



**SIERRA METALS INC.  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE YEAR ENDED DECEMBER 31, 2018**

***Corporate Office***

*Suite 4260, 161 Bay Street  
Toronto, ON, Canada M5J 2S1*

*TSX: SMT  
NYSE AMERICAN:  
SMTS  
BVL: SMT*

*[www.sierrametals.com](http://www.sierrametals.com)*

## TABLE OF CONTENTS

<b>1. INTRODUCTION .....</b>	<b>3</b>
<b>2. COMPANY OVERVIEW .....</b>	<b>3</b>
<b>3. 2018 OPERATING AND FINANCIAL HIGHLIGHTS .....</b>	<b>4</b>
<b>4. OUTLOOK .....</b>	<b>10</b>
<b>5. RESULTS OF OPERATIONS .....</b>	<b>19</b>
<b>6. SUMMARIZED FINANCIAL RESULTS .....</b>	<b>30</b>
<b>7. QUARTERLY FINANCIAL REVIEW .....</b>	<b>34</b>
<b>8. LIQUIDITY AND CAPITAL RESOURCES .....</b>	<b>38</b>
<b>9. SAFETY, HEALTH AND ENVIRONMENT .....</b>	<b>39</b>
<b>10. FINANCIAL INSTRUMENTS AND RELATED RISKS .....</b>	<b>39</b>
<b>11. OTHER RISKS AND UNCERTAINTIES .....</b>	<b>42</b>
<b>12. NON-IFRS PERFORMANCE MEASURES .....</b>	<b>47</b>
<b>13. RELATED PARTY TRANSACTIONS .....</b>	<b>53</b>
<b>14. CRITICAL ACCOUNTING POLICIES AND ESTIMATES .....</b>	<b>54</b>
<b>15. OFF BALANCE SHEET ARRANGEMENTS .....</b>	<b>56</b>
<b>16. DISCLOSURE CONTROLS AND INTERNAL CONTROLS OVER FINANCIAL REPORTING (“ICFR”) .....</b>	<b>56</b>
<b>17. CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS .....</b>	<b>57</b>

## **1. INTRODUCTION**

This Management's Discussion and Analysis ("MD&A") should be read in conjunction with Sierra Metals Inc.'s (the "Company" or "Sierra" or "Sierra Metals") consolidated financial statements for the year ended December 31, 2018 and related notes thereto (the "Financial Statements"), which have been prepared in accordance with International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board ("IASB"). References herein to "\$" are to the United States dollar and "C\$" are to the Canadian dollar and all tabular amounts are expressed in thousands of \$ unless otherwise stated. All information contained in this MD&A is current as of March 27, 2019 unless otherwise noted. The Company's common shares (the "Common Shares") are listed and traded on the Toronto Stock Exchange (the "TSX"), the New York Stock Exchange (the "NYSE AMERICAN"), and the Peruvian Bolsa de Valores de Lima ("BVL" or the "Lima Stock Exchange") under the symbol "SMT", and "SMTS" on the NYSE AMERICAN. Additional information relating to the Company, including the Company's Annual Information Form ("AIF"), is available on SEDAR at [www.sedar.com](http://www.sedar.com) and on the Company's website at [www.sierrametals.com](http://www.sierrametals.com). A cautionary note regarding forward-looking information follows this MD&A.

### **QUALIFIED PERSONS**

Gordon Babcock B.Sc., P. ENG., Chief Operating Officer, Sierra Metals, is the qualified person as defined in National Instrument 43-101 ("NI 43-101") relating to operational scientific and technical information of Sierra Metals which have been included in this MD&A.

Americo Zuzunaga, MAusIMM CP(Mining Engineer) and Vice President of Corporate Planning is a Qualified Person and chartered professional qualifying as a Competent Person under the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

Augusto Chung, FAusIMM CP(Metallurgist) and Consultant to Sierra Metals is a Qualified Person and chartered professional qualifying as a competent person on metallurgical processes.

## **2. COMPANY OVERVIEW**

Sierra Metals is a Canadian, American, and Peruvian listed mining company focused on the production, exploration and development of precious and base metals in Peru and Mexico. The Company plans to continue growing its production base through brownfield exploration investments within its properties. The Company's key priorities are to provide high returns on invested capital, to generate strong cash flows and to maximize shareholder value. The Company has three producing mining properties and manages its business on the basis of the geographical location of its mining projects. The Peruvian Operation ("Peru") is comprised of the Yauricocha mine ("Yauricocha" or the "Yauricocha Mine"), located in the province of Yauyos, its near-mine concessions, and exploration and early stage properties. The Mexican Operation ("Mexico") includes the Bolivar ("Bolivar" or the "Bolivar Mine") and Cusi ("Cusi" or the "Cusi Mine") mines, both located in Chihuahua State, Mexico, their near-mine concessions, and exploration and early stage properties. The Company's strategic focus is currently on its operations, improving efficiencies, as well as pursuing growth opportunities at, and surrounding, its operating projects. The Company is also considering other opportunities to add value and expand through external growth. Exploration remains a key aspect of the improvement programs being implemented at all three of the Company's mines and there is optimism that these brownfield exploration programs will continue to add increased economic tonnage going forward. Examples of this can be seen at

## Sierra Metals Inc.

### Management's Discussion and Analysis

For the year ended December 31, 2018

(In thousands of United States dollars, unless otherwise stated)

Yauricocha with the Esperanza, Cuye-Mascota zones, at Bolivar, with the Bolivar West and Northwest zones, as well as at Cusi, with the Santa Rosa de Lima Zone. These results provide potential to further grow mineral resources and enhance shareholder value.

The Company is focused on improving operating performance through the production of higher volumes of ore to reduce unit costs, strengthening its asset base, continuing to increase its mineral reserves and resources at each of its mines, and exploring organic and external growth opportunities to enhance and deliver shareholder value.

### 3. 2018 OPERATING AND FINANCIAL HIGHLIGHTS

(In thousands of dollars, except per share and cash cost amounts, consolidated figures unless noted otherwise)	Three Months Ended		Twelve Months Ended	
	December 31, 2018	December 31, 2017	December 31, 2018	December 31, 2017
<b>Operating</b>				
Ore Processed / Tonnes Milled	599,297	498,199	2,325,288	1,988,738
Silver Ounces Produced (000's)	701	496	2,716	2,317
Copper Pounds Produced (000's)	8,932	7,471	33,968	26,775
Lead Pounds Produced (000's)	7,948	5,736	27,714	29,704
Zinc Pounds Produced (000's)	17,545	19,545	76,831	76,088
Gold Ounces Produced	2,137	1,591	7,743	6,197
Copper Equivalent Pounds Produced (000's) <sup>1</sup>	23,447	21,856	95,184	90,354
Zinc Equivalent Pounds Produced (000's) <sup>1</sup>	56,287	47,287	215,053	193,152
Silver Equivalent Ounces Produced (000's) <sup>1</sup>	4,445	4,078	17,988	14,865
Cash Cost per Tonne Processed	\$ 50.44	\$ 50.57	\$ 47.55	\$ 46.87
Cost of sales per AgEqOz	\$ 7.99	\$ 7.91	\$ 7.35	\$ 7.75
Cash Cost per AgEqOz <sup>2</sup>	\$ 7.68	\$ 7.54	\$ 7.03	\$ 7.41
AISC per AgEqOz <sup>2</sup>	\$ 10.59	\$ 12.42	\$ 10.04	\$ 12.34
Cost of sales per CuEqLb <sup>2</sup>	\$ 1.51	\$ 1.48	\$ 1.39	\$ 1.27
Cash Cost per CuEqLb <sup>2</sup>	\$ 1.45	\$ 1.41	\$ 1.33	\$ 1.22
AISC per CuEqLb <sup>2</sup>	\$ 2.00	\$ 2.32	\$ 1.90	\$ 2.03
Cost of sales per ZnEqLb <sup>2</sup>	\$ 0.63	\$ 0.68	\$ 0.61	\$ 0.60
Cash Cost per ZnEqLb <sup>2</sup>	\$ 0.61	\$ 0.65	\$ 0.58	\$ 0.57
AISC per ZnEqLb <sup>2</sup>	\$ 0.84	\$ 1.07	\$ 0.83	\$ 0.95
Cash Cost per ZnEqLb (Yauricocha) <sup>2</sup>	\$ 0.52	\$ 0.57	\$ 0.52	\$ 0.50
AISC per ZnEqLb (Yauricocha) <sup>2</sup>	\$ 0.73	\$ 0.90	\$ 0.73	\$ 0.78
Cash Cost per CuEqLb (Bolivar) <sup>2</sup>	\$ 1.67	\$ 1.72	\$ 1.44	\$ 1.49
AISC per CuEqLb (Bolivar) <sup>2</sup>	\$ 2.37	\$ 3.03	\$ 2.13	\$ 2.68
Cash Cost per AgEqOz (Cusi) <sup>2</sup>	\$ 18.96	\$ 18.66	\$ 15.71	\$ 15.37
AISC per AgEqOz (Cusi) <sup>2</sup>	\$ 23.27	\$ 36.33	\$ 22.09	\$ 33.90
<b>Financial</b>				
Revenues	\$ 55,019	\$ 51,170	\$ 232,371	\$ 205,118
Adjusted EBITDA <sup>2</sup>	\$ 15,263	\$ 19,208	\$ 89,756	\$ 81,034
Operating cash flows before movements in working capital	\$ 15,167	\$ 17,812	\$ 90,148	\$ 79,785
Adjusted net income attributable to shareholders <sup>2</sup>	\$ 783	\$ 3,241	\$ 29,009	\$ 23,482
Net income (loss) attributable to shareholders	\$ (2,654)	\$ 2,118	\$ 18,814	\$ (4,645)
Cash and cash equivalents	\$ 21,832	\$ 23,878	\$ 21,832	\$ 23,878
Working capital	\$ (8,290)	\$ (6,784)	\$ (8,290)	\$ (6,784)

(1) Silver equivalent ounces and copper and zinc equivalent pounds for Q4 2018 were calculated using the following realized prices: \$14.63/oz Ag, \$2.77/lb Cu, \$0.89/lb Pb, \$1.16/lb Zn, \$1.238/oz Au. Silver equivalent ounces and copper and zinc equivalent pounds for Q4 2017 were calculated using the following realized prices: \$16.77/oz Ag, \$3.13/lb Cu, \$1.11/lb Pb, \$1.45/lb Zn, \$1.282/oz Au. Silver equivalent ounces and copper and zinc equivalent pounds for 12M 2018 were calculated using the following realized prices: \$15.65/oz Ag, \$2.96/lb Cu, \$1.02/lb Pb, \$1.31/lb Zn, \$1.269/oz Au. Silver equivalent ounces and copper and zinc equivalent pounds for 12M 2017 were calculated using the following realized prices: \$17.14/oz Ag, \$2.82/lb Cu, \$1.06/lb Pb, \$1.32/lb Zn, \$1.265/oz Au.

(2) This is a non-IFRS performance measure, see Non-IFRS Performance Measures section of the MD&A.

### 2018 Operational Highlights and Growth Initiatives

During 2018, the annual consolidated production of silver, copper, zinc and gold increased 17%, 27%, 1%, and 25%, respectively, while annual consolidated lead production decreased 7% compared to 2017. The Company achieved record consolidated quarterly ore throughput during Q4 2018, as well as record quarterly ore throughput from the Bolivar and Cusi Mines. These results continued the Company's successful production increases realized during the first three quarters of 2018, which resulted in strong annual consolidated production figures.

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

Metal production at Yauricocha increased 14% in Q4 2018 compared to Q4 2017 due to 5% higher ore throughput, higher head grades of all metals, except zinc, and higher lead and gold recoveries. At Bolivar, 20% higher ore throughput, and higher silver and gold head grades resulted in a 16% increase in copper equivalent pounds produced in Q4 2018 compared to Q4 2017. The Cusi Mine realized a 258% increase in throughput which resulted in a 70% increase in silver equivalent ounces produced during Q4 2018 compared to Q4 2017.

2019 will be an important year for the Company as we ramp up production in Mexico while continuing to modernize and improve all Mines implementing best operational practices. These changes should allow the Company to increase metal production to new highs. Our Company wide ongoing brownfield exploration programs should also lead to further significant growth in reserves and resources, which will add to the value of our assets during the year ahead.

**2018 Consolidated Production Highlights**

- Silver production of 2.7 million ounces; a 17% increase from 2017
- Copper production of 34.0 million pounds; a 27% increase from 2017
- Zinc production of 76.8 million pounds; a 1% increase from 2017
- Lead production of 27.7 million pounds; a 7% decrease from 2017
- Gold production of 7,743 ounces; a 25% increase from 2017
- Total of 2.3 million tonnes processed; a 16% increase from 2017

**Q4 2018 Production Highlights**

- Silver production of 0.7 million ounces; a 41% increase from Q4 2017
- Copper production of 8.9 million pounds; a 20% increase from Q4 2017
- Zinc production of 17.5 million pounds; a 10% decrease from Q4 2017
- Lead production of 7.9 million pounds; a 39% increase from Q4 2017
- Gold production of 2,137 ounces; a 34% increase from Q4 2017

**2018 Consolidated Financial Highlights**

- Revenue from metals payable of \$232.4 million in 2018 increased by 13% from \$205.1 million in 2017. Higher revenues are primarily attributable to the 8% increase in throughput, and the higher head grades and recoveries for copper and gold at Yauricocha in 2018 compared to 2017; the 16% increase in throughput, higher silver and gold head grades, and higher gold recoveries resulted in Bolivar's revenues being 17% higher than 2017; and the 112% increase in throughput, and higher silver recoveries resulted in Cusi's revenues being 88% higher than 2017; the increase in revenues were realized despite decreases in the prices of silver (9%), lead (4%), and zinc (1%), which copper prices increased by 5% and gold prices were consistent with 2017;

## Sierra Metals Inc.

### Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

- Yauricocha's cost of sales per zinc equivalent payable pound was \$0.55 (2017 - \$0.54), cash cost per zinc equivalent payable pound was \$0.52 (2017 - \$0.50), and AISC per zinc equivalent payable pound of \$0.73 (2017 - \$0.78). The decrease in the AISC per zinc equivalent payable pound for 2018 compared to 2017 was a result of lower sustaining capital expenditures and higher zinc equivalent payable pounds, while cash costs remained consistent; this was partially offset by slight increases in general and administrative costs. These cost decreases were realized in spite of the \$2.0 million payment made to the Company's union of mining employees made during Q4 2018;
- Bolivar's cost of sales per copper equivalent payable pound was \$1.73 (2017 - \$1.54), cash cost per copper equivalent payable pound was \$1.44 (2017 - \$1.49), and AISC per copper equivalent payable pound was \$2.13 (2017 - \$2.698) for 2018 compared to 2017. The decrease in the AISC per copper equivalent payable pound during 2018 compared to 2017 was due to the increase in copper equivalent payable pounds resulting from higher throughput, higher silver and gold head grades and higher gold recoveries, as well as a decrease in sustaining capital expenditures;
- Cusi's cost of sales per silver equivalent payable ounce was \$8.97 (2017 - \$12.51), cash cost per silver equivalent payable ounce was \$15.71 (2017 - \$15.37), and AISC per silver equivalent payable ounce was \$22.09 (2017 - \$33.90) for 2018 compared to 2017. AISC per silver equivalent payable ounce decreased due to higher silver equivalent payable ounces resulting from higher throughput, higher silver recoveries, lower treatment and refining charges, and lower sustaining capital expenditures;
- Adjusted EBITDA<sup>(1)</sup> of \$89.8 million for 2018 increased 11% compared to \$81.0 million in 2017. The increase in adjusted EBITDA in 2018 was due to the increase in revenues realized at all three mines during 2018, mainly the result of higher throughput;
- Net income (loss) attributable to shareholders for 2018 was \$18.8 million (2017: \$(4.6) million) or \$0.12 per share (basic and diluted) (2017: \$(0.03)). The net loss incurred in 2017 included a \$4.4 million non-cash loss on the distribution of Cautivo Mining Inc. assets to Sierra shareholders;
- Adjusted net income attributable to shareholders <sup>(1)</sup> of \$29.0 million, or \$0.17 per share, for 2018 was higher than the adjusted net income of \$23.5 million, or \$0.14 per share for 2017;
- A large component of the net income for every period is the non-cash depletion charge in Peru, which was \$10.5 million for 2018 (2017: \$31.5 million). The non-cash depletion charge is based on the aggregate fair value of the Yauricocha mineral property at the date of acquisition of Corona of \$371.0 million amortized over the total proven and probable reserves of the mine. The decrease in the non-cash depletion charge in 2018 was due to the 134% increase in proven and probable reserves reported in the Company's NI 43-101 Technical Report issued on October 26, 2017;
- Cash flow generated from operations before movements in working capital of \$90.1 million for 2018 increased compared to \$79.8 million in 2017. The increase in operating cash flow is mainly the result of higher revenues generated and higher gross margins realized; and

## Sierra Metals Inc.

### Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

- Cash and cash equivalents of \$21.8 million and working capital of \$(8.3) million as at December 31, 2018 compared to \$23.9 million and \$(6.8) million, respectively, at the end of 2017. Cash and cash equivalents have decreased by \$2.0 million during 2018 due to \$61.9 million of operating cash flows, and \$10.0 million drawn down from a short term revolving line of credit, being offset by capital expenditures incurred in Mexico and Peru of \$(49.3) million, repayment of loans, credit facilities and interest of \$(21.5) million, dividends paid to non-controlling interest shareholders of \$(2.9) million.

