts presented in the tables below due to rounding.

Consolidated	Three months ended		Year ended	
Net pounds of copper produced				
<i>(in thousands)</i>	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Peru	58,773	67,977	250,940	269,357
Manitoba	12,705	14,118	51,487	71,368
Net pounds of copper produced	71,478	82,095	302,427	340,725

Consolidated	Three months ended				Year ended			
	Dec. 31, 2019		Dec. 31, 2018		Dec. 31, 2019		Dec. 31, 2018	
Cash cost per pound of copper produced	\$000s	\$/lb	\$000s	\$/lb	\$000s	\$/lb	\$000s	\$/lb
Cash cost, before by-product credits	209,597	2.93	211,023	2.57	816,115	2.70	844,441	2.48
By-product credits, net of deferred revenue	(121,847)	(1.70)	(134,200)	(1.63)	(471,386)	(1.56)	(524,193)	(1.54)
Cash cost, net of by-product credits	87,750	1.23	76,823	0.94	344,729	1.14	320,248	0.94

Consolidated	Three months ended				Year ended			
	Dec. 31, 2019		Dec. 31, 2018		Dec. 31, 2019		Dec. 31, 2018	
Supplementary cash cost information	\$000s	\$/lb ¹	\$000s	\$/lb ¹	\$000s	\$/lb ¹	\$000s	\$/lb ¹
By-product credits:								
Zinc	71,732	1.00	86,264	1.05	284,766	0.94	353,971	1.04
Gold ³	45,214	0.63	36,397	0.44	143,448	0.47	151,452	0.44
Silver ³	24,723	0.35	21,432	0.26	85,681	0.28	85,616	0.25
Molybdenum & other	4,057	0.06	13,367	0.16	33,594	0.11	26,536	0.08
Total by-product credits	145,726	2.04	157,460	1.92	547,489	1.81	617,575	1.81
Less: deferred revenue ³	(23,879)	(0.33)	(23,260)	(0.28)	(76,103)	(0.25)	(93,382)	(0.27)
Total by-product credits, net of deferred revenue	121,847	1.70	134,200	1.63	471,386	1.56	524,193	1.54
Reconciliation to IFRS:								
Cash cost, net of by-product credits	87,750		76,823		344,729		320,248	
By-product credits	145,726		157,460		547,489		617,575	
Change in deferred revenues	(23,879)		(23,260)		(76,103)		(93,382)	
Treatment and refining charges	(21,176)		(27,352)		(83,481)		(101,909)	
Share-based payment	208		180		400		160	
Inventory adjustments	1,668		(32)		2,272		(234)	
Change in product inventory	10,677		6,388		(7,726)		7,254	
Royalties	3,933		4,097		13,762		16,247	
Depreciation and amortization ²	93,945		82,243		344,555		332,667	
Cost of sales ⁴	298,852		276,547		1,085,897		1,098,626	

¹ Per pound of copper produced.

² Depreciation is based on concentrate sold.

³ Twelve months ended December 31, 2019 gold and silver by-product credits and deferred revenue both reflect the \$16.3 million revenue adjustment primarily associated with the increase in reserves and resources at the 777 mine.

⁴ As per IFRS financial statements.

Peru (in thousands)	Three months ended		Year ended	
	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Net pounds of copper produced ¹	58,773	67,977	250,940	269,357

¹ Contained copper in concentrate.

Peru	Three months ended				Year ended			
	Dec. 31, 2019		Dec. 31, 2018		Dec. 31, 2019		Dec. 31, 2018	
Cash cost per pound of copper produced	\$000s	\$/lb	\$000s	\$/lb	\$000s	\$/lb	\$000s	\$/lb
Mining	18,533	0.32	21,721	0.32	82,417	0.33	91,324	0.34
Milling	43,860	0.75	39,590	0.58	159,913	0.64	150,016	0.56
G&A	15,147	0.26	15,036	0.22	56,847	0.23	56,533	0.21
Onsite costs	77,540	1.32	76,347	1.12	299,177	1.19	297,873	1.11
Treatment & refining	15,361	0.26	19,050	0.28	59,809	0.24	65,937	0.24
Freight & other	15,121	0.26	14,919	0.22	53,016	0.21	51,840	0.19
Cash cost, before by-product credits	108,022	1.84	110,316	1.62	412,002	1.64	415,650	1.54
By-product credits, net of deferred revenue	(10,583)	(0.18)	(21,169)	(0.31)	(58,053)	(0.23)	(49,587)	(0.18)
Cash cost, net of by-product credits	97,439	1.66	89,147	1.31	353,949	1.41	366,063	1.36