*(1) This is a non-IFRS performance measure, see non-IFRS Performance Measures section of this MD&A.*

## Project Development

- The Company provided an updated Mineral Reserve and Resource Estimate at the Bolivar Mine (press release dated July 5, 2018). The NI 43-101 Technical Report was filed on SEDAR and was prepared by SRK Consulting (U.S.) Inc.;
- The Company reported the results of a Preliminary Economic Assessment ("PEA") for the Bolivar Mine (press release dated July 9, 2018) yielding a 550% return on investment and after-tax net present value ("NPV") of US\$214 million at an 8% discount rate. The PEA was compiled under NI 43-101 standards by Mining Plus Peru SAC, and filed on SEDAR on August 23, 2018;
- The Company reported the results of a PEA for the Yauricocha Mine (press release dated June 27, 2018) yielding a 486% return on investment and after-tax NPV of US\$393 million at an 8% discount rate. The PEA was compiled under NI 43-101 standards by Mining Plus Peru SAC;
- The Company reported the results of a PEA for the Cusi Mine (press release dated June 18, 2018) yielding a 75% internal rate of return ("IRR") and after-tax NPV of US\$92 million at an 8% discount rate. The PEA was compiled under NI 43-101 standards by Mining Plus Peru SAC;
- The Company reported that their subsidiary Sociedad Minera Corona S.A. received approval for its Environmental Impact Assessment ("EIA") Study for the expansion of its tailings deposition facility at the Yauricocha Mine;
- Mine development at Bolívar during Q4 2018 totaled 1,136 meters. Most of these meters (553m) were developed to prepare stopes for mine production. The remainder of the meters (583m) were related to the deepening of ramps and developing service ramps to be used for ventilation and pumping in the El Gallo Inferior orebody; and
- During Q4 2018, at the Cusi property, mine development totaled 1,059 meters, which included 25 meters of ramp development at the Santa Rosa de Lima Zone; the rest of the development related to stope preparation in various zones within the mines;

## Sierra Metals Inc.

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

### Exploration Highlights

#### Peru:

During Q4 2018, the Company drilled 58 holes totaling 10,537 meters at Yauricocha. The drilling included the following:

#### Exploration Drilling:

- Copper Porphyry Mineralization (Central Mine Zone Level 720): 2 holes totaling 1,341 meters were drilled to continue to test the priority anomaly located in the monzonite intrusive zone, where a copper molybdenum mineralized porphyry was discovered earlier in the year; drill results continue to display the presence of a copper molybdenum porphyry orebody, where we have observed typical alterations, as well as copper mineralization disseminated in the encased rock, as veinlets with quartz and copper are present with molybdenum;
- Cuye Orebody (Level 1070 Central Mine Zone): 1 hole totaling 210 meters to explore the continuity of mineralization of the orebody at depth; the hole confirmed the continuity of this mineralized orebody at depth;
- Catas Orebody (Level 1070 Central Mine Zone) – 1 hole totaling 681 meters confirmed the continuity of the copper mineralization at depth;
- Contacto Occidental Orebody (Level 1070 Central Mine Zone): 1 hole totaling 86 meters confirmed the continuity of mineralization at depth of this “cuerpo chico”, or small orebody;
- Escondida Norte (Level 870 Cachi Cachi): 4 holes totaling 1,745 meters with the objective of exploring and defining the fresh sulphide zones, as areas previously explored in this area have intercepted oxide zones with silver and lead mineralization; these holes drilled intercepted mineralized structures of polymetallic sulphide zones;
- Cachi Cachi Norte (Level 720 Cachi Cachi): 2 holes totaling 681 meters with the objective of exploring the northern part of the mineralized orebodies already recognized within the Cachi Cachi Mine, but did not encounter any mineralization of ore grade material.

#### Definition Drilling:

- Antacaca Sur (Level 920): 17 holes totaling 2,186 meters with the objective of defining more certainty on the orebody between the 970 level and the 8th floor on the 1020 level;
- Esperanza (Level 970): 14 holes totaling 1,770 meters which confirmed the continuity of mineralization of the orebody; holes were executed between the sublevel development level 8 meters above the 1020 level;
- Angelita (Level 870 Cachi Cachi): 11 holes totaling 1,577 meters to further define the orebody on the 870 level between floors 8 and 16;
- Yoselin (920 Level Cachi Cachi Mine): 5 holes totaling 260 meters which confirmed the orebody and the extension of the orebody to 1070 level. These drill holes provided more geological information to help plan potential mining of the orebody. Once the drift reaches the 1070 level the remainder of orebody below will be drilled off from the 1070 level. Initial highlights of the average grades encountered in this “cuerpo chico” or “small orebody” included grades of 1.2 Oz Ag, 4.8% Pb, 0.09% Cu, 8.5% Zn.

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

**Mexico:****Bolivar**

- At Bolívar during Q4 2018, 6,258 meters were drilled from surface as well as diamond drilling within the mine. 2,183 meters were drilled within the mine in the El Gallo zone. There was also 3,865 meters drilled at the Bolivar West extension to explore the extension of the orebody to the North and West, exploring the skarn orebody with semi-massive magnetite, and disseminated nodules of chalcopyrite. There was also 210 meters drilled at La Campana, which is a new exploration target where we are exploring the possibility of finding a skarn orebody with copper and zinc;

**Cusi**

- During Q4 2018 the Company drilled 1,781 meters to support the development of the Santa Rosa de Lima vein in Promontorio to further verify the size and continuity of the orezone. 2,497 meters of surface diamond drilling was performed to explore the depth of the mineralized structure of San Nicolas in the area of the San Juan Mine.

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

**4. OUTLOOK**

The Company has continued to be successful in maintaining positive operating cash flow generation from its existing operations in order to reduce debt levels, fund required capital expenditures, and maintain liquidity. Planned capital expenditures of \$83 million have been approved for 2019 to deliver on the focus of capitalizing on the successful drilling campaigns during the previous two years which resulted in significant increases to the reserves and resources at each of the three mines, in addition to providing the basis for the successful results of the PEA's released during 2018 at all three mines. Also, the new \$100 million Corporate Credit Facility finalized during March 2019, provides the Company with additional liquidity and will provide the financial flexibility to fund future capital projects in Mexico as well as corporate working capital requirements. The Company will also use the proceeds of the new facility to repay existing debt balances in the near term.

The Company has made significant progress on the expansion plans at all three mines, as well as the preparation of updated Life Of Mine ("LOM") Plans, and NI 43-101 Technical Reports, based on the encouraging PEA's results released for all three mines, demonstrating positive economics, and supporting the immense potential for future operational production increases. These studies are intended to provide further clarity and confidence to either progress with the potential future operational production increases, which are scalable in nature, and potential production increases can be made gradually, if optimal. Development at all three mines will continue with the objective of expediting the resource increases at the Cusi Mine, as well as the reserve and resource increases at the Yauricocha and Bolivar Mines into the mine plans. Continued production growth is expected to be realized from the strategic allocation of operating cash flows towards growth efficient capital, in order to provide the infrastructure, and scoping studies necessary to continue the process of monetizing the reserve and resource increases as quickly as possible.

Looking ahead 2019 represents a critical year at Yauricocha for projects, improvements and exploration. The Company continues to work on the expansion plans at Yauricocha, which we expect to complete during 2019. Having now received approval for the EIA study at Yauricocha, we can now proceed to obtain a construction permit for the next phase of the tailings deposition facility, and a permit for the expanded waste rock facility. Once those permits have been received, we would then be able to complete a final submission for an ITS permit, which is required for any potential expansion of the Mine.

We have also commenced internal studies on a potential secondary stage expansion plan at the Mine, as well as an updated NI 43-101 report which we expect to have completed during Q2 2019. The Company continues to make progress on projects at the Mine and during the fourth quarter we completed the refurbishment of the lower part of the Mascota Shaft as well as the infrastructure and tie-ins for the Yauricocha tunnel, allowing for faster turn-around in the cycle time of the trolley locomotives, and providing for increased capacity and handling of larger volumes of ore and waste.

Additionally, the Yauricocha shaft will continue to be sunk to the 1270 level this year to provide access to further reserves and resources at the Mine and loading pockets will be added on the 1210 level. Work will also commence on a ramp connecting the 920 level with the 720 level of the Yauricocha Mine providing for an additional 10,000 tonnes per month of increased capacity to move ore and waste from the Mine.

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

Furthermore, the Company continues to have success in its drilling campaigns at the Mine as evidenced in a recent press release dated October 1, 2018, demonstrating the existence of porphyry style mineralization at Yauricocha and a great opportunity for further expansion potential at the Mine. There are several higher-grade intercepts between 798 and 980 meters, and the objective is to follow-up drilling programs to define the geometry of the higher-grade core of the porphyry during 2019. The Company continues to perform drilling on the porphyry and has budgeted approximately \$4.0 million for this drilling during 2019. Also, during 2019 infill drilling programs will be focused on the Central Mine Zone, Esperanza, Cachi Cachi and the Cuerpos Chicos. While brownfield drilling campaigns will focus on the Kilkaska and Dona Leona areas located on the Chonta Fault System. Mine development during 2019 will continue to focus on the Central Mine Zone and Cachi Cachi areas, and the Company is planning on making improvements to the ventilation system within the mine.

We are very pleased with the progress made with our expansion plans at the Bolivar Mine. With the early completion of construction at the Piedras Verdes Mill, we expect deliver on our goal of a 20% increase in production from 3,000 TPD to 3,600 TPD, during H1 2019. Completion of the expansion included the installation of a refurbished mill, an electrical substation with 1250 KVA of capacity, a secondary crusher and a hydrocyclone cluster that allows for finer grind size optionality that is estimated to provide a 6% increase in copper recoveries from 80% to 86% at Bolivar Mine. The expansion at Bolivar will contribute through a 20% increase in production rates, a 6% increase in copper recoveries and a decrease in costs per unit.

A revised LOM plan is nearing completion at Bolivar, and we expect to have an updated NI 43-101 report for the Bolivar Mine during Q4 2019. Development and infrastructure improvements continue in the effort to push throughput at Bolivar to 4,000 tpd during the second half of 2019. During 2019, target mining areas will be the Gallo Inferior, Mina de Fierro, Chimneys, Breccias and Gallo Superior orebodies. Infill drilling will continue on the Bolivar West and Gallo Inferior areas, while mine development will focus on the Gallo Inferior and Breccia zones. This work will allow the Company to increase the number of minable stopes available in order to increase throughput at the plant. Improvements continue to be made at the Piedras Verdes Plant, as one flash flotation cell has been installed, and two more will be installed during the first half of 2019. Also, a new concentrate filter and fine ore bin are currently being installed.

The Company is also pleased to report that the replacement program for the main reservoir of the Bolivar water dam has progressed successfully and is 50% complete. We expect the work to be finished during the first half of 2019.

At Cusi, the Company realized continued improvements in tonnage in the fourth quarter, and the Mine realized a sequential increase in ore throughput and a 6% increase when compared to Q3 2018. The increase in throughput was partially the result of the Company's successful development and mining of ore from the recently discovered high-grade silver stockwork zone located within the Santa Rosa de Lima ("SRL") vein complex. This mineralized zone extends to over 100 meters in length, 50 meters in width and 70 meters in height. Our development plan is now incorporating the wider dimensions of this zone.

A revised LOM plan is nearing completion at Cusi, and we expect to have an updated NI 43-101 report completed during Q4 2019, which will include a maiden reserve estimate for the mine. The Company continues to increase mill feed from the Santa Rosa de Lima zone, while mining selected structures in the older part of the mine. The successful addition of another ball mill has

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

seen the capacity increase from 650 tonnes per day to approximately 1,200 tonnes per day during H1 2019. A decanter was also installed at the Mal Paso Mill which will help improve water availability and provide some flexibility with the tailings facility. Development plans are in place to increase production from 1,200 tpd to 2,400 tpd by Q1 2020.

During 2019, the majority of the mine production at Cusi will come from the SRL zone, from sublevel long hole stoping and sublevel caving from the SRL zone. Infill drilling will be performed on the SRL zone, San Nicolas zone, and the Promontorio Mine. Plant improvements during 2019 will include the installation of an additional ball mill during Q3 2019, as well as new tank cells to improve flotation, and are required to push the plant's capacity up to 2,400 tpd.

Brownfield exploration remains a key component of the Company's growth program. The Company has budgeted drilling campaigns of 51,000 meters to be performed during 2019. 21,500 meters have been budgeted at Yauricocha, which includes underground exploration drilling on the Cuerpos Chicos, Esperanza – Norte – Mascota, and other areas on the interior of the mine, as well as brownfield exploration on the Dona Leona, Victoria, Alida, El Paso, Millpoca and Kilkasa areas on the Chonta Fault. 20,000 meters of brownfield exploration drilling have been budgeted at Bolivar for 2019 which will focus on the Bolivar West and Bolivar Northwest areas. While at Cusi, 9,500 meters of brownfield exploration drilling has been budgeted for 2019 which will focus on the Margarita, San Juan, SRL Extension Norte, and Sayra and Bibiana areas, all located within the SRL mine complex.

Management is very optimistic for the next twelve months, and beyond, as the groundwork has been set for continued improvements, through the modernizing and implementation of best operational practices. We continue to realize positive returns on our capital investments, and the recent PEA results demonstrate a path for continued growth at all our Mines. Ongoing aggressive brownfield exploration programs at all mines are expected to provide further growth in reserves and resources adding to the value of our assets going forward.

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)***Confirmation of Porphyry Mineralization at Yauricocha**

On October 1, 2018, the Company confirmed the discovery of a new style of mineralization (copper - molybdenum porphyry). The results were from testing of the geophysical anomalies, in the quartz monzonite intrusive, in the eastern part of the mineralized area. This area is known as the Central Mine which is located between the Cuye and Esperanza zones.

Prior evidence of copper-molybdenum porphyry mineralization had been observed on surface within the monzonite intrusive and had previously been sampled by Rio Tinto Zinc. Subsequently, drill core was sampled at 10-meter intervals over the entire hole length and the Company obtained 122 samples. The hole was drilled from the Klepetko Tunnel located on the 720 level to a depth of 1,394.6 meters. The samples indicated an average of >0.1% Copper.

A recently completed TITAN 24 Geophysical Study identified more than 100 anomalies at Yauricocha and a program to test this first geophysical anomaly was designed. Hole (E-PORF 10-18-01) was drilled from the Klepetko Tunnel to test the priority anomaly located in the monzonite intrusive as this zone had high conductivity within the Intrusive. A copper-molybdenum mineralized porphyry was discovered. Results to date show mineralized sectors with notable grades of copper and molybdenum (see table 1) and this discovery confirms the existence of a new style of mineralization at Yauricocha. The Company will continue with a drilling program which will allow for a better understanding of the distribution of mineralization.

**Table 1 – Assays obtained from Drill Hole E PORF 10-18-10 showing copper, molybdenum and cobalt values.**

Description	From	To	Width m	Cu %	Mo ppm	Co Ppm
	396.00	418.00	22.00	0.13	19.45	7.73
	418.00	432.00	14.00	0.08	25.71	6.71
	432.00	454.00	22.00	0.11	27.36	8.55
	454.00	468.00	14.00	0.07	26.00	6.29
	468.00	574.00	106.00	0.13	39.60	10.70
	574.00	600.00	26.00	0.07	20.00	7.69
	600.00	702.00	102.00	0.15	94.84	8.69
	702.00	798.00	96.00	0.19	48.02	11.27
	798.00	806.00	8.00	0.46	219.00	24.25
	806.00	822.00	14.00	0.21	39.57	10.57
	822.00	844.00	22.00	0.46	133.73	10.73
	844.00	854.00	10.00	0.18	104.00	10.60
	854.00	872.00	18.00	0.54	131.44	17.67
	872.00	950.00	78.00	0.15	68.41	7.05
	950.00	958.00	8.00	0.49	110.00	6.25
	958.00	968.00	10.00	0.23	50.40	7.80
	968.00	980.00	12.00	0.45	68.00	6.50
	980.00	1024.00	44.00	0.19	55.23	9.50
	1024.00	1072.00	48.00	0.23	90.33	5.33
	1072.00	1092.00	20.00	0.21	173.30	4.30
	1092.00	1294.00	202.00	0.15	194.00	3.90

## **Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

### **Closing of New Senior Secured US\$100 Million Corporate Credit Facility**

On March 11, 2019, the Company entered into a new six-year senior secured corporate credit facility ("Corporate Facility") with Banco de Credito del Peru ("BCP") that provides funding of up to US\$100 million effective March 8, 2019. The Corporate Facility provides the Company with additional liquidity and will provide the financial flexibility to fund future capital projects in Mexico as well as corporate working capital requirements. The Company will also use the proceeds of the Corporate Facility to repay existing debt balances in the near term.

The most significant terms of the Corporate Facility are as follows:

- Term: 6-year term maturing March 2025
- Principal Repayment Grace Period: 2 years
- Principal Repayment Period: 4 years
- Interest Rate: 3.15% + LIBOR 3M

The Corporate Facility is subject to customary covenants, including consolidated net leverage and interest coverage ratios and customary events of default.

### **Initiation of Normal Course Issuer Bid with 1.5 Million Share Target**

On December 11, 2018, the Company approved a share repurchase program in the form of a normal course issuer bid (the "NCIB") in the open market through the facilities of the Toronto Stock Exchange (the "TSX") and other Canadian marketplaces / alternative trading systems. Pursuant to the NCIB, the Company proposed to repurchase for cancellation up to 1,500,000 common shares of the Company (the "Common Shares"), which represented approximately 0.92% of the issued and outstanding Common Shares as at December 11, 2018.

In connection with its implementation of the NCIB, Sierra Metals obtained TSX approval of its notice of intention to make a normal course issuer bid (the "Notice"). The Notice provided that the Company may purchase up to 1,500,000 Common Shares through the facilities of the TSX and other Canadian marketplaces / alternative trading systems during the 12-month period commencing on December 17, 2018 and ending on or before December 16, 2019. Any Common Share purchases made pursuant to the NCIB will be at the prevailing market price at the time of the transaction, purchased in accordance with the policies of the TSX and conducted by CIBC. In accordance with TSX rules, any daily purchases made under the NCIB are limited to a maximum of 4,214 Common Shares, which represents 25% of the average daily trading volume of 16,858 Common Shares on the TSX for the six months ended November 30, 2018. However, the Company may make one block purchase per calendar week which exceeds the daily repurchase restriction, up to and including the maximum annual aggregate limit of 1,500,000 Common Shares. Once the block purchase exception has been relied on, the Company may not make any further purchases under the NCIB for the remainder of that calendar day.

### **Repayment of FIFOMI Loan in Mexico**

During February 2019, the Company repaid the remaining US\$1,657 owed on Dia Bras Mexicana's loan from FIFOMI. This repayment prior to the loan's maturity date did not result in any financial penalties and was within the terms of the agreement.

## Sierra Metals Inc.

### Management's Discussion and Analysis

For the year ended December 31, 2018

(In thousands of United States dollars, unless otherwise stated)

## 2019 Production and Cost Guidance

This section of the MD&A provides management's production, cost, and capex estimates for 2019. These are "forward-looking statements" and subject to the cautionary note regarding the risks associated with forward-looking statements contained at the end of this document

The Company anticipates that 2019 silver equivalent production will range between 19.5 to 21.8 million ounces, copper equivalent production will range between 107.0 to 119.9 million pounds, and zinc equivalent production will range between 261.5 to 292.9 million pounds. The increase in 2019 guidance for silver ounces and copper pounds compared to the actual 2018 production is due to the significant throughput and recovery increases planned at Bolivar and Cusi. At Yauricocha, higher copper production should be realized due to consistent copper head grades and improvement to recoveries expected from the various areas planned to be mined from the copper areas in the Esperanza Zone during 2019.

A table summarizing 2019 production guidance has been provided below:

	2019 Guidance		2018 Actual
	Low	High	
Silver ounces (000's)	3,730	4,176	2,716
Copper pounds (000's)	45,000	50,400	33,968
Lead pounds (000's)	25,500	28,600	27,714
Zinc pounds (000's)	72,400	81,100	76,831
Gold ounces	8,100	9,000	7,743
<b>Silver equivalent ounces (000's)<sup>(1)</sup></b>	<b>19,478</b>	<b>21,812</b>	<b>17,988</b>
<b>Copper equivalent pounds (000's)<sup>(1)</sup></b>	<b>107,035</b>	<b>119,858</b>	<b>95,184</b>
<b>Zinc equivalent pounds (000's)<sup>(1)</sup></b>	<b>261,545</b>	<b>292,880</b>	<b>215,053</b>

(1) 2019 Silver equivalent ounces, copper and zinc equivalent pounds were calculated using the following metal prices: \$16.65/oz Ag, \$3.03/lb Cu, \$1.01/lb Pb, \$1.24/lb Zn, \$1,275/oz Au

## 2019 Cost Guidance

A mine by mine breakdown of 2019 production guidance, cash costs and all-in sustaining costs ("AISC") are included in the table below. Cash costs and AISC guidance is shown per zinc equivalent payable pound at Yauricocha, copper equivalent payable pound at Bolivar, and silver equivalent payable ounce at Cusi.