Peru	Three months ended				Year ended			
	Dec. 31, 2019		Dec. 31, 2018		Dec. 31, 2019		Dec. 31, 2018	
Supplementary cash cost information	\$000s	\$/lb ¹	\$000s	\$/lb ¹	\$000s	\$/lb ¹	\$000s	\$/lb ¹
By-product credits:								
Gold	5,782	0.10	8,588	0.13	24,398	0.10	24,156	0.09
Silver	19,576	0.33	15,320	0.23	69,802	0.28	60,138	0.22
Molybdenum	2,791	0.05	11,990	0.18	28,835	0.11	21,791	0.08
Total by-product credits	28,149	0.48	35,898	0.53	123,035	0.49	106,085	0.39
Less: deferred revenue	(17,566)	(0.30)	(14,729)	(0.22)	(64,982)	(0.26)	(56,498)	(0.21)
Total by-product credits, net of deferred revenue	10,583	0.18	21,169	0.31	58,053	0.23	49,587	0.18
Reconciliation to IFRS:								
Cash cost, net of by-product credits	97,439		89,147		353,949		366,063	
By-product credits	28,149		35,898		123,035		106,085	
Change in deferred revenues	(17,566)		(14,729)		(64,982)		(56,498)	
Treatment and refining charges	(15,361)		(19,050)		(59,809)		(65,937)	
Inventory adjustments	(100)		(32)		504		(234)	
Share-based payment	27		53		75		59	
Change in product inventory	7,410		3,453		(3,313)		(4,141)	
Royalties	2,152		1,986		6,724		7,802	
Depreciation and amortization ²	56,938		52,510		209,126		211,152	
Cost of sales³	159,088		149,236		565,309		564,351	

¹ Per pound of copper produced.

² Depreciation is based on concentrate sold.

³ As per IFRS financial statements.

Manitoba <i>(in thousands)</i>	Three months ended		Year ended	
	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Net pounds of copper produced¹	12,705	14,118	51,487	71,368

¹ Contained copper in concentrate.

Manitoba	Three months ended				Year ended			
	Dec. 31, 2019		Dec. 31, 2018		Dec. 31, 2019		Dec. 31, 2018	
Cash cost per pound of copper produced	\$000s	\$/lb	\$000s	\$/lb	\$000s	\$/lb	\$000s	\$/lb
Mining	46,335	3.65	42,825	3.03	186,972	3.63	165,108	2.31
Milling	13,396	1.05	13,372	0.95	49,269	0.96	52,544	0.74
Refining (zinc)	19,464	1.53	18,837	1.33	72,259	1.40	73,008	1.02
G&A	9,551	0.75	9,265	0.66	45,026	0.87	46,038	0.65
Purchased ore and zinc concentrates	—	—	—	—	—	—	20,804	0.29
Onsite costs	88,746	6.98	84,299	5.97	353,526	6.87	357,502	5.01
Treatment & refining	5,815	0.46	8,302	0.59	23,672	0.46	35,972	0.50
Freight & other	7,014	0.55	8,106	0.57	26,915	0.52	35,317	0.49
Cash cost, before by-product credits	101,575	7.99	100,707	7.13	404,113	7.85	428,791	6.01
By-product credits, net of deferred revenue	(111,264)	(8.76)	(113,031)	(8.01)	(413,333)	(8.03)	(474,606)	(6.65)
Cash cost, net of by-product credits	(9,689)	(0.76)	(12,324)	(0.87)	(9,220)	(0.18)	(45,815)	(0.64)

Manitoba	Three months ended				Year ended			
	Dec. 31, 2019		Dec. 31, 2018		Dec. 31, 2019		Dec. 31, 2018	
Supplementary cash cost information	\$000s	\$/lb ¹	\$000s	\$/lb ¹	\$000s	\$/lb ¹	\$000s	\$/lb ¹
By-product credits:								
Zinc	71,732	5.65	86,264	6.11	284,766	5.53	353,971	4.96
Gold	39,432	3.10	27,809	1.97	119,050	2.31	127,296	1.78
Silver	5,147	0.41	6,112	0.43	15,879	0.31	25,478	0.36
Other	1,266	0.10	1,377	0.10	4,759	0.09	4,745	0.07
Total by-product credits	117,577	9.25	121,562	8.61	424,454	8.24	511,490	7.17
Less: deferred revenue	(6,313)	(0.50)	(8,531)	(0.60)	(11,121)	(0.22)	(36,884)	(0.52)
Total by-product credits, net of deferred revenue	111,264	8.76	113,031	8.01	413,333	8.03	474,606	6.65
Reconciliation to IFRS:								
Cash cost, net of by-product credits	(9,689)		(12,324)		(9,220)		(45,815)	
By-product credits	117,577		121,562		424,454		511,490	
Change in deferred revenues	(6,313)		(8,531)		(11,121)		(36,884)	
Treatment and refining charges	(5,815)		(8,302)		(23,672)		(35,972)	
Inventory adjustments	1,768		—		1,768		—	
Share-based payment	181		127		325		101	
Change in product inventory	3,267		2,935		(4,413)		11,395	
Royalties	1,781		2,111		7,038		8,445	
Depreciation and amortization ²	37,007		29,733		135,429		121,515	
Cost of sales³	139,764		127,311		520,588		534,275	

¹ Per pound of copper produced.