Mine		Equivalent Production Range	Cash Costs per ZnEqLb or CuEqLb or AgEqOz Sold	AISC (\$) * per ZnEqLb or CuEqLb or AgEqOz Sold
Yauricocha	Zinc Eq Lbs (000's)	163,884 - 183,478	\$0.58/lb	\$0.88/lb
Bolivar	Copper Eq Lbs (000's)	29,877 - 33,449	\$1.35/lb	\$2.08/lb
Cusi	Silver Eq Ozs (000's)	1,862 - 2,085	\$14.29/oz	\$20.70/oz

\*AISC includes Treatment and Refining Charges, Selling Costs, G&A Costs and Sustaining Capex

(1) 2019 Silver equivalent ounces, copper and zinc equivalent pounds were calculated using the following metal prices: \$16.65/oz Ag, \$3.03/lb Cu, \$1.01/lb Pb, \$1.24/lb Zn, \$1,275/oz Au

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)***2019 Capital Expenditures**

In 2019, the Company plans to invest a total of up to \$83 million on capital expenditures, including \$39 million for sustaining capital requirements and \$44 million for expansion, growth projects and exploration expenses. These capital expenditures will allow Sierra Metals to continue to significantly grow our mineral reserves and resources, complete the development work required in operations in order to increase production in the future, as well as complete plant expansion projects to process the increased production. These significant capital expenditure projects are expected to result in increased cash flows, and lower cash costs. These capital expenditure programs will be funded through the generation of operating cash flows, as well as additional liquidity provided from the new credit facility in process if needed.

A breakdown by mine of the throughput and planned capital investments is shown below:

The Yauricocha Mine in Peru plans to process up to 1.1 million tonnes (3,250 tpd) in 2019. Sustaining capex will be approximately \$18 million and growth capex will be approximately \$23 million.

2019 major capital investments include:

<b>Yauricocha 2019 Major Capital Investments</b>	<b>Up to (\$ millions)</b>
Deepening of the Yauricocha Shaft	\$ 8
Regional and Brownfield Exploration and Lower Level Development	\$ 6
Ventilation	\$ 5
Mine Camp Improvements	\$ 4
Equipment	\$ 4
Tailings Dam Facility Expansion (next lift)	\$ 2
Mascota Ramp from 920 to 720 Level	\$ 2
Central Mine Zone and Cachi Cachi Mine Development	\$ 7

The Bolivar Mine in Mexico plans to process up to 1.4 million tonnes, with an average production rate of 4,000 tpd in 2019. Sustaining capex will be approximately \$12.0 million and growth capex will be approximately \$10 million.

2019 major capital investments include:

<b>Bolivar 2019 Major Capital Investments</b>	<b>Up to (\$ millions)</b>
Regional and Brownfield Exploration and Drift and Drill Station Development	\$ 9
Equipment	\$ 5
Concentrator Plant	\$ 4
Tailings Dam Facility Expansion	\$ 2

## Sierra Metals Inc.

### Management's Discussion and Analysis

For the year ended December 31, 2018

(In thousands of United States dollars, unless otherwise stated)

The Cusi Mine in Mexico plans to process up to 515,500 tonnes, ramping up from 650 tpd with an objective of reaching 1,200 tpd in Q2 2019 and 2,400 tpd in Q1 2020. Sustaining capex will be approximately \$8 million and growth capex will be \$12 million.

2019 major capital investments include:

Cusi 2019 Major Capital Investments	Up to (\$ millions)
Regional and Brownfield Exploration and Drift and Drill Station Development	\$ 5
Equipment	\$ 4
Concentrator Plant	\$ 5
Tailings Dam Facility Expansion	\$ 4

## Market Review and Trends

### Metal Prices

One of the primary drivers of Sierra's earnings and ability to generate operating cash flows are the market prices of silver, copper, zinc, lead and gold, which were approximately 5% higher for copper, 4% lower for lead, 1% lower for zinc, 9% lower for silver, and consistent for gold, during 2018 compared to the average realized prices for 2017. A shortage of non-ferrous raw materials combined with an improved view of the Chinese economy have, in recent months, had a positive impact on the base metal prices. However, recent uncertainty has arose following the imposition of trade tariffs by the U.S. government on Chinese exports which has negatively impacted base metal prices.

LME Average Prices (In US dollars)	Three months ended December 31,		Year ended December 31,	
	2018	2017	2018	2017
Silver (oz)	\$ 14.55	\$ 16.70	\$ 15.71	\$ 17.05
Copper (lb)	\$ 2.80	\$ 3.09	\$ 2.96	\$ 2.80
Lead (lb)	\$ 0.89	\$ 1.13	\$ 1.02	\$ 1.05
Zinc (lb)	\$ 1.19	\$ 1.47	\$ 1.33	\$ 1.31
Gold (oz)	\$ 1,229.00	\$ 1,277	\$ 1,270.00	\$ 1,258

The price of gold can fluctuate widely and is affected by a number of macroeconomic factors, including the sale or purchase of gold by central banks and financial institutions, interest rates, exchange rates, inflation or deflation, global and regional supply and demand and the political and economic conditions of major gold-producing and gold-consuming countries throughout the world. A steady tightening of US monetary policy provided the backdrop for gold price movement in 2018, with the US Federal Reserve raising benchmark interest rates four times during the year, for a total of nine such increases since the current cycle began three years ago. The US dollar was a major beneficiary of the higher interest rate environment and this negatively impacted gold prices. Gold recorded its highest price for the year in late January at \$1,366 per ounce and remained relatively strong until mid-April, before falling steadily until mid-August when it recorded a low price of \$1,160 per ounce. Notwithstanding this period of weakness in the second and third quarters, the precious metal rallied over the remainder of the year to close 2018 at \$1,282 per ounce; recording a modest overall annual loss of 2%.

## **Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

During 2018, the price of silver was 9% lower, and gold 1% lower, compared to 2017, with the price ranging from \$14.00 to \$17.50 per ounce for silver and \$1,180 to \$1,360 per ounce for gold. Sierra's average realized silver price for 2018 was \$15.65 per ounce compared to \$17.14 per ounce in 2017. Sierra's average realized gold price for 2018 was \$1,269 per ounce compared to \$1,265 per ounce in 2017.

London Metal Exchange (LME) copper prices in the fourth quarter of 2018 averaged US\$2.80 per pound, up 1% from the third quarter, but down 9% from the fourth quarter a year ago. Annual prices in 2018 averaged US\$2.96 per pound, a 6% increase from 2017 averages. Copper prices hit a three-year high in June, settling at US\$3.29 per pound due to improving outlook for global synchronized demand in the first half of 2018. However, copper prices then began to weaken for the remainder of the year on concerns over impending global trade disputes and averaged 11% lower in the second half of the year. Although copper prices were affected by overall global macro investor sentiment, fundamentals in the second half remained strong with global exchange stocks falling 58%. During 2018, copper prices traded in a range of \$2.61 to \$3.32 per pound with an average price of \$2.96 per pound compared with \$2.80 per pound in 2017. Sierra's average realized copper price for 2018 was \$2.96 per pound compared to \$2.82 per pound in 2017.

London Metal Exchange (LME) zinc prices averaged US\$1.19 per pound in the fourth quarter of 2018, an increase of 4% over the third quarter, but down 19% from the fourth quarter of 2017. Annual LME zinc prices in 2018 averaged US\$1.33 per pound, similar to US\$1.31 per pound in 2017. Zinc reached an 11-year high in February at just over US\$1.64 per pound, a price last seen in July 2007. Sierra's realized zinc price for 2018 was \$1.31 per pound compared to \$1.32 per pound in 2017.

Lead prices traded in a range of \$0.87 to \$1.16 per pound in 2018. Sierra's realized lead price during 2018 was \$1.02 per pound compared to \$1.06 per pound in 2017.

### Currency Exchange Rates

The results of Sierra's operations are affected by US dollar exchange rates. Sierra's largest exposures are to the US dollar/Peruvian Nuevo Sol exchange rate and the US dollar/Mexican Peso exchange rate which impacts operating and administration costs in Peru and Mexico incurred in Nuevo Soles and Pesos while revenues are earned in US dollars. As at December 31, 2018 the US dollar/Peruvian Nuevo Sol exchange rate was 3.38 (December 31, 2017: 3.26) and the US dollar/Mexican Peso exchange rate was 19.64 (December 31, 2017: 19.74). A 10% change in the value of the Nuevo Sol and Peso against the US dollar would have resulted in a change of \$4.7 million and \$2.3 million in the Company's net profit, respectively, assuming that our operational performance during 2018 was consistent with 2017.

The Company also has a minor exposure to the Canadian dollar through corporate administrative costs.

**Sierra Metals Inc.**
**Management's Discussion and Analysis**
**For the year ended December 31, 2018**
*(In thousands of United States dollars, unless otherwise stated)*
**5. RESULTS OF OPERATIONS**
**Selected Production Results on a Mine-by-Mine Basis for the Past Eight Quarters**

Production Highlights	2018				2017			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
<b>Ore Processed/tonnes milled</b>								
Yauricocha	268,363	283,446	283,450	271,389	266,222	268,178	237,912	251,180
Bolivar	272,645	227,690	272,040	259,375	226,986	223,339	192,937	243,974
Cusi	58,289	55,058	46,597	26,946	16,280	13,234	23,956	34,541
<b>Consolidated</b>	<b>599,297</b>	<b>566,194</b>	<b>602,087</b>	<b>557,710</b>	<b>509,488</b>	<b>504,751</b>	<b>454,805</b>	<b>529,695</b>
<b>Silver ounces produced (000's)</b>								
Yauricocha	402	404	392	366	330	376	448	499
Bolivar	128	94	110	120	84	76	73	94
Cusi	171	230	190	108	82	55	95	104
<b>Consolidated</b>	<b>701</b>	<b>728</b>	<b>692</b>	<b>594</b>	<b>496</b>	<b>507</b>	<b>616</b>	<b>697</b>
<b>Copper pounds produced (000's)</b>								
Yauricocha	4,702	4,428	3,884	3,727	3,567	3,178	2,192	2,783
Bolivar	4,230	3,898	4,737	4,363	3,904	3,522	3,123	4,508
Cusi	-	-	-	-	-	-	-	-
<b>Consolidated</b>	<b>8,932</b>	<b>8,326</b>	<b>8,621</b>	<b>8,090</b>	<b>7,471</b>	<b>6,700</b>	<b>5,315</b>	<b>7,290</b>
<b>Lead pounds produced (000's)</b>								
Yauricocha	7,528	6,114	6,809	6,069	5,431	6,112	8,010	8,382
Bolivar	-	-	-	-	-	-	-	-
Cusi	421	244	287	243	305	246	457	761
<b>Consolidated</b>	<b>7,949</b>	<b>6,358</b>	<b>7,096</b>	<b>6,312</b>	<b>5,736</b>	<b>6,358</b>	<b>8,467</b>	<b>9,143</b>
<b>Zinc pounds produced (000's)</b>								
Yauricocha	17,545	20,772	20,300	18,144	19,393	19,717	18,268	17,774
Bolivar	-	-	-	-	-	-	-	-
Cusi	-	-	-	70	152	160	262	363
<b>Consolidated</b>	<b>17,545</b>	<b>20,772</b>	<b>20,300</b>	<b>18,214</b>	<b>19,545</b>	<b>19,877</b>	<b>18,530</b>	<b>18,137</b>
<b>Gold ounces produced</b>								
Yauricocha	850	911	807	835	723	827	566	779
Bolivar	1,163	911	911	1,048	791	629	620	840
Cusi	124	84	96	69	77	61	126	159
<b>Consolidated</b>	<b>2,137</b>	<b>1,906</b>	<b>1,814</b>	<b>1,952</b>	<b>1,591</b>	<b>1,517</b>	<b>1,312</b>	<b>1,778</b>

Production Highlights	2018				2017			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
<b>Silver equivalent ounces produced (000's)<sup>1</sup></b>								
Yauricocha	3,209	3,292	3,361	3,236	3,084	2,973	2,551	2,735
Bolivar	1,029	902	1,085	1,021	873	736	586	825
Cusi	207	253	217	136	121	88	149	186
<b>Consolidated</b>	<b>4,445</b>	<b>4,447</b>	<b>4,663</b>	<b>4,393</b>	<b>4,078</b>	<b>3,797</b>	<b>3,286</b>	<b>3,746</b>
<b>Copper equivalent pounds produced (000's)<sup>1</sup></b>								
Yauricocha	16,929	17,493	17,624	17,266	16,527	17,107	17,029	18,346
Bolivar	5,426	4,790	5,691	5,450	4,677	4,235	3,914	5,533
Cusi	1,092	1,345	1,137	728	652	509	995	1,247
<b>Consolidated</b>	<b>23,447</b>	<b>23,628</b>	<b>24,452</b>	<b>23,444</b>	<b>21,856</b>	<b>21,851</b>	<b>21,938</b>	<b>25,126</b>
<b>Cash cost per tonne processed</b>								
Yauricocha	\$ 69.37	\$ 60.34	\$ 60.51	\$ 63.04	\$ 64.90	\$ 62.33	\$ 64.63	\$ 57.81
Bolivar	\$ 30.25	\$ 31.06	\$ 24.31	\$ 25.68	\$ 28.84	\$ 25.69	\$ 26.35	\$ 19.51
Cusi	\$ 57.74	\$ 59.00	\$ 66.56	\$ 83.57	\$ 119.06	\$ 134.77	\$ 88.41	\$ 52.71
<b>Consolidated</b>	<b>\$ 50.44</b>	<b>\$ 48.43</b>	<b>\$ 44.62</b>	<b>\$ 46.66</b>	<b>\$ 50.57</b>	<b>\$ 48.01</b>	<b>\$ 49.64</b>	<b>\$ 39.84</b>

## Sierra Metals Inc.

### Management's Discussion and Analysis

For the year ended December 31, 2018

(In thousands of United States dollars, unless otherwise stated)

Consolidated Production	Three Months Ended			Twelve Months Ended		
	December 31, 2018	December 31, 2017	% Var	December 31, 2018	December 31, 2017	% Var
Tonnes processed	599,297	498,199	20%	2,325,288	1,988,738	17%
Daily throughput	6,849	5,694	20%	6,644	5,711	16%
Silver ounces (000's)	701	496	41%	2,716	2,317	17%
Copper pounds (000's)	8,932	7,471	20%	33,968	26,775	27%
Lead pounds (000's)	7,949	5,736	39%	27,714	29,704	-7%
Zinc pounds (000's)	17,545	19,545	-10%	76,831	76,088	1%
Gold ounces	2,137	1,591	34%	7,743	6,197	25%
Silver equivalent ounces (000's) <sup>(1)</sup>	4,445	4,078	9%	17,988	14,865	21%
Copper equivalent pounds (000's) <sup>(1)</sup>	23,447	21,856	7%	95,184	90,354	6%
Zinc equivalent pounds (000's) <sup>(1)</sup>	56,287	47,287	19%	215,053	193,152	12%
<b>Metals payable in concentrates</b>						
Silver ounces (000's)	573	400	43%	2,222	1,976	12%
Copper pounds (000's)	8,293	7,078	17%	31,255	25,602	22%
Lead pounds (000's)	7,161	5,193	38%	26,506	28,075	-6%
Zinc pounds (000's)	14,918	15,047	-1%	64,872	62,796	3%
Gold ounces	1,370	815	68%	5,176	3,708	40%
Silver equivalent ounces (000's) <sup>(1)</sup>	3,878	3,428	13%	15,673	13,034	20%
Copper equivalent pounds (000's) <sup>(1)</sup>	20,480	18,367	12%	82,992	79,222	4%
Zinc equivalent pounds (000's) <sup>(1)</sup>	48,904	39,648	23%	188,750	169,248	11%

(1) Silver equivalent ounces and copper and zinc equivalent pounds for Q4 2018 were calculated using the following realized prices: \$14.63/oz Ag, \$2.77/lb Cu, \$0.89/lb Pb, \$1.16/lb Zn, \$1,238/oz Au. Silver equivalent ounces and copper and zinc equivalent pounds for Q4 2017 were calculated using the following realized prices: \$16.77/oz Ag, \$3.13/lb Cu, \$1.11/lb Pb, \$1.45/lb Zn, \$1,282/oz Au. Silver equivalent ounces and copper and zinc equivalent pounds for 12M 2018 were calculated using the following realized prices: \$15.65/oz Ag, \$2.96/lb Cu, \$1.02/lb Pb, \$1.31/lb Zn, \$1,269/oz Au. Silver equivalent ounces and copper and zinc equivalent pounds for 12M 2017 were calculated using the following realized prices: \$17.14/oz Ag, \$2.82/lb Cu, \$1.06/lb Pb, \$1.32/lb Zn, \$1,265/oz Au.

## The Peruvian Operation

### Yauricocha Mine, Yauyos, Peru

Corona's main asset, Yauricocha, is an underground mine located in western central Peru in the Yauyos province, approximately 12 km west of the Continental Divide. The Yauricocha property covers 18,778 hectares that straddle a 20 km strike length of the prolific Yauricocha fault, a major ore controlling structure in this part of western central Peru. The mine is at an average altitude of 4,600 meters and has been producing for more than 68 years. Ore is processed at the on-site Chumpe plant using a combination of crushing, grinding and flotation and is permitted to produce at a rate of 3,150 tpd, which we expect to increase to 3,600 tpd during 2019 upon receipt of the ITS permit. The ore is treated in two separate circuits and is extracted from three different types of deposits which include the following:

- A polymetallic deposit, containing silver, lead, zinc, copper, and gold
- A lead oxide deposit, containing lead, silver and gold
- A copper oxide deposit, containing copper, silver, lead and gold

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)***Yauricocha Preliminary Economic Assessment ("PEA")**

On June 27, 2018, the Company reported the results of the PEA for the Yauricocha Mine, which included the following highlights (see Company's website for the Press Release):

<b>PEA Highlights</b>		
<b>Base case of US\$1,323/oz Gold, US\$18.68/oz Silver, US\$0.98/lb Lead, US\$1.19/lb Zinc, US\$3.15/lb Copper.</b>	<b>Unit</b>	<b>Value</b>
Net Present Value (After Tax 8% Discount Rate)	US\$ M	\$393
Return On Investment (ROI)	ROI%	486%
Mill Feed	Tonnes (Millions)	13.5
Mining Production Rate	t/year	1,800,000
LOM Project Operating Period	years	9
Total Capital Costs	US\$ M	\$238
Net After – Tax Cashflow	US\$ M	\$532
Total Operating Unit Cost	US\$/t	\$43.86
LOM Gold Production (Payable)	oz	17,621
LOM Silver Production (Payable)	oz	11,408,281
LOM Lead Production (Payable)	t	87,881
LOM Zinc Production (Payable)	t	281,746
LOM Copper Production (Payable)	t	102,821

The PEA calculates a Base Case after – tax NPV of US\$393 million with an after – tax Return on Investment (ROI) of 486% using a discount rate of 8%. The total life of mine capital cost of the project is estimated to total US\$238 million. The payback period for the LoM capital is estimated at 4.1 years. Operating costs of the LoM total US\$593 million, equating to an operating cost of US\$43.86 per tonne milled.

**Sierra Metals Inc.**

## Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)***Yauricocha Production**

A summary of contained metal production from the Yauricocha Mine for the three months and year ended December 31, 2018 has been provided below:

Yauricocha Production	3 Months Ended			12 Months Ended		
	Q4 2018	Q4 2017	% Var.	Q4 2018	Q4 2017	% Var.
<b>Tonnes processed (mt)</b>	<b>268,363</b>	<b>254,933</b>	<b>5%</b>	<b>1,106,649</b>	<b>1,023,491</b>	<b>8%</b>
Daily throughput	3,067	2,914	5%	3,162	2,924	8%
Silver grade (g/t)	64.06	53.57	20%	60.32	67.13	-10%
Copper grade	1.06%	0.80%	33%	0.97%	0.79%	22%
Lead grade	1.51%	1.19%	27%	1.30%	1.48%	-12%
Zinc grade	3.41%	3.91%	-13%	3.55%	3.74%	-5%
Gold Grade (g/t)	0.57	0.55	3%	0.58	0.54	7%
Silver recovery	72.66%	75.13%	-3%	72.85%	74.82%	-3%
Copper recovery	74.89%	78.86%	-5%	70.84%	65.45%	8%
Lead recovery	84.42%	81.32%	4%	83.75%	83.64%	0%
Zinc recovery	87.07%	88.25%	-1%	88.74%	89.14%	0%
Gold Recovery	17.20%	16.02%	7%	16.63%	16.30%	2%
<b>Silver ounces (000's)</b>	<b>402</b>	<b>330</b>	<b>22%</b>	<b>1,563</b>	<b>1,653</b>	<b>-5%</b>
<b>Copper pounds (000's)</b>	<b>4,702</b>	<b>3,567</b>	<b>32%</b>	<b>16,741</b>	<b>11,719</b>	<b>43%</b>
<b>Lead pounds (000's)</b>	<b>7,528</b>	<b>5,431</b>	<b>39%</b>	<b>26,520</b>	<b>27,934</b>	<b>-5%</b>
<b>Zinc pounds (000's)</b>	<b>17,545</b>	<b>19,393</b>	<b>-10%</b>	<b>76,761</b>	<b>75,151</b>	<b>2%</b>
<b>Gold ounces</b>	<b>850</b>	<b>723</b>	<b>18%</b>	<b>3,403</b>	<b>2,894</b>	<b>18%</b>
<b>Zinc equivalent pounds (000's)<sup>(1)</sup></b>	<b>40,640</b>	<b>35,758</b>	<b>14%</b>	<b>157,151</b>	<b>146,816</b>	<b>7%</b>

(1) Silver equivalent ounces and copper and zinc equivalent pounds for Q4 2018 were calculated using the following realized prices: \$14.63/oz Ag, \$2.77/lb Cu, \$0.89/lb Pb, \$1.16/lb Zn, \$1.238/oz Au. Silver equivalent ounces and copper and zinc equivalent pounds for Q4 2017 were calculated using the following realized prices: \$16.77/oz Ag, \$3.13/lb Cu, \$1.11/lb Pb, \$1.45/lb Zn, \$1.282/oz Au. Silver equivalent ounces and copper and zinc equivalent pounds for 12M 2018 were calculated using the following realized prices: \$15.65/oz Ag, \$2.96/lb Cu, \$1.02/lb Pb, \$1.31/lb Zn, \$1.269/oz Au. Silver equivalent ounces and copper and zinc equivalent pounds for 12M 2017 were calculated using the following realized prices: \$17.14/oz Ag, \$2.82/lb Cu, \$1.06/lb Pb, \$1.32/lb Zn, \$1.265/oz Au.

The Yauricocha Mine processed a total of 1,106,649 tonnes during 2018, representing an 8% increase from 2017, and 268,363 tonnes in Q4 2018, representing a 5% increase compared to Q4 2017. Zinc equivalent metal production in Q4 2018 increased by 14% due to higher ore throughput, higher head grades for all metals, except zinc, and higher lead and copper recoveries. The higher lead head grades and lead production realized during Q4 2018 was the result of increased production from the cuerpos chicos that contained higher lead grades during the quarter. Higher copper head grades and lower zinc head grades resulted from the inclusion of certain copper-enriched zones at Esperanza, polymetallic ore from the Central Mine Zone, and a small inclusion of polymetallic ore from the cuerpos chicos.

Year over year zinc equivalent production was 7% higher in 2018 compared to the prior year. Copper Production was 43% higher, zinc production 2% higher, and gold production was 18% higher. This was partially offset by a 5% decrease in silver production, and a 5% decrease in lead production from 2017.

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

**The Mexican Operations****Bolivar Mine, Chihuahua State**

The Bolivar Mine is a contiguous portion of the 15,217 hectare Bolívar Property land package within the municipality of Urique, in the Piedras Verdes mining district of Chihuahua State, Mexico. During 2012, the Company achieved its first full year of commercial production at the Piedras Verdes plant, which is located 6 kilometres from the Bolívar Mine that had an initial capacity of 1,000 tpd. In September 2013, the Piedras Verdes plant further increased its daily throughput capacity to 2,000 tpd by installing a new circuit. Work continues on the installation of an additional mill in the fourth quarter which will help grind size optionality and improve recoveries at the plant. Production has increased incrementally in Q4 2018 and we should be at the 3,600 tonnes per day level during Q1 2019.

At Bolívar during Q4 2018, 6,258 meters were drilled from surface as well as diamond drilling within the mine. 2,183 meters were drilled within the mine in the El Gallo zone. There was also 3,865 meters drilled at the Bolívar West extension to explore the extension of the orebody to the North and West, exploring the skarn orebody with semi-massive magnetite, and disseminated nodules of chalcopyrite. There was also 210 meters drilled at La Campana, which is a new exploration target where we are exploring the possibility of finding a skarn orebody with copper and zinc.

**Bolivar Reserve and Resource Update**

On May 22, 2018, the Company provided an update to its Mineral Reserve and Resource Estimate for the Bolívar Mine.

**Mineral Reserve and Resource Estimate**

Mineral Reserve Estimations have been conducted or reviewed by the following Qualified Persons:

- Enrique Rubio, Ph.D. of REDCO Mining Consultants (Chile); Datamine Studio 5DP™ and Enhanced Production Scheduler (EPS)™ software.
- Shannon L. Rhéaume, P.Eng. of SRK Consulting (Canada) Inc.; Datamine Studio 5DP™ and Enhanced Production Scheduler (EPS)™ software.

Mineral Resource Estimations have been conducted by David Keller, P.Geo. of SRK Consulting Canada and reviewed by Giovanni Ortiz, FAusIMM CP an associate of SRK Consulting (U.S.) Inc. and a Qualified Person under National Instrument 43-101 – Standards of Disclosure for Mineral Projects. The estimations were carried out using Datamine Studio RM™ and Leapfrog Geo™ software.

The consolidated mineral reserve statement for the Bolívar Mine area is presented in Table 1. The effective date for the reserves estimated herein is October 31, 2017. SRK has prepared an NI 43-101 Technical Report which supports this disclosure.

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)***Table 1: Consolidated Bolivar Mineral Reserve Estimate as of October 31, 2017 – SRK Consulting (U.S.), Inc.**

Category	Tonnes (000's)	Ag (g/t)	Au (g/t)	Cu (%)	Ag (Koz)	Au (Koz)	Cu (t)
Proven							
Probable	7,925	18.9	0.25	0.86	4,823	63	67,925
P+P	7,925	18.9	0.25	0.86	4,823	63	67,925

(1) All figures rounded to reflect the relative accuracy of the estimates. Totals may not sum due to rounding.

(2) Ore reserves are reported at unit value cut-offs based on metal price assumptions\*, metallurgical recovery assumptions\*\*, mining costs, processing costs, general and administrative (G&A) costs, and treatment and refining charges.

\* Metal price assumptions considered are: Copper (Cu): US\$/lb 3.00, Silver (Ag): US\$/oz 18.25, and Gold (Au): US\$/oz 1,291.00.

\*\* Metallurgical recovery assumptions are 83% Cu, 78% Ag, and 64% Au.

(3) The mining costs are based on historical actual costs.

(4) The NSR cut-off values are variable by proposed mining method.

- The economic NSR cut-off value is:
  - US\$30.80 = Room and Pillar; and
  - US\$33.10 = Longhole Stopping.
- The marginal NSR cut-off value is:
  - US\$26.50 = Room and Pillar; and
  - US\$28.70 = Longhole Stopping.

(5) Mining recovery and dilution have been applied and are variable by mining area and proposed mining method.

The October 31, 2017, consolidated mineral resource statement for the Bolivar Mine area is presented in Table 2. These resources have been stated in unmined areas of the deposits. Potential resources within surveyed pillar shapes in the existing mined out areas are not reported. SRK has prepared an NI 43-101 Technical Report which supports this disclosure.

**Table 2: Consolidated Bolivar Mineral Resource Estimate as of October 31, 2017 – SRK Consulting (U.S.), Inc.**

Category	Tonnes (000's)	Ag (g/t)	Au (g/t)	Cu (%)	Ag (Koz)	Au (Koz)	Cu (t)
Indicated	13,267	22.5	0.29	1.04	9,616	124	137,537
Inferred	8,012	22.4	0.42	0.96	5,779	109	76,774

(6) Mineral resources are reported inclusive of ore reserves. Mineral resources are not ore reserves and do not have demonstrated economic viability. All figures rounded to reflect the relative accuracy of the estimates. Copper, gold, and silver assays were capped where appropriate.

(7) Mineral resources are reported at variable metal value cut-off grades based on metal price assumptions\*, metallurgical recovery assumptions\*\*, mining/transport costs (US\$17.95/t), processing costs (US\$8.33/t), and general and administrative costs (US\$2.41/t).

(8) The metal value cut-off grade for the Bolivar Mine is US\$29. No mineral resources are reported for remaining pillars.

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

(9) \* Metal price assumptions considered for the calculation of metal value are: Copper (Cu): US\$/lb 3.00, Silver (Ag): US\$/oz 18.25, and Gold (Au): US\$/oz 1,291.00.

(10) \*\* Metallurgical recovery assumptions are 83% Cu, 78% Ag, and 64% Au.

**Bolivar Preliminary Economic Assessment (“PEA”)**

On July 9, 2018, the Company reported the results of the PEA for the Bolivar Mine, which included the following highlights (see Company's website for the Press Release):

<b>PEA Highlights</b>	<b>Unit</b>	<b>Value</b>
<b>Base case of \$1,291/oz Gold, \$18.25/oz Silver, \$3.00/lb. Copper</b>		
Net Present Value (After Tax 8% Discount Rate)	US\$ M	\$214
Return on Investment	ROI (%)	550%
Mill Feed	Tonnes (Mt)	16.9
Peak Mining Production Rate	t/year	1,800,000
LOM Project Operating Period	Years	11
Total Life of Mine (LoM) Capital Costs	US\$ M	\$96
Net After – Tax Cashflow	US\$ M	\$303
Total Operating Unit Costs	US\$/t	\$21.18
LOM Gold Production (Payable)	oz	86,472
LOM Silver Production (Payable)	oz	7,013,157
LOM Copper Production (Payable)	t	114,537

The PEA calculates a Base Case after-tax NPV of US\$214 million, with an after – tax Return on Investment of 550% using a discount rate of 8%. The total life of mine capital cost of the project is estimated to total US\$96.0 million. The payback period for the Life of Mine (LoM) capital is estimated at 3.4 years. Operating costs of the life of mine total US\$359 million, equating to an operating cost of US\$21.18 per tonne milled.

## Sierra Metals Inc.

### Management's Discussion and Analysis

For the year ended December 31, 2018

(In thousands of United States dollars, unless otherwise stated)

## Bolivar Production

A summary of contained metal production from the Bolivar Mine for the three months and year ended December 31, 2018 has been provided below:

Bolivar Production	3 Months Ended			12 Months Ended		
	Q4 2018	Q4 2017	% Var.	Q4 2018	Q4 2017	% Var.
<b>Tonnes processed (mt)</b>	<b>272,645</b>	<b>226,986</b>	<b>20%</b>	<b>1,031,750</b>	<b>887,237</b>	<b>16%</b>
Daily throughput	3,116	2,594	20%	2,948	2,535	16%
Copper grade	0.89%	0.94%	-6%	0.95%	0.96%	-2%
Silver grade (g/t)	19.00	14.67	30%	17.69	14.93	19%
Gold grade (g/t)	0.21	0.16	30%	0.17	0.17	3%
Copper recovery	79.27%	83.03%	-5%	79.95%	79.82%	0%
Silver recovery	77.14%	78.35%	-2%	77.08%	76.88%	0%
Gold recovery	64.29%	68.42%	-6%	68.55%	59.50%	15%
<b>Copper pounds (000's)</b>	<b>4,230</b>	<b>3,904</b>	<b>8%</b>	<b>17,227</b>	<b>15,056</b>	<b>14%</b>
<b>Silver ounces (000's)</b>	<b>128</b>	<b>84</b>	<b>53%</b>	<b>452</b>	<b>327</b>	<b>38%</b>
<b>Gold ounces</b>	<b>1,163</b>	<b>791</b>	<b>47%</b>	<b>3,968</b>	<b>2,880</b>	<b>38%</b>
<b>Copper equivalent pounds (000's)<sup>(1)</sup></b>	<b>5,426</b>	<b>4,677</b>	<b>16%</b>	<b>21,323</b>	<b>18,338</b>	<b>16%</b>

(1) Silver equivalent ounces and copper and zinc equivalent pounds for Q4 2018 were calculated using the following realized prices: \$14.63/oz Ag, \$2.77/lb Cu, \$0.89/lb Pb, \$1.16/lb Zn, \$1.238/oz Au. Silver equivalent ounces and copper and zinc equivalent pounds for Q4 2017 were calculated using the following realized prices: \$16.77/oz Ag, \$3.13/lb Cu, \$1.11/lb Pb, \$1.45/lb Zn, \$1.282/oz Au. Silver equivalent ounces and copper and zinc equivalent pounds for 12M 2018 were calculated using the following realized prices: \$15.65/oz Ag, \$2.96/lb Cu, \$1.02/lb Pb, \$1.31/lb Zn, \$1.269/oz Au. Silver equivalent ounces and copper and zinc equivalent pounds for 12M 2017 were calculated using the following realized prices: \$17.14/oz Ag, \$2.82/lb Cu, \$1.06/lb Pb, \$1.32/lb Zn, \$1.265/oz Au.

The Bolivar Mine processed 1,031,750 tonnes in 2018, representing a 16% increase over 2017. Q4 2018 record throughput was 272,645 tonnes, which was 20% higher when compared to Q4 2017. The higher throughput and higher gold and silver head grades resulted in a 16% increase in copper equivalent production in Q4 2018 compared to Q4 2017. The increase in throughput was due to the work performed to increase the profile of the ramps and main access drives to 5 meters wide x 5 meters high within the mine to provide access to larger conventional road dump trucks as well as articulating 6-wheel trucks to move higher volumes of ore out of the mine. The development work performed during the year resulted in increased access to more minable stopes which also contributed to the higher throughput. The Company is pleased with the progress made on the expansion plans at the Bolivar Mine. With the early completion of construction at the Piedras Verdes Mill, we expect to deliver on the goal of a 20% increase in production from 3,000 TPD to 3,600 TPD, in Q1 2019.

Copper equivalent production at the Bolivar Mine increased 16% in 2018 compared to 2017, with copper production 14% higher, silver production 38% higher, and gold production 38% higher. In Q4 2018, copper production increased by 8% to 4,230,000 pounds, silver production increased 53% to 128,000 ounces, and gold production increased 47% to 1,163 ounces compared to Q4 2017. The 16% increase in copper equivalent production was driven by higher throughput, and higher silver and gold head grades.

The Company continues to define higher grade ore sources at Bolivar West and Bolivar Northwest which are expected to come into the mine plan by the second half of 2019. However, as a short-term planning strategy, the Bolivar Mine continues to focus on developing and mining the El Gallo Inferior zone to centralize operations, optimize equipment usage and to improve productivity.

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)***The Cusi Mine, Chihuahua**

The Company's Cusi Mine encompasses 73 concessions covering 11,977 hectares that include 12 historical mines, each located on a mineralized structure, which lie within 40 kilometers of the Malpaso Plant located in Chihuahua State, Mexico. On January 1, 2013 the Company announced that the Cusi Mine achieved commercial production.

During Q4 2018 the Company drilled 1,781 meters to support the development of the Santa Rosa de Lima vein in Promontorio to further verify the size and continuity of the orezone. 2,497 meters of surface diamond drilling was performed to explore the depth of the mineralized structure of San Nicolas in the area of the San Juan Mine.

**Cusi Preliminary Economic Assessment ("PEA")**

On June 18, 2018, the Company reported the results of the PEA for the Cusi Mine, which included the following highlights (see Company's website for the Press Release):

<b>PEA Highlights</b>	<b>Unit</b>	<b>Value</b>
<b>Base case of \$1,283/oz Gold, \$18.30/oz Silver, \$0.93/lb. Lead, \$1.15/lb. Zinc</b>		
Net Present Value (After Tax 8% Discount Rate)	US\$ M	\$92.2
Internal Rate of Return	IRR	75%
Mill Feed	Tonnes (Mt)	6.27
Peak Mining Production Rate	t/year	972,000
LOM Project Operating Period	Years	9
Total Life of Mine (LoM) Capital Costs	US\$ M	\$104.5
Net After – Tax Cashflow	US\$ M	\$150.6
Total Operating Unit Costs	US\$/t	\$41.36
LOM Gold Production (Payable)	Oz	19,706
LOM Silver Production (Payable)	MOz	30
LOM Lead Production (Payable)	t	28,256
LOM Zinc Production (Payable)	t	19,160

The PEA calculates a Base Case after-tax NPV of US\$92.2 million, with an after-tax IRR of 75% using a discount rate of 8%. The total life of mine capital cost of the project is estimated to total US\$104.5 million. The payback period for the Life of Mine (LoM) capital is estimated at 4.6 years. Operating costs of the life of mine total US\$259.3 million, equating to an operating cost of US\$41.36 per tonne milled.