² Depreciation is based on concentrate sold.

³ As per IFRS financial statements.

Consolidated	Three months ended				Year ended			
	Dec. 31, 2019		Dec. 31, 2018		Dec. 31, 2019		Dec. 31, 2018	
All-in sustaining cash cost per pound of copper produced	\$000s	\$/lb	\$000s	\$/lb	\$000s	\$/lb	\$000s	\$/lb
Cash cost, net of by-product credits	87,750	1.23	76,823	0.94	344,729	1.14	320,248	0.94
Cash sustaining capital expenditures	74,362	1.04	48,313	0.59	241,461	0.80	164,578	0.48
Capitalized exploration ¹	8,807	0.12	8,698	0.11	12,391	0.04	10,222	0.03
Royalties	3,933	0.06	4,097	0.05	13,762	0.05	16,247	0.05
Sustaining cash cost, net of by-product credits	174,852	2.45	137,931	1.68	612,343	2.03	511,295	1.50
Corporate selling and administrative expenses & regional costs	6,702	0.09	9,600	0.12	39,950	0.13	31,916	0.09
Accretion and amortization of decommissioning and community agreements ²	677	0.01	88	0.00	2,521	0.01	308	0.00
All-in sustaining cash cost, net of by-product credits	182,231	2.55	147,619	1.80	654,814	2.17	543,519	1.60

¹ Only includes exploration costs incurred for locations near existing mines.

² Includes accretion and amortization of decommissioning relating to non-productive sites, and accretion and amortization of current community agreements.

Peru	Three months ended				Year ended			
	Dec. 31, 2019		Dec. 31, 2018		Dec. 31, 2019		Dec. 31, 2018	
Sustaining cash cost per pound of copper produced	\$000s	\$/lb	\$000s	\$/lb	\$000s	\$/lb	\$000s	\$/lb
Cash cost, net of by-product credits	97,439	1.66	89,147	1.31	353,949	1.41	366,063	1.36
Cash sustaining capital expenditures	37,676	0.64	13,394	0.20	108,420	0.43	44,664	0.17
Capitalized exploration	8,000	0.14	8,500	0.13	8,000	0.03	8,500	0.03
Royalties	2,152	0.04	1,986	0.03	6,724	0.03	7,802	0.03
Sustaining cash cost per pound of copper produced	145,267	2.47	113,027	1.66	477,093	1.90	427,029	1.59

Manitoba	Three months ended				Year ended			
	Dec. 31, 2019		Dec. 31, 2018		Dec. 31, 2019		Dec. 31, 2018	
Sustaining cash cost per pound of copper produced	\$000s	\$/lb	\$000s	\$/lb	\$000s	\$/lb	\$000s	\$/lb
Cash cost, net of by-product credits	(9,689)	(0.76)	(12,324)	(0.87)	(9,220)	(0.18)	(45,815)	(0.64)
Cash sustaining capital expenditures	36,686	2.89	34,919	2.47	133,041	2.58	119,914	1.68
Capitalized exploration	807	0.06	198	0.01	4,391	0.09	1,722	0.02
Royalties	1,781	0.14	2,111	0.15	7,038	0.14	8,445	0.12
Sustaining cash cost per pound of copper produced	29,585	2.33	24,904	1.76	135,250	2.63	84,266	1.18

Zinc Cash Cost and Zinc Sustaining Cash Cost

Cash cost per pound of zinc produced ("zinc cash cost") is a non-IFRS measure that management uses as a key performance indicator to assess the performance of our Manitoba operations. This alternative cash cost calculation designates zinc as the primary metal of production as it is the largest component of revenues for our Manitoba business unit and should therefore be less volatile over time than Manitoba cash cost per pound of copper. The calculation is presented in three manners:

- **Zinc cash cost, before by-product credits** - This measure is gross of by-product revenues and is a function of the efforts and costs incurred to mine and process all ore mined. However, the measure divides this aggregate cost over only pounds of zinc produced, our primary metal of production. This measure is generally less volatile from period to period, as it is not affected by changes in the price received for by-product metals. It is, however, significantly affected by the relative mix of copper concentrate and finished zinc production, where the sale of the copper will occur later, and an increase in production of copper metal will tend to result in an increase in zinc cash cost under this measure.
- **Zinc cash cost, net of by-product credits** - In order to calculate the net cost to produce and sell zinc, the net of by-product credits measure subtracts the revenues realized from the sale of the metals other than zinc. The by-product revenues from copper, gold, and silver are significant and are integral to the economics of our Manitoba operation. The economics that support our decision to produce and sell zinc would be different if we did not receive revenues from the other significant metals being extracted and processed. This measure provides management and investors with an indication of the minimum zinc price consistent with positive operating cash flow and operating margins, assuming realized by-product metal prices are consistent with those prevailing during the reporting period. It also serves as an important operating statistic that management and investors utilize to measure our operating performance at our Manitoba operation versus that of our competitors. However, it is important to understand that if by-product metal prices decline alongside zinc prices, the zinc cash cost net of by-product credits would increase, requiring a higher zinc price than that reported to maintain positive cash flows and operating margins.
- **Zinc sustaining cash cost, net of by-product credits** - This measure is an extension of zinc cash cost that includes cash sustaining capital expenditures, capitalized exploration and net smelter returns royalties. It does not include corporate selling and administrative expenses. It provides a more fulsome measurement of the cost of sustaining production than zinc cash cost, which is focused on operating costs only.

The tables below present a detailed build-up of zinc cash cost and zinc sustaining cash cost, net of by-product credits, for the Manitoba business unit, and reconciliations between zinc cash cost, net of by-product credits, to the most comparable IFRS measures of cost of sales for the three and nine months ended December 31, 2019 and 2018. Zinc cash cost, net of by-product credits, may not calculate exactly based on amounts presented in the tables below due to rounding.

Manitoba <i>(in thousands)</i>	Three months ended		Year ended	
	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Net pounds of zinc produced¹	67,444	60,425	262,583	254,828

¹ Contained zinc in concentrate.

Manitoba	Three months ended				Year ended			
	Dec. 31, 2019		Dec. 31, 2018		Dec. 31, 2019		Dec. 31, 2018	
Cash cost per pound of zinc produced	\$000s	\$/lb	\$000s	\$/lb	\$000s	\$/lb	\$000s	\$/lb
Cash cost, before by-product credits ¹	101,575	1.51	100,707	1.67	404,113	1.54	428,791	1.69
By-product credits	(72,517)	(1.08)	(55,460)	(0.92)	(265,205)	(1.01)	(312,438)	(1.23)
Zinc cash cost, net of by-product credits	29,058	0.43	45,247	0.75	138,908	0.53	116,353	0.46

¹ For additional detail on cash cost, before by-product credits please see page 46 of this MD&A.

Manitoba	Three months ended				Year ended			
	Dec. 31, 2019		Dec. 31, 2018		Dec. 31, 2019		Dec. 31, 2018	
	\$000s	\$/lb ¹	\$000s	\$/lb ¹	\$000s	\$/lb ¹	\$000s	\$/lb ¹
Supplementary cash cost information								
By-product credits:								
Copper	32,985	0.49	28,693	0.47	136,638	0.52	191,803	0.75
Gold	39,432	0.58	27,809	0.46	119,050	0.45	127,296	0.50
Silver	5,147	0.08	6,112	0.10	15,879	0.06	25,478	0.10
Other	1,266	0.02	1,377	0.02	4,759	0.02	4,745	0.02
Total by-product credits	78,830	1.17	63,991	1.06	276,326	1.05	349,322	1.37
Less: deferred revenue	(6,313)	(0.09)	(8,531)	(0.14)	(11,121)	(0.04)	(36,884)	(0.14)
Total by-product credits, net of deferred revenue	72,517	1.08	55,460	0.92	265,205	1.01	312,438	1.23
Reconciliation to IFRS:								
Cash cost, net of by-product credits	29,058		45,247		138,908		116,353	
By-product credits	78,830		63,991		276,326		349,322	
Change in deferred revenues	(6,313)		(8,531)		(11,121)		(36,884)	
Treatment and refining charges	(5,815)		(8,302)		(23,672)		(35,972)	
Share-based payment	181		127		325		101	
Inventory adjustments	1,768		—		1,768		—	
Change in product inventory	3,267		2,935		(4,413)		11,395	
Royalties	1,781		2,111		7,038		8,445	
Depreciation and amortization ²	37,007		29,733		135,429		121,515	
Cost of sales³	139,764		127,311		520,588		534,275	

¹ Per pound of zinc produced.

² Depreciation is based on concentrate sold.

³ As per IFRS financial statements.