## Sierra Metals Inc.

### Management's Discussion and Analysis

For the year ended December 31, 2018

(In thousands of United States dollars, unless otherwise stated)

## Cusi Production

A summary of contained metal production from the Cusi Mine for the three months and year ended December 31, 2018 has been provided below:

Cusi Production	3 Months Ended			12 Months Ended		
	Q4 2018	Q4 2017	% Var.	Q4 2018	Q4 2017	% Var.
<b>Tonnes processed (mt)</b>	<b>58,289</b>	<b>16,280</b>	<b>258%</b>	<b>186,889</b>	<b>88,011</b>	<b>112%</b>
Daily throughput	666	186	258%	534	251	112%
Silver grade (g/t)	111.10	178.60	-38%	140.17	164.93	-15%
Gold grade (g/t)	0.16	0.25	-36%	0.16	0.26	-38%
Lead grade	0.41%	0.97%	-58%	0.36%	1.12%	-68%
Zinc grade	0.49%	1.00%	-50%	0.40%	1.13%	-64%
Silver recovery	82.06%	88.15%	-7%	83.10%	72.17%	15%
Gold recovery	40.72%	58.09%	-30%	39.14%	58.40%	-33%
Lead recovery	80.61%	87.65%	-8%	79.92%	81.26%	-2%
Zinc recovery	0.00%	42.50%	-100%	4.26%	42.56%	-90%
<b>Silver ounces (000's)</b>	<b>171</b>	<b>82</b>	<b>107%</b>	<b>700</b>	<b>337</b>	<b>108%</b>
<b>Gold ounces</b>	<b>124</b>	<b>77</b>	<b>62%</b>	<b>372</b>	<b>423</b>	<b>-12%</b>
<b>Lead pounds (000's)</b>	<b>421</b>	<b>305</b>	<b>38%</b>	<b>1,194</b>	<b>1,769</b>	<b>-33%</b>
<b>Zinc pounds (000's)</b>	<b>0</b>	<b>152</b>	<b>-100%</b>	<b>71</b>	<b>937</b>	<b>-92%</b>
<b>Silver equivalent ounces (000's)<sup>(1)</sup></b>	<b>207</b>	<b>122</b>	<b>70%</b>	<b>813</b>	<b>550</b>	<b>48%</b>

(1) Silver equivalent ounces and copper and zinc equivalent pounds for Q4 2018 were calculated using the following realized prices: \$14.63/oz Ag, \$2.77/lb Cu, \$0.89/lb Pb, \$1.16/lb Zn, \$1,238/oz Au. Silver equivalent ounces and copper and zinc equivalent pounds for Q4 2017 were calculated using the following realized prices: \$16.77/oz Ag, \$3.13/lb Cu, \$1.11/lb Pb, \$1.45/lb Zn, \$1,282/oz Au. Silver equivalent ounces and copper and zinc equivalent pounds for 12M 2018 were calculated using the following realized prices: \$15.65/oz Ag, \$2.96/lb Cu, \$1.02/lb Pb, \$1.31/lb Zn, \$1,269/oz Au. Silver equivalent ounces and copper and zinc equivalent pounds for 12M 2017 were calculated using the following realized prices: \$17.14/oz Ag, \$2.82/lb Cu, \$1.06/lb Pb, \$1.32/lb Zn, \$1,265/oz Au.

Annual production at the Cusi Mine was 186,889 tonnes in 2018, which was 112% higher than 2017. Total ore processed increased 258% to 58,289 tonnes during Q4 2018 compared to Q4 2017. The higher throughput was partially offset by lower head grades and recoveries for all metals, but still resulted in a 70% increase in silver equivalent production in Q4 2018 compared to Q4 2017.

Silver equivalent production increased 48% during 2018 compared to 2017, as silver production increased 108% to 700,000 ounces, while gold production decreased 12% to 372 ounces, lead production decreased 33% to 1,194,000 pounds and zinc production decreased 92% to 71,000 pounds. However, during Q4 2018, silver, gold, and lead production were 107%, 62%, and 38% higher than Q4 2017, respectively.

The increase in throughput was partially the result of the Company's successful development and mining of ore from the recently discovered high-grade silver stockwork zone located within the Santa Rosa de Lima ("SRL") vein complex. This mineralized zone extends to over 100 meters in length, 50 meters in width and 70 meters in height. Our development plan is now incorporating the wider dimensions of this zone.

# Sierra Metals Inc.

## Management's Discussion and Analysis

For the year ended December 31, 2018

(In thousands of United States dollars, unless otherwise stated)

### Consolidated Mineral Resources

		Reserves - Proven and Probable										Contained Metal									
		Tonnes (x1000)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Au (g/t)	AgEq (g/t)	CuEq (%)	ZnEq (%)	Ag (M oz)	Cu (M lb)	Pb (M lb)	Zn (M lb)	Au (K oz)	AgEq (M oz)	CuEq (M lb)	ZnEq (M lb)			
Yauricocha	Proven	1,836	47	1.08	0.84	2.59	0.64	-	-	5.78	3	44	34	105	38	-	-	234			
	Probable	7,081	49	1.23	0.75	2.38	0.49	-	-	5.72	11	192	117	372	112	-	-	893			
	Proven & Probable	8,917	48	1.20	0.77	2.43	0.52	-	-	5.73	14	235	151	477	150	-	-	1,127			
Bolivar	Proven	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	Probable	7,925	19	0.86	-	-	0.25	-	1.14	-	5	150	-	-	64	-	199	-			
	Proven & Probable	7,925	19	0.86	-	-	0.25	-	1.14	-	5	150	-	-	64	-	199	-			
<b>Total</b>	<b>Proven &amp; Probable</b>	<b>16,842</b>	<b>34</b>	<b>1.04</b>	<b>0.41</b>	<b>1.29</b>	<b>0.39</b>				<b>19</b>	<b>386</b>	<b>151</b>	<b>477</b>	<b>213</b>						
		Resources - Measured and Indicated										Contained Metal									
		Tonnes (x1000)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Au (g/t)	AgEq (g/t)	CuEq (%)	ZnEq (%)	Ag (M oz)	Cu (M lb)	Pb (M lb)	Zn (M lb)	Au (K oz)	AgEq (M oz)	CuEq (M lb)	ZnEq (M lb)			
Yauricocha	Measured	3,094	70	1.72	1.23	3.20	0.79	-	-	8.06	7	117	84	219	78	-	-	550			
	Indicated	10,112	60	1.46	0.83	2.67	0.60	-	-	6.63	19	326	185	595	196	-	-	1,478			
	Measured & Indicated	13,206	62	1.52	0.92	2.79	0.65	-	-	6.97	26	444	269	813	274	-	-	2,028			
Bolivar	Measured	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	Indicated	13,267	23	1.04	-	-	0.30	-	1.37	-	10	304	-	-	128	-	402	-			
	Measured & Indicated	13,267	23	1.04	-	-	0.30	-	1.37	-	10	304	-	-	128	-	402	-			
Cusi	Measured	362	225	-	0.55	0.68	0.13	269	-	-	3	-	4	5	2	3	-	-			
	Indicated	4,195	217	-	0.64	0.66	0.21	267	-	-	29	-	59	61	28	36	-	-			
	Measured & Indicated	4,557	218	-	0.63	0.66	0.20	267	-	-	32	-	64	66	30	39	-	-			
<b>Total</b>	<b>Measured &amp; Indicated</b>	<b>31,030</b>	<b>68</b>	<b>1.09</b>	<b>0.49</b>	<b>1.29</b>	<b>0.43</b>				<b>68</b>	<b>748</b>	<b>333</b>	<b>880</b>	<b>432</b>						
		Resources - Inferred										Contained Metal									
		Tonnes (x1000)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Au (g/t)	AgEq (g/t)	CuEq (%)	ZnEq (%)	Ag (M oz)	Cu (M lb)	Pb (M lb)	Zn (M lb)	Au (K oz)	AgEq (M oz)	CuEq (M lb)	ZnEq (M lb)			
Yauricocha		6,632	43	1.19	0.47	2.16	0.55	-	-	5.15	9	175	68	315	117	-	-	753			
Bolivar		8,012	22	0.96	-	-	0.42	-	1.35	-	6	170	-	-	108	-	238	-			
Cusi		1,633	158	-	0.54	0.84	0.16	207	-	-	8	-	19	30	8	11	-	-			
<b>Total</b>	<b>Inferred</b>	<b>16,277</b>	<b>44</b>	<b>0.96</b>	<b>0.24</b>	<b>0.96</b>	<b>0.45</b>				<b>23</b>	<b>344</b>	<b>87</b>	<b>345</b>	<b>234</b>						

#### Notes:

- The effective date of the Yauricocha mineral reserve and resource estimate is July 31, 2017. Details of the estimate are provided in a NI 43-101 technical report filed on SEDAR on November 10, 2017. Zinc equivalency is based on the following metal price assumptions: US\$17.80/oz Ag, US\$2.60/lb Cu, US\$1.01/lb Pb, US\$1.25/lb Zn and US\$1,255/oz Au. Metallurgical recovery assumptions are variable between mineralization types, and are based on actual plant data for 2017. They range (where recovered) from 28-67% Ag, 39-65% Cu, 66-85% Pb, 89% Zn, 16-54% Au. The equivalency expression is designed to present an in-situ zinc equivalent, considering the recovered value of the other metals expressed in the value of zinc percent.
  - The equation is:  $ZnEq = ((Ag * Ag\$ * Agrec) + (Cu * Cu\$ * Curec) + (Pb * Pb\$ * Pbre) + (Zn * Zn\$ * Znrec) + (Au * Au\$ * Aurec)) / (Zn\$ * Znrec)$ .
- The effective date of the Bolivar mineral reserve and resource estimate is October 31, 2017. Details of the estimate are provided in the Company's May 22, 2018 press releases and a NI 43-101 technical report will be filed on SEDAR within 45 days of the May 22, 2018 press release. Measured, Indicated and Inferred Resources include Proven and Probable Reserves. Copper equivalent is based on the following metal prices: US\$18.25/oz Ag, US\$3.00/lb Cu and US\$1,291 Au. Totals for Proven and Probable are diluted for internal waste. Metallurgical recovery assumptions are based on actual plant data for 2017 and are 78% Ag, 83% Cu, and 64% Au. The equivalency expression is designed to present an in-situ copper equivalent, considering the recovered value of the other metals expressed in the value of copper percent.
  - The equation is:  $CuEq = ((Ag * Ag\$ * Agrec) + (Cu * Cu\$ * Curec) + (Au * Au\$ * Aurec)) / (Cu\$ * Curec)$ .
- The effective date of the Cusi mineral resource estimate is August 31, 2017. Details of the estimate are provided in a NI 43-101 technical report filed on SEDAR on February 12, 2018. Mineral resources that are not mineral reserves do not have demonstrated economic viability. Silver equivalency is based on the following metal price assumptions: US\$18.30/oz Ag, US\$0.93/lb Pb, US\$1.15/lb Zn and US\$1,283/oz Au. Based on the historical production information for Cusi, the metallurgical recovery assumptions are 84% Ag, 86% Pb, 51% Zn, 57% Au. The equivalency expression is designed to present an in-situ silver equivalent, considering the recovered value of the other metals expressed in the value of silver g/t.
  - The equation is:  $AgEq = ((Ag * Ag\$ * Agrec) + (Pb * Pb\$ * Pbre) + (Zn * Zn\$ * Znrec) + (Au * Au\$ * Aurec)) / (Ag\$ * Agrec)$ .

## Sierra Metals Inc.

### Management's Discussion and Analysis

For the year ended December 31, 2018

(In thousands of United States dollars, unless otherwise stated)

## 6. SUMMARIZED FINANCIAL RESULTS

### Year ended December 31, 2018 (compared to the year ended December 31, 2017)

(In thousands of United States dollars, except cash costs)	Year ended		
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2016
Revenue	\$ 232,371	\$ 205,118	\$ 143,180
Adjusted EBITDA <sup>1</sup>	89,756	81,034	41,887
Cash flow from operations before movements in working capital	90,148	79,785	44,303
Adjusted net income attributable to shareholders	29,009	23,482	7,006
Non-cash charge on the acquisition of Corona	10,534	31,448	24,384
Gross profit	85,782	45,964	16,780
Income tax expense	(26,340)	(10,348)	(5,757)
Net income (loss) attributable to shareholders	18,814	(4,645)	(12,265)
(In thousands of United States dollars)	Dec 31, 2018	Dec 31, 2017	Dec 31, 2016
Cash and cash equivalents	\$ 21,832	\$ 23,878	\$ 42,145
Assets	356,441	340,601	364,812
Liabilities	152,836	159,923	178,850
<b>Net Debt<sup>2</sup></b>	<b>34,421</b>	<b>40,982</b>	<b>36,537</b>
Equity	203,605	180,678	185,962

<sup>1</sup> This is a non-IFRS performance measure, see Non-IFRS Performance Measures section

<sup>2</sup> Loans payable minus cash and cash equivalents.

Net income (loss) attributable to shareholders for 2018 was \$18.8 million (2017: \$(4.6) million) or \$0.12 per share (basic and diluted) (2017: \$(0.03)). The net loss incurred in 2017 included a \$4.4 million non-cash loss on the distribution of Cautivo Mining Inc. assets to Sierra shareholders. The other major differences between these periods are explained below.

### Revenues

Revenue from metals payable at the Yauricocha Mine in Peru of \$168.7 million for 2018 increased by 9% compared to \$154.2 million of revenues in 2017. Higher revenues are primarily attributable to the 8% increase in throughput, and the higher head grades and recoveries for copper and gold at Yauricocha in 2018 compared to 2017. The increase in revenues were realized despite decreases in the prices of silver (9%), lead (4%), and zinc (1%), which copper prices increased by 5% and gold prices were consistent with 2017. The Company continued to achieve consistent production throughout 2018 as the operational improvement program, and the focus on extracting higher value ore, in addition to ore sourced from the Esperanza Zone, continues to generate significant cash flows.

Revenue from metals payable in Mexico were \$63.7 million for 2018 compared to \$51.0 million in 2017. Revenues increased by 25% in Mexico during 2018 as a result of the 16% increase in throughput, higher silver and gold head grades, and higher gold recoveries realized at Bolivar; as well as the 112% increase in throughput, and higher silver recoveries realized at Cusi. The increase in revenues were realized despite decreases in the prices of silver (9%), lead (4%), and zinc (1%), which copper prices increased by 5% and gold prices were consistent with 2017;

**Sierra Metals Inc.**

## Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

Revenue from metals payable at the Bolivar Mine were \$52.5 million for 2018 compared to \$45.0 million in 2017. The increase in revenue from the Bolivar Mine in 2018 was due to the 5% increase in the price of copper realized, the 16% increase in throughput, higher silver and gold head grades, and higher recoveries of gold realized due to plant enhancements completed at Bolivar which included the installation of a new vibrating screen, filters, and cyclones.

Revenue from metals payable at the Cusi Mine for 2018 were \$11.3 million compared to \$6.0 million in 2017. The increase in revenues was the result of a 112% increase in throughput, and higher silver recoveries realized at Cusi. The Company has successfully transitioned to mining the recently developed Santa Rosa de Lima zone. This zone was being developed for the majority of 2017 as ramps were being prepared to access the minable stopes within the deposit. The Company is currently mining selected higher-grade structures at the old mine, the San Antonio vein, as well as the Santa Rosa de Lima structure containing improved head grades to the mill at Cusi.

The following table shows the Company's realized selling prices for each quarter in 2018 and 2017:

Realized Metal Prices <i>(In US dollars)</i>	2018					2017				
	Q4	Q3	Q2	Q1	YTD	Q4	Q3	Q2	Q1	YTD
Silver (oz)	\$ 14.63	\$ 14.85	\$ 16.36	\$ 16.75	\$ 15.65	\$ 16.77	\$ 16.86	\$ 17.22	\$ 17.71	\$ 17.14
Copper (lb)	\$ 2.77	\$ 2.79	\$ 3.12	\$ 3.14	\$ 2.96	\$ 3.13	\$ 2.93	\$ 2.58	\$ 2.64	\$ 2.82
Lead (lb)	\$ 0.89	\$ 0.94	\$ 1.09	\$ 1.15	\$ 1.02	\$ 1.11	\$ 1.08	\$ 0.99	\$ 1.04	\$ 1.06
Zinc (lb)	\$ 1.16	\$ 1.14	\$ 1.38	\$ 1.56	\$ 1.31	\$ 1.45	\$ 1.36	\$ 1.20	\$ 1.27	\$ 1.32
Gold (oz)	\$ 1,238	\$ 1,206	\$ 1,296	\$ 1,334	\$ 1,269	\$ 1,282	\$ 1,280	\$ 1,265	\$ 1,231	\$ 1,265

Yauricocha's cost of sales per zinc equivalent payable pound was \$0.55 (2017 - \$0.54), cash cost per zinc equivalent payable pound was \$0.52 (2017 - \$0.50), and AISC per zinc equivalent payable pound of \$0.73 (2017 - \$0.78). The decrease in the AISC per zinc equivalent payable pound for 2018 compared to 2017 was a result of lower sustaining capital expenditures and higher zinc equivalent payable pounds, while cash costs remained consistent; this was partially offset by slight increases in general and administrative costs. These cost decreases were realized despite a \$2.0 million increase in labor costs, due to the Company's union agreement and a salary adjustment to bring the 2018 salaries in line with the current market rates. The payment was made during November and December 2018 but retroactive to the entire year's salaries. Going forward these costs will be amortized over the entire year for 2019. The union was formed in July 2017 and has grown to 406 workers at the end of 2018, equivalent to approximately 60% of the Company's workforce, representing the majority of the mine employees.

Bolivar's cost of sales per copper equivalent payable pound was \$1.73 (2017 - \$1.54), cash cost per copper equivalent payable pound was \$1.44 (2017 - \$1.49), and AISC per copper equivalent payable pound was \$2.13 (2017 - \$2.698) for 2018 compared to 2017. The decrease in the AISC per copper equivalent payable pound during 2018 compared to 2017 was due to the increase in copper equivalent payable pounds resulting from higher throughput, higher silver and gold head grades and higher gold recoveries, as well as a decrease in sustaining capital expenditures.

Cusi's cost of sales per silver equivalent payable ounce was \$8.97 (2017 - \$12.51), cash cost per silver equivalent payable ounce was \$15.71 (2017 - \$15.37), and AISC per silver equivalent payable ounce was \$22.09 (2017 - \$33.90) for 2018 compared to 2017. AISC per silver equivalent payable ounce decreased due to higher silver equivalent payable ounces resulting from higher

## **Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

throughput, higher silver recoveries, lower treatment and refining charges, and lower sustaining capital expenditures.

### Non-cash depletion, depreciation and amortization

The Company recorded total non-cash depletion, depreciation and amortization expense for 2018 of \$31.3 million compared to \$58.2 million for the same period in 2017.

A large component of the net income for every period is the non-cash depletion charge in Peru, which was \$10.5 million for 2018 (2017: \$31.5 million). The non-cash depletion charge is based on the aggregate fair value of the Yauricocha mineral property at the date of acquisition of Corona of \$371.0 million amortized over the total proven and probable reserves of the mine. The decrease in the non-cash depletion charge in 2018 was due to the 134% increase in proven and probable reserves reported in the Company's NI 43-101 Technical Report issued on October 26, 2017.