Manitoba	Three months ended				Year ended			
	Dec. 31, 2019		Dec. 31, 2018		Dec. 31, 2019		Dec. 31, 2018	
	\$000s	\$/lb	\$000s	\$/lb	\$000s	\$/lb	\$000s	\$/lb
Sustaining cash cost per pound of zinc produced								
Zinc cash cost, net of by-product credits	29,058	0.43	45,247	0.75	138,908	0.53	116,353	0.46
Cash sustaining capital expenditures	36,686	0.54	34,919	0.58	133,041	0.51	119,914	0.47
Capitalized exploration	807	0.01	198	—	4,391	0.02	1,722	0.01
Royalties	1,781	0.03	2,111	0.03	7,038	0.03	8,445	0.03
Sustaining cash cost per pound of zinc produced	68,332	1.01	82,475	1.36	283,378	1.08	246,434	0.97

Combined Unit Cost & Zinc Plant Unit Cost Reconciliation

Combined unit cost ("unit cost") and zinc plant unit cost is a non-IFRS measure that management uses as a key performance indicator to assess the performance of our mining and milling operations. Combined unit cost and zinc plant unit cost are calculated by dividing the cost of sales by mill throughput and refined zinc metal produced, respectively. This measure is utilized by management and investors to assess our cost structure and margins and compare it to similar information provided by other companies in our industry. Unlike cash cost, this measure is not impacted by variability in by-product commodity prices since there are no by-product deductions; costs associated with profit-sharing and similar costs are excluded because of their correlation to external metal prices. In addition, the unit costs are reported in the functional currency of the operation which minimizes the impact of foreign currency fluctuations. In all, the unit cost measures provide an alternative perspective on operating cost performance with minimal impact from external market prices.

The tables below present a detailed combined unit cost and zinc plant unit costs for the Manitoba business unit and combined unit cost for the Peru business unit, and reconciliations between these measures to the most comparable IFRS measures of cost of sales for the three and nine months ended December 31, 2019 and 2018.

Peru	Three months ended		Year ended	
<i>(in thousands except unit cost per tonne)</i>	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Combined unit cost per tonne processed				
Mining	18,533	21,721	82,417	91,324
Milling	43,860	39,590	159,913	150,016
G&A ¹	15,147	15,036	56,847	56,533
Other G&A ²	(1,339)	(692)	(1,051)	(2,521)
Unit cost	76,201	75,655	298,126	295,352
Tonnes ore milled	7,474	7,658	31,387	31,283
Combined unit cost per tonne	10.20	9.88	9.50	9.44
Reconciliation to IFRS:				
Unit cost	76,201	75,655	298,126	295,352
Freight & other	15,121	14,919	53,016	51,840
Other G&A	1,339	692	1,051	2,521
Share-based payment	27	53	75	59
Inventory adjustments	(100)	(32)	504	(234)
Change in product inventory	7,410	3,453	(3,313)	(4,141)
Royalties	2,152	1,986	6,724	7,802
Depreciation and amortization	56,938	52,510	209,126	211,152
Cost of sales³	159,088	149,236	565,309	564,351

¹ G&A as per cash cost reconciliation above.

² Other G&A primarily includes profit sharing costs.

³ As per IFRS financial statements.

Manitoba <i>(in thousands except tonnes ore milled and unit cost per tonne)</i>	Three months ended		Year ended	
	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Combined unit cost per tonne processed				
Mining	46,335	42,825	186,972	165,108
Milling	13,396	13,372	49,269	52,544
G&A ¹	9,551	9,265	45,026	46,038
Less: G&A allocated to zinc metal production	(2,966)	(3,003)	(12,507)	(13,525)
Less: Other G&A related to profit sharing costs	—	(306)	(85)	(6,263)
Purchased ore and zinc concentrates	—	—	—	20,804
Unit cost	66,316	62,153	268,675	264,706
USD/CAD implicit exchange rate	1.32	1.32	1.33	1.29
Unit cost - C\$	87,528	81,894	356,562	342,361
Tonnes ore milled	685,151	573,564	2,652,306	2,625,210
Combined unit cost per tonne - C\$	128	143	134	130
Reconciliation to IFRS:				
Unit cost	66,316	62,153	268,675	264,706
Freight & other	7,014	8,106	26,915	35,317
Refined (zinc)	19,464	18,837	72,259	73,008
G&A allocated to zinc metal production	2,966	3,003	12,507	13,525
Other G&A related to profit sharing	—	306	85	6,263
Share-based payment	181	127	325	101
Inventory adjustments	1,768	—	1,768	—
Change in product inventory	3,267	2,935	(4,413)	11,395
Royalties	1,781	2,111	7,038	8,445
Depreciation and amortization	37,007	29,733	135,429	121,515
Cost of sales²	139,764	127,311	520,588	534,275

¹ G&A as per cash cost reconciliation above.

² As per IFRS financial statements.