### General and Administrative Expenses

The Company incurred general and administrative expenses of \$18.9 million in 2018 compared to \$20.3 million in 2017. The decrease in general and administrative costs in 2018 compared to 2017 was due to a decrease in consultant fees, professional fees and legal fees incurred in Canada during 2017 with regards to the work being performed towards listing Sierra Metals Inc. on the NYSE AMERICAN stock exchange, as well as the spin-out of the Northern Peruvian Properties from the Company's previous subsidiary, Plexmar Resources Inc.

### Adjusted EBITDA <sup>(1)</sup>

The Company recorded adjusted EBITDA of \$89.8 million during 2018 (2017: \$81.0 million) which was comprised of \$79.5 million (2017: \$74.8 million) from the Peruvian operations and \$13.8 million (2017: \$10.5 million) from the operations in Mexico. The increase in adjusted EBITDA is due to the increase in revenues discussed previously. Adjusted EBITDA is a non-IFRS measure that represents an indication of the Company's continuing capacity to generate earnings from operations before taking into account management's financing decisions and costs of consuming capital assets, which vary according to their vintage, technological currency, and management's estimate of their useful life. Adjusted EBITDA comprises revenue less operating expenses before interest expense (income), property, plant and equipment amortization and depletion, foreign exchange variations, non-recurring provisions, share-based payments expense, and income taxes. The Company considers cash flow before movements in working capital to be the IFRS performance measure that is most closely comparable to adjusted EBITDA.

### Income taxes

The Company recorded current tax expense of \$25.4 million for 2018 compared to \$23.4 million in 2017. The increase was the result of the higher taxable income generated in Peru during 2018 compared to 2017.

During 2018, the Company recorded a deferred tax expense of \$0.9 million compared to \$13.1 million deferred tax recovery in 2017. The main driver for the Company's consolidated deferred tax recovery is the non-cash recovery associated with the acquisition of Corona which has decreased period over period, in line with the non-cash depletion charge mentioned previously.

**Sierra Metals Inc.**

## Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*Adjusted net income attributable to shareholders <sup>(1)</sup>

Adjusted net income attributable to shareholders <sup>(1)</sup> of \$29.0 million, or \$0.17 per share, for 2018 was higher than the adjusted net income of \$23.5 million, or \$0.14 per share for 2017. Adjusted net income is defined by management as the net income attributable to shareholders shown in the condensed interim consolidated statements of income excluding the non-cash depletion charge due to the acquisition of Corona, the corresponding deferred income tax recovery, and certain non-recurring or non-cash items. Accordingly, management considers this metric to be more meaningful to measure the Company's profitability than net income as it adjusts for specific non-cash items.

Other Comprehensive Income

Other comprehensive income ("OCI") for 2018 was \$24.3 million compared to OCL of \$(0.4) million in 2017. OCI includes a foreign currency loss of \$1.6 million for 2018 (2017: \$0.5 million). The unrealized foreign currency translation loss was caused by the weakening of the Canadian dollar relative to the US dollar during the period which resulted in a foreign exchange loss on the translation of the Canadian dollar net assets into the Company's US dollar presentation currency.

<sup>(1)</sup> This is a non-IFRS performance measure, see non-IFRS Performance Measures section of this MD&A.

The following tables display selected quarterly financial results detailed by operating segment:

	Peru Yauricocha Mine	Mexico Bolivar Mine	Mexico Cusi Mine	Canada Corporate	Total
Year ended December 31, 2018	\$	\$		\$	\$
Revenue <sup>(1)</sup>	168,657	52,451	11,263	-	232,371
Production cost of sales	(74,731)	(33,168)	(7,281)	-	(115,180)
Depletion of mineral property	(13,229)	(2,918)	(640)	-	(16,787)
Depreciation and amortization of property, plant and equipment	(4,626)	(8,197)	(1,799)	-	(14,622)
Cost of sales	(92,586)	(44,283)	(9,720)	-	(146,589)
Gross profit from mining operations	76,071	8,168	1,543	-	85,782
Net income (loss) from operations	34,938	(3,593)	(1,228)	(4,277)	25,840
Adjusted EBITDA	79,524	10,984	2,792	(3,544)	89,756

	Peru Yauricocha Mine	Mexico Bolivar Mine	Mexico Cusi Mine	Canada Corporate	Total
Year ended December 31, 2017	\$	\$		\$	\$
Revenue	154,153	44,949	6,016	-	205,118
Production cost of sales	(67,542)	(27,418)	(6,019)	-	(100,979)
Depletion of mineral property	(31,448)	(3,163)	(690)	-	(35,301)
Depreciation and amortization of property, plant and equipment	(12,783)	(8,275)	(1,816)	-	(22,874)
Cost of sales	(111,773)	(38,856)	(8,525)	-	(159,154)
Gross profit (loss) from mining operations	42,380	6,093	(2,509)	-	45,964
Net income (loss) from operations	17,958	(3,230)	(4,593)	(10,995)	(860)
Adjusted EBITDA	74,815	11,900	(1,404)	(4,277)	81,034

## Sierra Metals Inc.

### Management's Discussion and Analysis

For the year ended December 31, 2018

(In thousands of United States dollars, unless otherwise stated)

#### Cash Flows

Cash flow generated from operations before movements in working capital of \$90.1 million for 2018 increased compared to \$79.8 million in 2017. The increase in operating cash flow is mainly the result of higher revenues generated and higher gross margins realized.

Net cash flow of \$(49.3) million (2017: \$(51.6) million) used in investing activities during 2018 consists of purchases of property, plant and equipment, capital expenditures related to the Yauricocha shaft and tunnel development, and exploration and evaluation assets in Peru and Mexico.

A breakdown of the Company's capital expenditures of \$49.3 million during the year ended December 31, 2018 is presented below:

2018 Capital Expenditures by Mine					
(\$ Millions)	Yauricocha	Bolivar	Cusi	Total	
<b>Expenditure</b>					
Mascota Shaft Refurbishing	\$ 1.50	\$ -	\$ -	\$ 1.50	
Concentrator Plant Improvements	\$ 2.00	\$ -	\$ -	\$ 2.00	
Investment in Equipment	\$ 3.90	\$ 2.20	\$ 2.10	\$ 8.20	
Exploration Drilling	\$ 1.80	\$ 2.20	\$ 2.60	\$ 6.60	
Mine Development	\$ 5.70	\$ 2.50	\$ 2.30	\$ 10.50	
Plant Improvements (production increases)	\$ 0.90	\$ 6.30	\$ 2.40	\$ 9.60	
Ventilation	\$ 1.00	\$ -	\$ -	\$ 1.00	
Yauricocha Tunnel	\$ 3.60	\$ -	\$ -	\$ 3.60	
Yauricocha Shaft	\$ 4.60	\$ -	\$ -	\$ 4.60	
Tailings Dam	\$ 0.20	\$ 0.50	\$ 0.60	\$ 1.30	
Mining Concession Fees	\$ -	\$ 0.40	\$ -	\$ 0.40	
	\$ 25.20	\$ 14.10	\$ 10.00	\$ 49.30	

Net cash flow of \$(14.5) million (2017: \$(21.1) million) from (used in) financing activities for 2018 consists of \$(18.8) million (2017: \$(44.5) million) in repayments of loans and credit facilities, \$(2.8) million (2017: \$(3.0) million) in interest paid on loans and credit facilities, and \$(2.9) million (2017: \$(3.4) million) of dividends paid to non-controlling interest shareholders. This was partially offset by proceeds received from the issuance of credit facilities of \$10.0 million during 2018 (2017: \$29.8 million).

## 7. QUARTERLY FINANCIAL REVIEW

The following table displays selected results from the eight most recent quarters:

(In thousands of United States dollars, except per share amounts)	2018				2017			
	Dec-31	Sep-30	Jun-30	Mar-31	Dec-31	Sep-30	Jun-30	Mar-31
Revenues	55,019	52,956	62,721	61,675	51,170	50,859	48,571	54,518
Adjusted EBITDA	15,263	18,212	28,878	27,403	19,208	18,845	17,620	25,361
Adjusted net income attributable to shareholders	783	4,482	12,557	11,187	3,241	4,993	4,258	10,990
Net income (loss) attributable to shareholders	(2,654)	1,922	10,843	8,703	2,118	(6,523)	(2,798)	2,558
Basic and diluted earnings (loss) per share (\$)	(0.01)	0.01	0.07	0.05	0.01	(0.04)	(0.02)	0.02

## **Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

### **Three months ended December 31, 2018 (compared to the three months ended December 31, 2017)**

Net income (loss) attributable to shareholders for Q4 2018 was \$(2.7) million, or \$(0.01) per share (basic and diluted), compared to net income of \$2.1 million, or \$0.01 per share (basic and diluted) for the same period in 2017. The major differences between these periods are explained below.

#### Revenues

Revenues from metals payable from the Yauricocha Mine in Peru were \$39.2 million for Q4 2018 compared to \$38.2 million in Q4 2017. The increase in revenues for Q4 2018 compared to Q4 2017 was due to a 5% increase in tonnes processed, higher head grades for all metals, except zinc, and higher recoveries for lead and gold. Increased revenues were realized due to the higher metal production, despite decreases in the prices of silver (13%), copper (12%), zinc (20%), lead (20%), and gold (3%).

Revenue from metals payable in Mexico were \$15.8 million for Q4 2018, compared to \$12.9 million for the same period in 2017. Revenues in Mexico increased as a result the 20% increase in throughput, higher silver and gold head grades at Bolivar; and the 258% increase in throughput at Cusi. Increased revenues were realized due to the higher metal production, despite decreases in the prices of silver (13%), copper (12%), zinc (20%), lead (20%), and gold (3%).

Revenues generated at the Bolivar Mine for Q4 2018 were \$12.0 million, compared to \$12.0 million for the same period in 2017. The 20% increase in throughput, and higher head grades of silver and gold resulted in an increase in equivalent metal production and revenues compared to Q4 2017.

Revenues generated at the Cusi Mine for Q4 2018 were \$3.8 million compared to \$1.0 million for Q4 2017. The increased revenue resulted as tonnage continued to improve in the fourth quarter, and the Mine realized a 258% increase in ore throughput when compared to Q4 2017. The Company continues to increase mill feed from the Santa Rosa de Lima zone, while mining selected structures in the older part of the mine. The addition of another ball mill will see the capacity increase to approximately 1,200 tonnes per day in 2019. Additionally, the company has recently defined a significant high-grade silver zone, which remains open to depth within the Santa Rosa de Lima structure which will help contribute increased, higher grade mill feed going forward.

Yauricocha's cost of sales per zinc equivalent payable pound was \$0.54 (Q4 2017 - \$0.63), cash cost per zinc equivalent payable pound was \$0.52 (Q4 2017 - \$0.57), and AISC per zinc equivalent payable pound of \$0.73 (Q4 2017 - \$0.90). The decrease in the AISC per zinc equivalent payable pound for Q4 2018 compared to Q4 2017 was the result of higher zinc equivalent payable pounds due to higher throughput, and higher copper and gold head grades and recoveries. These cost decreases were realized despite a \$2.0 million increase in labor costs, due to the Company's union agreement and a salary adjustment to bring the 2018 salaries in line with the current market rates. The payment was made during November and December 2018 but retroactive to the entire year's salaries. Going forward these costs will be amortized over the entire year for 2019. The union was formed in July 2017 and has grown to 406 workers at the end of 2018, equivalent to approximately 60% of the Company's workforce, representing the majority of the mine employees

## **Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

Bolivar's cost of sales per copper equivalent payable pound was \$2.11 (Q4 2017 - \$1.66), cash cost per copper equivalent payable pound was \$1.67 (Q4 2017 - \$1.72), and AISC per copper equivalent payable pound was \$2.37 (Q4 2017 - \$3.03) for Q4 2018 compared to Q4 2017. The decrease in the AISC per copper equivalent payable pound during Q4 2018 compared to Q4 2017 was due to the increase in copper equivalent payable pounds resulting from higher throughput, and silver and gold head grades, as well as a decrease in sustaining capital expenditures.

Cusi's cost of sales per silver equivalent payable ounce was \$11.04 (Q4 2017 - \$17.18), cash cost per silver equivalent payable ounce was \$18.96 (Q4 2017 - \$18.66), and AISC per silver equivalent payable ounce was \$23.27 (Q4 2017 - \$36.33) for Q4 2018 compared to Q4 2017. AISC per silver equivalent payable ounce decreased due to higher silver equivalent payable ounces resulting from higher throughput, and lower sustaining capital expenditures.

### Non-cash depletion, depreciation and amortization

The Company recorded total non-cash depletion, depreciation and amortization expense for Q4 2018 of \$8.0 million compared to \$7.9 million for the same period in 2017.

A large component of the non-cash depletion, depreciation and amortization expense is the depletion charge on the acquisition of Corona of \$2.5 million for Q4 2018 compared to \$2.7 million for the same period in 2017. The non-cash depletion charge is based on the aggregate fair value of the Yauricocha mineral property at the date of acquisition of Corona of \$371.0 million amortized over the total proven and probable reserves of the mine.

### General and Administrative Expenses

The Company incurred general and administrative expenses of \$5.0 million for Q4 2018 compared to \$8.6 million for Q4 2017. General and administrative costs in Q4 2017 included a substantial amount of legal fees incurred in Canada with regards to the work performed towards listing Sierra Metals Inc on the NYSE MKT stock exchange, as well as the spin-out of the Northern Peruvian Properties.

### Adjusted EBITDA

Adjusted EBITDA<sup>(1)</sup> of \$15.3 million for Q4 2018 decreased 21% compared to \$19.2 million in Q4 2017. The decrease in adjusted EBITDA in Q4 2018 was due to the decreases in the prices of silver (13%), copper (12%), lead (20%), zinc (20%), and gold (3%) during Q4 2018 compared to Q4 2017, which had a negative impact on the Company's revenues. The Company also made a payment of \$2.0 million to the Yauricocha union of mining employees during Q4 2018, which had a negative impact on the Adjusted EBITDA during the quarter.

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

Income taxes

The Company recorded current tax expense of \$5.3 million for Q4 2018 compared to \$5.6 million in Q4 2017 and the decrease was the result of the slightly lower taxable income generated in Peru during Q4 2018 compared to Q4 2017.

During Q4 2018, the Company recorded a deferred tax expense of \$(1.3) million compared to a deferred tax recovery of \$0.6 million in Q4 2017. The main driver for the Company's consolidated deferred tax recovery is the non-cash recovery associated with the acquisition of Corona which has decreased year over year in line with the non-cash depletion charge mentioned previously.

Adjusted net income attributable to shareholders

The Company recorded an adjusted net income of \$0.8 million for Q4 2018 compared to \$3.2 million for Q4 2017. Adjusted net income is defined by management as the net income attributable to shareholders shown in the condensed interim consolidated statements of income excluding the non-cash depletion charge due to the acquisition of Corona, the corresponding deferred income tax recovery, and certain non-recurring or non-cash items. Accordingly, management considers this metric to be more meaningful to measure the Company's profitability than net income as it adjusts for specific non-cash items.

Other Comprehensive Income (Loss)

OCL for Q4 2018 was \$(2.8) million compared to OCI of \$3.6 million for the same period in 2017. OCI includes a foreign currency loss of \$(1.1) million in Q4 2018 (Q4 2017: \$(0.1) million). The unrealized foreign currency translation loss was caused by the weakening of the Canadian dollar relative to the US dollar during the quarter, which resulted in a foreign exchange loss on the translation of the Canadian dollar net assets into the Company's US dollar presentation currency.

**Sierra Metals Inc.**

## Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)***8. LIQUIDITY AND CAPITAL RESOURCES****Financial Condition Review**

The following table provides a comparison of key elements of Sierra's balance sheet as at December 31, 2018 and December 31, 2017:

(000's)	December 31, 2018	December 31, 2017
Cash and cash equivalents	\$ 21,832	\$ 23,878
Working capital	\$ (8,290)	\$ (6,784)
Total assets	\$ 356,441	\$ 340,601
Debt (net of financing fees)	\$ 56,253	\$ 64,860
Total liabilities	\$ 152,836	\$ 159,923
Equity attributable to owners of the Company	\$ 173,355	\$ 154,571

Cash and cash equivalents of \$21.8 million and working capital of \$(8.3) million as at December 31, 2018 compared to \$23.9 million and \$(6.8) million, respectively, at the end of 2017. Cash and cash equivalents have decreased by \$2.0 million during 2018 due to \$61.9 million of operating cash flows, and \$10.0 million drawn down from a short term revolving line of credit, being offset by capital expenditures incurred in Mexico and Peru of \$(49.3) million, repayment of loans, credit facilities and interest of \$(21.5) million, dividends paid to non-controlling interest shareholders of \$(2.9) million.

Trade and other receivables include \$5.8 million (December 31, 2017 - \$5.7 million) of Mexican value-added tax ("VAT") receivables. During 2014, the Company commenced the process to request the refund of the VAT receivable relating to 2012 and 2013 and has successfully received refunds of \$15.6 million for some of the monthly claims submitted over the past three years. The Company expects to collect or offset the VAT balance against 2019 VAT payables. Amounts included in trade and other receivables are current and the Company has no allowance for doubtful accounts as at December 31, 2018.

Sierra's outstanding loan and credit facilities are shown below:

(000's)	Limit	Balance Outstanding	
		December 31, 2018	December 31, 2017
Dia Bras Peru loan with BCP (Corona Acquisition) <sup>(1)</sup>	\$ -	\$ 34,596	\$ 40,377
Corona loan with BCP (Corona Operating) <sup>(2)</sup>	\$ -	\$ -	\$ 6,309
DBP revolving credit facility with BCP <sup>(3)</sup>	\$ 15,000	\$ 15,000	\$ 15,000
Corona Notes payable to BBVA Banco Continental <sup>(4)</sup>	\$ 5,000	\$ 5,000	\$ -
FIFOMI working capital facility	\$ 7,543	\$ 1,657	\$ 3,174
Total Debt		\$ 56,253	\$ 64,860
Less cash balances		\$ 21,832	\$ 23,878
Net Debt		\$ 34,421	\$ 40,982

<sup>(1 - 4)</sup> See consolidated financial statements as at December 31, 2018 for details of each loan and credit facility.

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

**Outstanding shares**

The authorized share capital at December 31, 2018 was an unlimited number of common shares without par value. As at March 27, 2019, the Company had 163.5 million shares issued and outstanding (December 31, 2017 – 162.8 million shares issued and outstanding).

As at December 31, 2018, there were 1,380,085 RSUs outstanding at a weighted average fair value of C\$3.01.

As at March 27, 2019 there are 1,255,285 RSU's outstanding at a weighted average fair value of C\$3.15.

**9. SAFETY, HEALTH AND ENVIRONMENT**

Sierra Metals is fully committed to disciplined and responsible growth and has Safety and Health and Environmental Policies in place to support this commitment. The Company's corporate responsibility objectives are to prevent pollution, minimize the impact operations may cause to the environment and practice progressive rehabilitation of areas impacted by its activities. The Company aims to operate in a socially responsible and sustainable manner, and to follow international guidelines in Mexico and Peru. The Company focuses on social programs with the local communities in Mexico and Peru on an ongoing basis.