Manitoba (in thousands except zinc plant unit cost per pound)	Three months ended		Year ended	
	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Zinc plant unit cost				
Zinc plant costs	19,464	18,837	72,259	73,008
G&A ¹	9,551	9,265	45,026	46,038
Less: G&A allocated to other areas	(6,585)	(5,956)	(32,434)	(26,250)
Less: Other G&A related to profit sharing	—	(306)	(85)	(6,263)
Zinc plant unit cost	22,430	21,840	84,766	86,533
USD/CAD implicit exchange rate	1.32	1.33	1.33	1.30
Zinc plant unit cost - C\$	29,608	29,080	112,447	112,226
Refined metal produced (in pounds)	61,324	59,271	227,828	224,988
Zinc plant unit cost per pound - C\$	0.48	0.49	0.49	0.50
Reconciliation to IFRS:				
Zinc plant unit cost	22,430	21,840	84,766	86,533
Freight & other	7,014	8,106	26,915	35,317
Mining	46,335	42,825	186,972	165,108
Milling	13,396	13,372	49,269	52,544
Purchased ore and zinc concentrates	—	—	—	20,804
G&A allocated to other areas	6,585	5,956	32,434	26,250
Other G&A related to profit sharing	—	306	85	6,263
Share-based payment	181	127	325	101
Inventory adjustments	1,768	—	1,768	—
Change in product inventory	3,267	2,935	(4,413)	11,395
Royalties	1,781	2,111	7,038	8,445
Depreciation and amortization	37,007	29,733	135,429	121,515
Cost of sales²	139,764	127,311	520,588	534,275

¹ G&A as per cash cost reconciliation above.

² As per IFRS financial statements.

ACCOUNTING CHANGES

New standards and interpretations not yet adopted

For information on new standards and interpretations not yet adopted, refer to note 4 of our audited consolidated financial statements for the year ended December 31, 2019.

CRITICAL ACCOUNTING JUDGEMENTS AND ESTIMATES

The preparation of the consolidated financial statements in conformity with IFRS requires us to make judgements, estimates and assumptions that affect the application of accounting policies, reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and reported amounts of revenue and expenses during the reporting period. Actual results may differ from these estimates.

We review these estimates and underlying assumptions on an ongoing basis based on our experience and other factors, including expectations of future events that we believe to be reasonable under the circumstances. Revisions

to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected. Certain accounting estimates and judgements have been identified as being “critical” to the presentation of our financial condition and results of operations because they require us to make subjective and/or complex judgments about matters that are inherently uncertain; or there is a reasonable likelihood that materially different amounts could be reported under different conditions or using different assumptions and estimates.

The following are significant judgements and estimates impacting the consolidated financial statements:

- Judgements and estimates that affect multiple areas of the consolidated financial statements:
 - Mineral reserves and resources which form the basis of life of mine plans which are utilized in impairment testing, timing of payments related to decommissioning obligations and depreciation of capital assets. We estimate our ore reserves and mineral resources based on information compiled by qualified persons as defined in accordance with NI 43-101;
 - Identification of a business combination and acquisition method accounting;
 - IFRS 15 - Revenue - adoption for stream transactions
 - Determination of functional currency;
 - Income and mining taxes, including estimates of future taxable profit which impacts the ability to realize deferred tax assets on our balance sheet; and
 - In respect of the outcome of uncertain future events as it concerns recognizing contingent liabilities.
- Judgements and estimates that relate mainly to assets (these judgements may also affect other areas of the consolidated financial statements):
 - Property, plant and equipment:
 - Cost allocations for mine development;
 - Mining properties expenditures capitalized;
 - Classification of supply costs as related to capital development or inventory acquisition;
 - Determining when exploration and evaluation assets should be transferred to capital works in progress within property, plant and equipment;
 - Determination of when an asset or group of assets is in the condition and location to be ready for use as intended by management for the purposes of commencing depreciation;
 - Componentization;
 - Assessment of impairment, including determination of cash generating units and assessing for indicators of impairment;
 - Recoverability of exploration and evaluation assets, including determination of cash generating units and assessing for indications of impairment;
 - Determining whether assets meet criteria for classification as held for sale;
 - Units of production depreciation;
 - Plant and equipment estimated useful lives and residual values;
 - Capitalized stripping costs; and
 - Finite life intangible assets.
 - Impairment (and reversal of impairment) of non-financial assets:
 - Future production levels and timing;
 - Operating and capital costs;
 - Future commodity prices;
 - Foreign exchange rates; and
 - Risk adjusted discount rates.
 - Valuation of acquired assets; and
 - In process inventory quantities, inventory cost allocations and inventory valuation.
- Judgements and estimates that relate mainly to liabilities (these judgements may also affect other areas of the consolidated financial statements):
 - Determining the accounting classification of the precious metals stream deposit;
 - Determination of deferred revenue per unit related to the precious metals stream transactions and determination of current portion of deferred revenue, which is based on timing of future sales, and adjustments of the expected conversion of resource to reserves;
 - Pensions and other employee benefits;
 - Decommissioning, restoration and similar liabilities including estimated future costs and timing of spending;

- Contingent liabilities; and
- Capital commitments.
- Estimates that relate mainly to the consolidated income statements:
 - Assaying used to determine revenues and recoverability of inventories.

For more information on judgements and estimates, refer to note 2 of our consolidated financial statements for the year ended December 31, 2019.

DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROL OVER FINANCIAL REPORTING

Disclosure controls and procedures (“DC&P”)

Management is responsible for establishing and maintaining adequate DC&P. As of December 31, 2019, we have evaluated the effectiveness of the design and operation of our DC&P in accordance with requirements of National Instrument 52-109 of the Canadian Securities Commission (“NI 52-109”) and the Sarbanes Oxley Act of 2002 (as adopted by the US Securities and Exchange Commission). Our Chief Executive Officer (“CEO”) and Chief Financial Officer (“CFO”) supervised and participated in this evaluation.

As of December 31, 2019, based on management’s evaluation, our CEO and CFO concluded that our DC&P were effective to ensure that information required to be disclosed by us in reports we file or submit is recorded, processed, summarized and reported within the time periods specified in securities legislation and is accumulated and communicated to our management, including our CEO and CFO, to allow timely decisions regarding required disclosure.

Internal control over financial reporting (“ICFR”)

Management is responsible for establishing and maintaining adequate ICFR. Under the supervision and with the participation of our management, including our CEO and CFO, we evaluated the effectiveness of our ICFR based upon the Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on management’s evaluation, our CEO and CFO concluded that our ICFR was effective as of December 31, 2019. The Company’s internal control over financial reporting as of December 31, 2019 has been audited by Deloitte LLP, Independent Registered Public Accounting Firm who also audited the Company’s consolidated financial statements for the year ended December 31, 2019. Deloitte LLP expressed an unqualified opinion on the Company’s internal control over financial reporting.

Changes in ICFR

We did not make any changes to ICFR during the year ended December 31, 2019 that materially affected, or are reasonably likely to materially affect, our ICFR.

Inherent limitations of controls and procedures

All internal control systems, no matter how well designed, have inherent limitations. As a result, even systems determined to be effective may not prevent or detect misstatements on a timely basis, as systems can provide only reasonable assurance that the objectives of the control system are met. In addition, projections of any evaluation of the effectiveness of ICFR 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 change.

NOTES TO READER

Forward-Looking Information

This MD&A contains forward-looking information within the meaning of applicable Canadian and United States securities legislation. All information contained in this MD&A, other than statements of current and historical fact, is forward-looking information. Often, but not always, forward-looking information can be identified by the use of words such as “plans”, “expects”, “budget”, “guidance”, “scheduled”, “estimates”, “forecasts”, “strategy”, “target”, “intends”, “objective”, “goal”, “understands”, “anticipates” and “believes” (and variations of these or similar words) and statements that certain actions, events or results “may”, “could”, “would”, “should”, “might” “occur” or “be achieved” or “will be taken” (and variations of these or similar expressions). All of the forward-looking information in this MD&A is qualified by this cautionary note.

Forward-looking information includes, but is not limited to, production, cost and capital and exploration expenditure guidance, anticipated production at our mines and processing facilities, expectations regarding the timing of mining activities at the Pampacancha deposit, the anticipated timing, cost and benefits of developing the Rosemont project and the outcome of litigation challenging Rosemont's permits, expectations regarding the appointment of a permanent CFO, expectations regarding the impact of the Covid-19 coronavirus outbreak and CN rail blockades on our operations and financial performance, expectations regarding the Lalor gold strategy, including the refurbishment of the New Britannia mill, and the possibility of optimizing the value of our gold resources in Manitoba, the future potential of the 1901 deposit, including the possibility of identifying additional gold resources, the possibility of converting inferred mineral resource estimates to higher confidence categories, the potential and our anticipated plans for advancing our mining properties surrounding Constancia and the Mason project, anticipated mine plans, anticipated metals prices and the anticipated sensitivity of our financial performance to metals prices, events that may affect our operations and development projects, anticipated cash flows from operations and related liquidity requirements, the anticipated effect of external factors on revenue, such as commodity prices, estimation of mineral reserves and resources, mine life projections, reclamation costs, economic outlook, government regulation of mining operations, and business and acquisition strategies. Forward-looking information is not, and cannot be, a guarantee of future results or events. Forward-looking information is based on, among other things, opinions, assumptions, estimates and analyses that, while considered reasonable by us at the date the forward-looking information is provided, inherently are subject to significant risks, uncertainties, contingencies and other factors that may cause actual results and events to be materially different from those expressed or implied by the forward-looking information.