**10. FINANCIAL INSTRUMENTS AND RELATED RISKS****Financial risk management**

The Company is exposed to financial risks, including credit risk, liquidity risk, currency risk, interest rate risk and price risk. The aim of the Company's overall risk management strategy is to reduce the potential adverse effect that these risks may have on the Company's financial position and results.

The Company's Board of Directors has overall responsibility and oversight of management's risk management practices. Risk management is carried out under policies approved by the Board of Directors. The Company may from time to time, use foreign exchange contracts, future and forward contracts to manage its exposure to fluctuations in foreign currency and metals prices. The Company does not ordinarily enter into hedging arrangements to cover long term commodity price risk unless it has the obligation to do so under a credit facility, which would be approved by the Board of Directors.

**i) Market Risk****(1) Currency risk**

Currency risk is the risk that the fair values or future cash flows of the Company's financial instruments will fluctuate because of changes in foreign exchange rates. The Company and its subsidiaries' financial instruments are exposed to currency risk where those instruments are denominated in currencies that are not the same as their functional currency; exchange gains and losses in these situations impact net income or loss. The Company's sales of silver, copper, lead and zinc are denominated in United States dollars and the Company's costs are incurred in Canadian dollars,

**Sierra Metals Inc.**

## Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

United States dollars, Mexican pesos and Peruvian Nuevo Soles. The United States dollar is the functional currency of the Peruvian and Mexican entities. The Canadian dollar is the functional currency of all other entities. The company also holds cash and cash equivalents, trade and other receivables and accounts payable that are subject to currency risk.

The following are the most significant areas of exposure to currency risk:

	December 31, 2018			Total \$
	CAN dollar	Mexican Peso	Peruvian Nuevo Soles	
Cash and cash equivalents	183	393	1,064	<b>1,640</b>
Income tax and other receivables	32	8,748	617	<b>9,397</b>
	215	9,141	1,681	<b>11,037</b>
Accounts payable and other liabilities	(1,268)	(22,865)	(19,632)	<b>(43,765)</b>
<b>Total</b>	<b>(1,053)</b>	<b>(13,724)</b>	<b>(17,951)</b>	<b>(32,728)</b>

	December 31, 2017			Total \$
	CAN dollar	Mexican Peso	Peruvian Nuevo Soles	
Cash and cash equivalents	132	167	634	933
Income tax and other receivables	158	9,618	918	10,694
	290	9,785	1,552	11,627
Accounts payable and other liabilities	(1,461)	(30,674)	(21,838)	(53,973)
<b>Total</b>	<b>(1,171)</b>	<b>(20,889)</b>	<b>(20,286)</b>	<b>(42,346)</b>

The Company manages and monitors this risk with the objective of mitigating the potential adverse effect that fluctuations in currencies against the Canadian dollar and US dollar could have on the Company's Consolidated Statement of Financial Position and Consolidated Statement of income (loss). As at December 31, 2018, the Company has not entered into any derivative contracts to mitigate this risk.

A 10% appreciation in the US dollar exchange rate against the Peruvian Nuevo Soles and the Mexican Peso based on the financial assets and liabilities held at December 31, 2018, with all the other variables held constant, would have resulted in an increase to the Company's net income of \$1,992 (increase in loss in 2017 of \$4,118).

A 10% appreciation in the Canadian dollar exchange rate against the US dollar based on the financial assets and liabilities held at December 31, 2018 and 2017, with all the other variables held constant, would have resulted in a negligible impact to the Company's net income (loss).

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)***(2) Interest rate risk**

Interest rate risk is the risk that the fair values or future cash flows of the Company will fluctuate because of changes in market interest rates. The Company is exposed to interest rate risk on its loans payable (note 10). The Company monitors its exposure to interest rates closely and has not entered into any derivative contracts to manage its risk. The weighted average interest rate paid by the Company during the year ended December 31, 2018 on its loans and notes payable in Peru was 4.26% (2017 – 4.31%). With all other variables unchanged a 1% increase in the interest rate would have increased the Company's net loss by \$486 (2017 - \$541). The interest rate paid by the Company during the year ended December 31, 2018 on its loans payable in Mexico was 5.63% (2017 – 5.74%). With all other variables unchanged a 1% increase in the interest rate would have increased the Company's net income by \$57 (2017 - \$60).

**(3) Commodity price risk**

Commodity price risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices (other than those arising from interest risk or currency risk), whether those changes are caused by factors specific to the individual financial instrument or its issuer, or factors affecting all similar financial instruments in the market.

As at December 31, 2018 and 2017, the Company had certain amounts related to the sales of concentrates that have only been provisionally priced. Commodity price risk exists solely in Mexico as the Company fixes metal prices with the purchaser of its concentrates for specific sales for which concentrates have been delivered. The Company's exposure to commodity price risk is as follows:

<b>Commodity</b>	<b>2018</b>	<b>2017</b>
	<b>\$</b>	<b>\$</b>
10% decrease in silver prices	<b>(62)</b>	(27)
10% decrease in copper prices	<b>(325)</b>	(456)
10% decrease in lead prices	<b>(1)</b>	(1)
10% decrease in gold prices	<b>(134)</b>	(87)

As at December 31, 2018 and 2017, the Company did not have any forward contracts outstanding.

**ii) Liquidity risk**

Liquidity risk is the risk that the Company will not be able to meet its financial obligation as they fall due. The Company has in place planning, budgeting and forecasting process to help determine the funds required to support the Company's normal operating requirements on an ongoing basis and its expansion and development plans. The Company tries to ensure that it has sufficient committed credit facilities to meet its short-term operating needs.

In the normal course of business, the Company enters into contracts that give rise to commitments for future minimum payments. The following table summarizes the remaining contractual maturities and undiscounted cash flows as at December 31, 2018 of the Company's financial liabilities and operating and capital commitments:

**Sierra Metals Inc.**

## Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

	Within 1 year	1-2 years	2-5 years	After 5 years	Total	As at December 31, 2018
	\$	\$	\$	\$	\$	\$
Accounts payable and accrued liabilities	36,092	-	-	-	36,092	36,092
Loans payable	27,520	6,000	22,733	-	56,253	56,253
Interest on loans payable	198	127	250	-	575	575
Other liabilities	8,908	1,081	-	-	9,989	9,989
<b>Total Commitments</b>	<b>72,718</b>	<b>7,208</b>	<b>22,983</b>	<b>-</b>	<b>102,909</b>	<b>102,909</b>

In the opinion of management, the working capital at December 31, 2018, together with future cash flows from operations and available loan facilities, is sufficient to support the Company's commitments through 2019.

**iii) Credit risk**

Credit risk is the risk that the counterparty to a financial instrument might fail to discharge its obligations under the terms of a financial contract. Credit risk is primarily associated with trade receivables; however, it also arises on cash and cash equivalents. The Company sells its concentrate to large international organizations. The Company is exposed to significant concentration of credit risk given that all of its revenues from Peru and Mexico were from two customers at each of the locations. At December 31, 2018 the Company has not recorded an allowance against trade receivables because it is confident that all of the balances will be collected in full when due and there have not been any issues collecting balances owed to the Company in the past.

The Company's policy is to keep its cash and cash equivalents only with highly rated financial institutions and to only invest in government securities. The Company considers the risk of loss associated with cash and cash equivalents to be low. The counterparty to the financial asset is a large international financial institution with strong credit ratings and thus the credit risk is considered to be low.

**11. OTHER RISKS AND UNCERTAINTIES****Foreign operations**

The Company currently conducts foreign operations and has exploration properties in Peru and Mexico, and as such is exposed to various levels of economic, political and other risks and uncertainties. These risks and uncertainties vary from country to country and include, but are not limited to, royalties and tax increases or claims by governmental bodies, expropriation or nationalization, foreign exchange controls, import and export regulations, cancellation or renegotiation of contracts and environmental permitting regulations. The occurrence of these various factors and uncertainties cannot be accurately predicted and could have a material adverse effect on operations or profitability.

The Company currently has no political risk insurance coverage against these risks. The Company is unable to determine the impact of these risks on its future financial position or results of operations. Changes, if any, in mining or investment policies or shifts in political attitude in

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

foreign countries may substantively affect Company's exploration, development and production activities.

**Environmental regulation**

The Company's activities are subject to extensive laws and regulations governing environmental protection which are complex and have tended to become more stringent over time. The Company is required to obtain governmental permits and in some instances provide bonding requirements under federal, state, or provincial air, water quality, and mine reclamation rules and permits. Although the Company makes provisions for reclamation costs, it cannot be assured that these provisions will be adequate to discharge its future obligations for these costs. Failure to comply with applicable environmental laws may result in injunctions, damages, suspension or revocation of permits and imposition of penalties. While responsible environmental stewardship is one of the Company's top priorities, there can be no assurance that the Company has been or will be at all times in complete compliance with such laws, regulations and permits, or that the costs of complying with current and future environmental laws and permits will not materially and adversely affect the Company's business, results of operations or financial condition.

**Exploration, development and mining risk**

Sierra's operations will be subject to all the hazards and risks normally encountered in the exploration, development and production of base or precious metals, including, without limitation, unusual and unexpected geologic formations, seismic activity, rock bursts, pit-wall failures, cave-ins, flooding, mudrushes and other conditions involved in the drilling, mining and removal of material, any of which could result in damage to, or destruction of, mines and other producing facilities, damage to life or property, environmental damage and legal liability. Milling operations are also subject to various hazards, including, without limitation, equipment failure and failure of retaining dams around tailings disposal areas, which may result in environmental pollution and legal liability.

**Loan repayment risk**

The Company's ability to repay its loans depends on its future cash flows, profitability, results of operations and financial condition. The Company has prepared budgets based on estimates of commodity prices, future production, operating costs and capital costs however the Company cannot assure you that such revenues, production plans, costs or other estimates will be achieved. Actual revenues and production costs may vary from the estimates depending on a variety of factors, many of which are not within the Company's control. These factors include, but are not limited to: commodity price fluctuations; actual ore mined varying from estimates of grade, tonnage, dilution, and metallurgical and other characteristics; mine failures, slope failures or equipment failures; industrial accidents; natural phenomena such as inclement weather conditions, floods, droughts, rock slides and earthquakes; encountering unusual or unexpected geological conditions; changes in power costs and potential power shortages; exchange rate and commodity price fluctuations; shortages of principal supplies needed shortages of principal supplies needed for operations, including explosives, fuels, chemical reagents, water, equipment parts and lubricants; labor shortages or strikes; high rates of inflation; civil disobedience and protests; and restrictions (including change to the taxation regime) or regulations imposed by governmental or regulatory authorities or other changes in the regulatory environments. Failure to achieve revenue, production or cost estimates or material increases in costs or material

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

decreases in commodity prices could have a material adverse impact on the Company's future cash flows, profitability, results of operations and financial condition.

**Title risk**

Although the Company believes that it has exercised commercially reasonable due diligence with respect to determining title to properties that it owns or controls, there is no guarantee that title to such properties will not be challenged or impugned. The Company's properties may be subject to prior unrecorded agreements or transfers or native land claims and title may be affected by undetected defects. There may be valid challenges to the title of the Company's properties which could impair development and/or operations of the Company.

**Permit risk**

In the ordinary course of business, the Company will be required to obtain and renew governmental permits and licenses for the operation and expansion of existing operations or for the commencement of new operations. Obtaining or renewing the necessary governmental permits is a complex and time-consuming process. The duration and success of the Company's efforts to obtain and renew permits and licenses are contingent upon many variables not within its control including the interpretation of applicable requirements implemented by the permitting or licensing authority. The Company may not be able to obtain or renew permits and licenses that are necessary to continue its operations or the cost to obtain or renew permits and licenses may exceed what the Company expects. Any unexpected delays or costs associated with the permitting and licensing process could delay the development or impede operations, which may adversely affect the Company's revenues and future growth.

**Estimates of mineralized materials are subject to geologic uncertainty and inherent sample variability**

Although the estimated resources have been delineated with appropriately spaced drilling and sampling, both underground and surface, there is inherent variability between duplicate samples taken adjacent to each other and between sampling points that cannot be reasonably eliminated. There also may be unknown geologic details that have not been identified or correctly appreciated at the current level of delineation. This results in uncertainties that cannot be reasonably eliminated from the estimation process. Some of the resulting variances can have a positive effect and others can have a negative effect on mining and processing operations. Acceptance of these uncertainties is part of any mining operation.

Estimates of mineralized material constitute forward-looking information, which is inherently subject to variability. Although resource estimates require a high degree of assurance in the underlying data when the estimates are made, unforeseen events and uncontrollable factors can have significant adverse or positive impacts on the estimates. Actual results will inherently differ from estimates. The unforeseen events and uncontrollable factors include: geologic uncertainties including inherent sample variability, metal price fluctuations, variations in mining and processing parameters, and adverse changes in environmental or mining laws and regulations. The timing and effects of variances from estimated values cannot be accurately predicted.

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

**Mineral resources**

Although the Company's reported mineral resources have been carefully prepared by qualified persons, these amounts are estimates only by independent geologists, and the Company cannot be certain that any specified level of recovery of mineral will in fact be realized or that any identified mineral deposit will ever qualify as a commercially mineable (or viable) ore body that can be economically exploited. Mineralized materials, which are not mineral reserves, do not have demonstrated economic viability. Any material change in the quantity of mineralization, grade or stripping ratio, or the metal price may affect the economic viability of the Company's properties. In addition, the Company cannot be certain that metal recoveries in small-scale laboratory tests will be duplicated in larger scale tests under on-site conditions or during production.

Until an un-mined deposit is actually mined and processed, the quantity of mineral resources and reserves and grades must be considered as estimates only. In addition, the economic value of mineral reserves and mineral resources may vary depending on, among other things, metal prices.

**Insurance risk**

The Company's insurance will not cover all the potential risks associated with a mining company's operations. The Company may also be unable to maintain insurance to cover these risks at economically feasible premiums. Insurance coverage may not continue to be available or may not be adequate to cover any resulting liability. Moreover, the Company expects that insurance against risks such as environmental pollution or other hazards as a result of exploration and production may be prohibitively expensive to obtain for a company of Sierra's size and financial means. The Company might also become subject to liability for pollution or other hazards which may not be insured against or which the Company may elect not to insure against because of premium costs or other reasons. Losses from these events may cause the Company to incur significant costs that could have a material adverse effect upon the Company's financial condition and results of operations.

**Competitive risk**

The mining industry is competitive in all of its phases. The Company faces strong competition from other mining companies in connection with the acquisition of properties producing, or capable of producing, base and precious metals. Many of these companies have greater financial resources, operational experience and technical capabilities than the Company does. As a result of this competition, the Company may be unable to maintain or acquire attractive mining properties on terms acceptable to the Company or at all. Consequently, the Company's revenues, operations and financial condition could be materially adversely affected.

**Sierra's common shares may experience price volatility**

Securities of mineral resource and mining companies have experienced substantial volatility in the past, often based on factors unrelated to the financial performance or prospects of the companies involved. These factors include macroeconomic developments in North America and globally, as well as market perceptions of the attractiveness of particular industries. The price of the Company's common shares is also likely to be significantly affected by short-term changes in commodity prices and currency exchange fluctuation. As a result of any of these factors, the

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

market price of the Company's common shares at any given point in time may not accurately reflect the long-term value of the Company. Securities class-action litigation often has been brought against companies following periods of volatility in the market price of their securities. The Company may in the future be the target of similar litigation. Securities litigation could result in substantial costs and damages and divert management's attention and resources.

**Global financial risk**

Financial markets globally have been subject to increased volatility. Access to financing has been negatively impacted by liquidity crises throughout the world. These factors may impact the Company's ability to obtain loans and other credit facilities in the future and, if obtained, on terms favorable to Sierra. The levels of volatility and market turmoil are on the rise, and the Company may not be able to secure appropriate debt or equity financing, any of which could affect the trading price of the Company's securities in an adverse manner.

**Reliance on Key Personnel and Labour Relations**

The Company's operations are dependent on the abilities, experience and efforts of key personnel. If any of these individuals were to be unable or unwilling to continue to provide their services to the Company, there may be a material adverse effect on the Company's operations. The Company's success is dependent upon its ability to attract and retain qualified employees and personnel to meet its needs from time to time. The Company may be negatively impacted by the availability and potential increased costs that may be associated with experienced key personnel and general labour. Sierra's ability to achieve its future goals and objectives is dependent, in part, on maintaining good relations with its employees and minimizing employee turnover. Work stoppages or other industrial relations events at any of Sierra's operations could lead to delayed revenues, increased costs and delayed operation cash flows. As a result, prolonged labor disruptions at any of Sierra's operations could have a material adverse impact on its operations as a whole.

**Claims and Legal Proceedings**

The Company is subject to various claims and legal proceedings covering a wide range of matters that arise in the normal course of business. Each of these matters is subject to various uncertainties and it is possible that some of these matters may be resolved unfavorably to the Company. The Company carries liability insurance coverage and will establish accruals and provisions for matters that are probable and can be reasonably estimated. In addition, the Company may be involved in disputes with other parties in the future which may result in a significant impact on our financial condition, cash flow and results of operations.

The claims associated with the Company's Mexican operations are discussed in detail below:

- a) In October 2009, Polo y Ron Minerals, S.A. de C.V. ("P&R") sued the Company and one of its subsidiaries, Dia Bras Mexicana S.A. de C.V. ("DBM"). P&R claimed damages for the cancellation of an option agreement (the "Option Agreement") regarding the San Jose properties in Chihuahua, Mexico (the "San Jose Properties"). The San Jose Properties are not located in any areas where DBM currently operates, nor are these properties included in any resource estimates of the Company. The Company believes that it has complied with all of its obligations pertaining to the Option Agreement. In October 2011,

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

the 8th Civil Court of the Judicial District of Morelos in Chihuahua issued a resolution that absolved the Company from the claims brought against it by P&R on the basis that P&R did not provide evidence to support any of its claims. P&R appealed this resolution to the State Court, which overruled the previous resolution and ordered the Company to: (i) transfer to P&R 17 mining concessions from the Company's Bolivar project, including the mining concessions where both mine operations and mineral reserves are located; and (ii) pay \$423 to P&R; the Company was not appropriately notified of this resolution. In February 2013, a Federal Court in the State of Chihuahua granted the Company a temporary suspension of the adverse resolution issued by the State Court of Chihuahua, Mexico. In July 2014, a Federal Court in the State of Chihuahua ordered that the Company was entitled to receive proper notice of the adverse resolution previously issued by the State Court of Chihuahua. This allows the Company to proceed with its appeal (writ of "amparo") of the State Court's previous resolution. The adverse resolution has been temporarily suspended since March 2013, which suspension will remain in place pending the writ of amparo. The amparo is being heard in Federal Court and will challenge the State Court's ruling. The Federal Court's verdict in the amparo will be final and non-appealable. The Company continues to vigorously defend its position by applying the proper legal resources necessary to defend its position. On February 12, 2016, The Second Federal Collegiate Court of Civil and Labor Matters, of the Seventeenth circuit in the State of Chihuahua, ("the Federal Court") issued a new judgment ruling that the State Court lacked jurisdiction to rule on issues concerning mining titles, and that no previous rulings by the State Court against the Company shall stand. They ordered the cancellation of the previous adverse resolution by the state Court. The Company will continue to vigorously defend this claim. Sierra Metals continues to believe that the original claim is without merit.