The material factors or assumptions that we identified and were applied by us in drawing conclusions or making forecasts or projections set out in the forward-looking information include, but are not limited to:

- the timing of development and production activities on the Pampacancha deposit;
- the timing of the Consulta Previa and permitting process for mining the Pampacancha deposit;
- the timing for reaching additional agreements with individual community members and no significant unanticipated delays to the development of Pampacancha;
- the successful completion of the New Britannia project on budget and on schedule;
- the successful outcome of the Rosemont litigation;
- the success of mining, processing, exploration and development activities;
- the scheduled maintenance and availability of our processing facilities;
- the accuracy of geological, mining and metallurgical estimates;
- anticipated metals prices and the costs of production;
- the supply and demand for metals we produce;
- the supply and availability of all forms of energy and fuels at reasonable prices;
- no significant unanticipated operational or technical difficulties;
- the execution of our business and growth strategies, including the success of our strategic investments and initiatives;
- the availability of additional financing, if needed;
- the ability to complete project targets on time and on budget and other events that may affect our ability to develop our projects;
- the timing and receipt of various regulatory and governmental approvals;
- the availability of personnel for our exploration, development and operational projects and ongoing employee relations;

- maintaining good relations with the communities in which we operate, including the neighbouring Indigenous communities;
- no significant unanticipated challenges with stakeholders at our various projects;
- no significant unanticipated events or changes relating to regulatory, environmental, health and safety matters;
- no contests over title to our properties, including as a result of rights or claimed rights of Indigenous peoples or challenges to the validity of our unpatented mining claims;
- the timing and possible outcome of pending litigation and no significant unanticipated litigation;
- certain tax matters, including, but not limited to current tax laws and regulations and the refund of certain value added taxes from the Canadian and Peruvian governments; and
- no significant and continuing adverse changes in general economic conditions or conditions in the financial markets (including commodity prices and foreign exchange rates).

The risks, uncertainties, contingencies and other factors that may cause actual results to differ materially from those expressed or implied by the forward-looking information may include, but are not limited to, risks generally associated with the mining industry, such as economic factors (including future commodity prices, currency fluctuations, energy prices and general cost escalation), uncertainties related to the development and operation of our projects (including risks associated with the litigation affecting the Rosemont project), risks related to the U.S. district court's recent decisions to set aside the U.S. Forest Service's FROD and the Biological Opinion for Rosemont and related appeals and other legal challenges, risks related to the new Lalor mine plan, including the schedule and cost for the refurbishment of the New Britannia mill and the ability to convert inferred mineral resource estimates to higher confidence categories, risks related to the schedule for mining the Pampacancha deposit (including risks associated with the Consulta Previa process, risks associated with reaching additional agreements with individual community members and risks associated with the rainy season in Peru and the impact of any schedule delays), dependence on key personnel and employee and union relations, risks related to political or social unrest or change, risks in respect of Indigenous and community relations, rights and title claims, operational risks and hazards, including the cost of maintaining and upgrading the Company's tailings management facilities and any unanticipated environmental, industrial and geological events, the inability to insure against all risks, failure of plant, equipment, processes, transportation and other infrastructure to operate as anticipated, compliance with government and environmental regulations, including permitting requirements and anti-bribery legislation, depletion of our reserves, volatile financial markets that may affect our ability to obtain additional financing on acceptable terms, the failure to obtain required approvals or clearances from government authorities on a timely basis, uncertainties related to the geology, continuity, grade and estimates of mineral reserves and resources, and the potential for variations in grade and recovery rates, uncertain costs of reclamation activities, our ability to comply with our pension and other post-retirement obligations, our ability to abide by the covenants in our debt instruments and other material contracts, tax refunds, hedging transactions, as well as the risks discussed under the heading "Risk Factors" in our most recent Annual Information Form.

Should one or more risk, uncertainty, contingency or other factor materialize or should any factor or assumption prove incorrect, actual results could vary materially from those expressed or implied in the forward-looking information. Accordingly, you should not place undue reliance on forward-looking information. We do not assume any obligation to update or revise any forward-looking information after the date of this MD&A or to explain any material difference between subsequent actual events and any forward-looking information, except as required by applicable law.

Note to United States Investors

This MD&A has been prepared in accordance with the requirements of the securities laws in effect in Canada, which may differ materially from the requirements of United States securities laws applicable to U.S. issuers.



Qualified Person

The technical and scientific information in this MD&A related to the Constancia mine and Rosemont project has been approved by Cashel Meagher, P. Geo, our Senior Vice President and Chief Operating Officer. The technical and scientific information related to our other material mineral projects contained in this MD&A has been approved by Olivier Tavchandjian, P. Geo, our Vice President, Exploration and Geology. Messrs. Meagher and Tavchandjian are qualified persons pursuant to NI 43-101. For a description of the key assumptions, parameters and methods used to estimate mineral reserves and resources at Hudbay's material properties, as well as data verification procedures and a general discussion of the extent to which the estimates of scientific and technical information may be affected by any known environmental, permitting, legal title, taxation, sociopolitical, marketing or other relevant factors, please see the technical reports for our material properties as filed by us on SEDAR at www.sedar.com.