- b) In 2009, a personal action was filed in Mexico against DBM by an individual, Ambrosio Bencomo Muñoz as administrator of the intestate succession of Ambrosio Bencomo Casavantes y Jesus Jose Bencomo Muñoz, claiming the annulment and revocation of the purchase agreement of two mining concessions, Bolívar III and IV between Minera Senda de Plata S.A. de C.V. and Ambrosio Bencomo Casavantes, and with this, the nullity of purchase agreement between DBM and Minera Senda de Plata S.A. de C.V. In June 2011, the Sixth Civil Court of Chihuahua, Mexico, ruled that the claim was unfounded and dismissed the case, the plaintiff appealed to the State Court. The process is in the appealing court. The Company will continue to vigorously defend this action and is confident that the claim is of no merit.

**12. NON-IFRS PERFORMANCE MEASURES**

The non-IFRS performance measures presented do not have any standardized meaning prescribed by IFRS and are therefore unlikely to be directly comparable to similar measures presented by other issuers.

**Non-IFRS reconciliation of adjusted EBITDA**

EBITDA is a non-IFRS measure that represents an indication of the Company's continuing capacity to generate earnings from operations before taking into account management's financing decisions and costs of consuming capital assets, which vary according to their vintage,

## Sierra Metals Inc.

### Management's Discussion and Analysis

For the year ended December 31, 2018

(In thousands of United States dollars, unless otherwise stated)

technological currency, and management's estimate of their useful life. EBITDA comprises revenue less operating expenses before interest expense (income), property, plant and equipment amortization and depletion, and income taxes. Adjusted EBITDA has been included in this document. Under IFRS, entities must reflect in compensation expense the cost of share-based payments. In the Company's circumstances, share-based payments involve a significant accrual of amounts that will not be settled in cash but are settled by the issuance of shares in exchange for cash. As such, the Company has made an entity specific adjustment to EBITDA for these expenses. The Company has also made an entity-specific adjustment to the foreign currency exchange (gain)/loss. The Company considers cash flow before movements in working capital to be the IFRS performance measure that is most closely comparable to adjusted EBITDA.

The following table provides a reconciliation of adjusted EBITDA to the consolidated financial statements for the three months and year ended December 31, 2018 and 2017:

(In thousands of United States dollars)	Three Months Ended		Twelve Months Ended	
	December 31, 2018	December 31, 2017	December 31, 2018	December 31, 2017
Net income (loss)	\$ (1,616)	\$ 3,719	\$ 25,840	\$ (860)
<i>Adjusted for:</i>				
Depletion and depreciation	7,959	7,906	31,349	58,236
Interest expense and other finance costs	1,055	860	3,634	3,639
Loss on spin out of Cautivo Mining Inc.	-	-	-	4,412
Interest income	(50)	(253)	(159)	(376)
Share-based payments	346	554	1,542	1,198
Foreign currency exchange and other provisions	959	1,463	1,210	4,437
Income taxes	6,610	4,959	26,340	10,348
<b>Adjusted EBITDA</b>	<b>\$ 15,263</b>	<b>\$ 19,208</b>	<b>\$ 89,756</b>	<b>\$ 81,034</b>

### Non-IFRS reconciliation of adjusted net income

The Company has included the non-IFRS financial performance measure of adjusted net income, defined by management as the net income attributable to shareholders shown in the statement of earnings plus the non-cash depletion charge due to the acquisition of Corona and the corresponding deferred tax recovery and certain non-recurring or non-cash items such as share-based compensation and foreign currency exchange (gains) losses. The Company believes that, in addition to conventional measures prepared in accordance with IFRS, certain investors may want to use this information to evaluate the Company's performance and ability to generate cash flows. Accordingly, it is intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance in accordance with IFRS.

The following table provides a reconciliation of adjusted net income to the consolidated financial statements for the three months and year ended December 31, 2018 and 2017:

(In thousands of United States dollars)	Three Months Ended		Twelve Months Ended	
	December 31, 2018	December 31, 2017	December 31, 2018	December 31, 2017
Net income (loss) attributable to shareholders	\$ (2,654)	\$ 2,118	\$ 18,814	\$ (4,645)
Non-cash depletion charge on Corona's acquisition	2,497	2,721	10,534	31,448
Deferred tax recovery on Corona's acquisition depletion charge	(365)	(915)	(3,091)	(10,668)
Share-based compensation	346	554	1,542	1,198
Foreign currency exchange gain	959	(1,237)	1,210	1,737
Loss on spin out of Cautivo Mining Inc.	-	-	-	4,412
<b>Adjusted net income attributable to shareholders</b>	<b>\$ 783</b>	<b>\$ 3,241</b>	<b>\$ 29,009</b>	<b>\$ 23,482</b>

## **Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

### **Cash cost per silver equivalent payable ounce, copper equivalent payable pound, and zinc equivalent payable pound**

The Company uses the non-IFRS measure of cash cost per silver equivalent ounce, copper equivalent payable pound, and zinc equivalent payable pound to manage and evaluate operating performance. The Company believes that, in addition to conventional measures prepared in accordance with IFRS, certain investors use this information to evaluate the Company's performance and ability to generate cash flows. Accordingly, it is intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS. The Company considers cost of sales per silver equivalent payable ounce, copper equivalent payable pound, and zinc equivalent payable pound to be the most comparable IFRS measure to cash cost per silver equivalent payable ounce, copper equivalent payable pound, and zinc equivalent payable pound, and has included calculations of this metric in the reconciliations within the applicable tables to follow.

### **All-in sustaining cost per silver equivalent payable ounce, copper equivalent payable pound, and zinc equivalent payable pound**

All-In Sustaining Cost ("AISC") is a non-IFRS measure and was calculated based on guidance provided by the World Gold Council ("WGC") in June 2013. WGC is not a regulatory industry organization and does not have the authority to develop accounting standards for disclosure requirements. Other mining companies may calculate AISC differently as a result of differences in underlying accounting principles and policies applied, as well as differences in definitions of sustaining versus development capital expenditures.

AISC is a more comprehensive measure than cash cost per ounce/pound for the Company's consolidated operating performance by providing greater visibility, comparability and representation of the total costs associated with producing silver and copper from its current operations.

The Company defines sustaining capital expenditures as, *"costs incurred to sustain and maintain existing assets at current productive capacity and constant planned levels of productive output without resulting in an increase in the life of assets, future earnings, or improvements in recovery or grade. Sustaining capital includes costs required to improve/enhance assets to minimum standards for reliability, environmental or safety requirements. Sustaining capital expenditures excludes all expenditures at the Company's new projects and certain expenditures at current operations which are deemed expansionary in nature."*

Consolidated AISC includes total production cash costs incurred at the Company's mining operations, including treatment and refining charges and selling costs, which forms the basis of the Company's total cash costs. Additionally, the Company includes sustaining capital expenditures and corporate general and administrative expenses. AISC by mine does not include certain corporate and non-cash items such as general and administrative expense and share-based payments. The Company believes that this measure represents the total sustainable costs of producing silver and copper from current operations and provides the Company and other stakeholders of the Company with additional information of the Company's operational performance and ability to generate cash flows. As the measure seeks to reflect the full cost of silver and copper production from current operations, new project capital and expansionary capital

## Sierra Metals Inc.

### Management's Discussion and Analysis

For the year ended December 31, 2018

(In thousands of United States dollars, unless otherwise stated)

at current operations are not included. Certain other cash expenditures, including tax payments, dividends and financing costs are also not included.

The following table provides a reconciliation of cash costs to cost of sales, as reported in the Company's consolidated statement of income for the three months and year ended December 31, 2018 and 2017:

(In thousand of US dollars, unless stated)	Twelve months ended December 31, 2018				Twelve months ended December 31, 2017			
	Yauricocha	Bolivar	Cusi	Consolidated	Yauricocha	Bolivar	Cusi	Consolidated
<b>Cash Cost per Tonne of Processed Ore</b>								
Cost of Sales	92,586	37,499	16,505	146,589	111,733	36,616	10,804	159,153
Reverse: Workers Profit Sharing	(4,938)	-	-	(4,938)	(4,446)	-	-	(4,446)
Reverse: D&A/Other adjustments	(17,726)	(9,931)	(3,752)	(31,409)	(44,619)	(10,148)	(3,409)	(58,176)
Reverse: Variation in Finished Inventory	54	1,026	(745)	335	1,222	(4,342)	264	(2,856)
<b>Total Cash Cost</b>	<b>69,976</b>	<b>28,593</b>	<b>12,008</b>	<b>110,577</b>	<b>63,890</b>	<b>22,126</b>	<b>7,659</b>	<b>93,675</b>
Tonnes Processed	1,106,649	1,031,750	186,889	2,325,288	1,023,492	887,236	88,011	1,998,739
<b>Cash Cost per Tonne Processed</b>	<b>US\$ 63.23</b>	<b>27.71</b>	<b>64.25</b>	<b>47.55</b>	<b>62.42</b>	<b>24.94</b>	<b>87.02</b>	<b>46.87</b>

(In thousand of US dollars, unless stated)	Three months ended December 31, 2018				Three months ended December 31, 2017			
	Yauricocha	Bolivar	Cusi	Consolidated	Yauricocha	Bolivar	Cusi	Consolidated
<b>Cash Cost per Tonne of Processed Ore</b>								
Cost of Sales	23,785	10,230	4,948	38,962	22,551	9,964	2,423	34,938
Reverse: Workers Profit Sharing	(1,206)	-	-	(1,206)	(1,268)	-	-	(1,268)
Reverse: D&A/Other adjustments	(4,195)	(2,520)	(1,269)	(7,984)	(4,536)	(2,552)	(725)	(7,812)
Reverse: Variation in Finished Inventory	231	537	(313)	455	531	(867)	240	(96)
<b>Total Cash Cost</b>	<b>18,615</b>	<b>8,246</b>	<b>3,366</b>	<b>30,227</b>	<b>17,278</b>	<b>6,545</b>	<b>1,938</b>	<b>25,762</b>
Tonnes Processed	268,363	272,644	58,289	599,297	266,222	226,986	16,281	509,488
<b>Cash Cost per Tonne Processed</b>	<b>US\$ 69.37</b>	<b>30.25</b>	<b>57.74</b>	<b>50.44</b>	<b>64.90</b>	<b>28.84</b>	<b>119.06</b>	<b>50.57</b>

The following table provides detailed information on Yauricocha's cost of sales, cash cost, and all-in sustaining cost per silver equivalent payable ounce, copper equivalent payable pound, and zinc equivalent payable pound for the three months and year ended December 31, 2018 and 2017:

### Yauricocha:

YAUICOCHA (In thousand of US dollars, unless stated)	Three months ended		Twelve months ended	
	December 31, 2018	December 31, 2017	December 31, 2018	December 31, 2017
<b>Cash Cost per zinc equivalent payable pound</b>				
Total Cash Cost	18,615	17,278	69,976	63,890
Variation in Finished Inventory	(231)	(531)	(54)	(1,222)
Total Cash Cost of Sales	18,384	16,747	69,922	62,668
Treatment and Refining Charges	2,371	4,461	9,909	12,447
Selling Costs	1,167	1,057	4,382	4,156
G&A Costs	1,648	1,844	7,203	6,054
Sustaining Capital Expenditures	2,043	2,156	7,186	11,632
<b>All-In Sustaining Cash Costs</b>	<b>25,613</b>	<b>26,265</b>	<b>98,602</b>	<b>96,957</b>
Silver Equivalent Payable Ounces (000's)	2,810	2,534	11,238	9,633
<b>Cost of Sales</b>	<b>19,085</b>	<b>18,443</b>	<b>74,731</b>	<b>67,542</b>
Cost of Sales per Silver Equivalent Payable Ounce (US\$)	6.79	7.28	6.65	7.01
Cash Cost per Silver Equivalent Payable Ounce (US\$)	6.54	6.61	6.22	6.51
<b>All-In Sustaining Cash Cost per Silver Equivalent Payable Ounce (US\$)</b>	<b>9.12</b>	<b>10.37</b>	<b>8.77</b>	<b>10.07</b>
Copper Equivalent Payable Pounds (000's)	14,838	13,575	59,508	58,547
Cost of Sales per Copper Equivalent Payable Pound (US\$)	1.29	1.36	1.26	1.15
Cash Cost per Copper Equivalent Payable Pound (US\$)	1.24	1.23	1.18	1.07
<b>All-In Sustaining Cash Cost per Copper Equivalent Payable Pound (US\$)</b>	<b>1.73</b>	<b>1.93</b>	<b>1.66</b>	<b>1.66</b>
Zinc Equivalent Payable Pounds (000's)	35,288	29,303	135,505	125,077
Cost of Sales per Zinc Equivalent Payable Pound (US\$)	0.54	0.63	0.55	0.54
Cash Cost per Zinc Equivalent Payable Pound (US\$)	0.52	0.57	0.52	0.50
<b>All-In Sustaining Cash Cost per Zinc Equivalent Payable Pound (US\$)</b>	<b>0.73</b>	<b>0.90</b>	<b>0.73</b>	<b>0.78</b>

## Sierra Metals Inc.

### Management's Discussion and Analysis

For the year ended December 31, 2018

(In thousands of United States dollars, unless otherwise stated)

The following table provides detailed information on Bolivar's cost of sales, cash cost, and all-in sustaining cost per copper equivalent payable pound, zinc equivalent payable pound, and silver equivalent payable ounce for the three months and year ended December 31, 2018 and 2017:

#### Bolivar:

BOLIVAR (In thousand of US dollars, unless stated)	Three months ended		Twelve months ended	
	December 31, 2018	December 31, 2017	December 31, 2018	December 31, 2017
<b>Cash Cost per copper equivalent payable pound</b>				
Total Cash Cost	8,246	6,545	28,593	22,126
Variation in Finished inventory	(537)	867	(1,026)	4,342
Total Cash Cost of Sales	7,710	7,412	27,568	26,468
Treatment and Refining Charges	1,007	1,152	4,233	4,695
Selling Costs	938	726	3,419	2,777
G&A Costs	1,015	834	3,651	2,577
Sustaining Capital Expenditures	256	2,891	2,011	11,054
<b>All-In Sustaining Cash Costs</b>	<b>10,926</b>	<b>13,015</b>	<b>40,882</b>	<b>47,571</b>
Silver Equivalent Payable Ounces (000's)	873	803	3,623	2,920
<b>Cost of Sales</b>	<b>9,751</b>	<b>7,121</b>	<b>33,168</b>	<b>27,418</b>
Cost of Sales per Silver Equivalent Payable Ounce (US\$)	11.17	8.87	9.15	9.39
Cash Cost per Silver Equivalent Payable Ounce (US\$)	8.83	9.23	7.61	9.06
All-In Sustaining Cash Cost per Silver Equivalent Payable Ounce (US\$)	12.52	16.21	11.28	16.29
Copper Equivalent Payable Pounds (000's)	4,614	4,302	19,183	17,747
Cost of Sales per Copper Equivalent Payable Pound (US\$)	2.11	1.66	1.73	1.54
Cash Cost per Copper Equivalent Payable Pound (US\$)	1.67	1.72	1.44	1.49
All-In Sustaining Cash Cost per Copper Equivalent Payable Pound (US\$)	2.37	3.03	2.13	2.68
Zinc Equivalent Payable Pounds (000's)	11,018	9,286	43,644	37,914
Cost of Sales per Zinc Equivalent Payable Pound (US\$)	0.89	0.77	0.76	0.72
Cash Cost per Zinc Equivalent Payable Pound (US\$)	0.70	0.80	0.63	0.70
All-In Sustaining Cash Cost per Zinc Equivalent Payable Pound (US\$)	0.99	1.40	0.94	1.25

The following table provides detailed information on Cusi's cost of sales, cash cost, and all-in sustaining cost per silver equivalent payable ounce, copper equivalent payable pound, and zinc equivalent payable pound for the three months and year ended December 31, 2018 and 2017:

#### Cusi:

CUSI (In thousand of US dollars, unless stated)	Three months ended		Twelve months ended	
	December 31, 2018	December 31, 2017	December 31, 2018	December 31, 2017
<b>Cash Cost per silver equivalent payable ounce</b>				
Total Cash Cost	3,366	1,938	12,008	7,659
Variation in Finished inventory	313	(240)	745	(264)
Total Cash Cost of Sales	3,679	1,698	12,753	7,395
Treatment and Refining Charges	250	181	1,498	2,412
Selling Costs	205	160	750	610
G&A Costs	223	183	802	566
Sustaining Capital Expenditures	157	1,084	2,132	5,323
<b>All-In Sustaining Cash Costs</b>	<b>4,513</b>	<b>3,306</b>	<b>17,934</b>	<b>16,306</b>
Silver Equivalent Payable Ounces (000's)	194	91	812	481
<b>Cost of Sales</b>	<b>2,141</b>	<b>1,563</b>	<b>7,281</b>	<b>6,019</b>
Cost of Sales per Silver Equivalent Payable Ounce (US\$)	11.04	17.18	8.97	12.51
Cash Cost per Silver Equivalent Payable Ounce (US\$)	18.96	18.66	15.71	15.37
All-In Sustaining Cash Cost per Silver Equivalent Payable Ounce (US\$)	23.27	36.33	22.09	33.90
Copper Equivalent Payable Pounds (000's)	1,028	490	4,301	2,928
Cost of Sales per Copper Equivalent Payable Pound (US\$)	2.08	3.19	1.69	2.06
Cash Cost per Copper Equivalent Payable Pound (US\$)	3.58	3.47	2.97	2.53
All-In Sustaining Cash Cost per Copper Equivalent Payable Pound (US\$)	4.39	6.75	4.17	5.57
Zinc Equivalent Payable Pounds (000's)	2,598	1,059	9,601	6,257
Cost of Sales per Zinc Equivalent Payable Pound (US\$)	0.82	1.48	0.76	0.96
Cash Cost per Zinc Equivalent Payable Pound (US\$)	1.42	1.60	1.33	1.18
All-In Sustaining Cash Cost per Zinc Equivalent Payable Pound (US\$)	1.74	3.12	1.87	2.61

## Sierra Metals Inc.

### Management's Discussion and Analysis

For the year ended December 31, 2018

(In thousands of United States dollars, unless otherwise stated)

#### Consolidated:

CONSOLIDATED (In thousand of US dollars, unless stated)	Three months ended		Twelve months ended	
	December 31, 2018	December 31, 2017	December 31, 2018	December 31, 2017
<b>Total Cash Cost of Sales</b>	29,772	25,857	110,242	96,531
<b>All-In Sustaining Cash Costs</b>	<b>41,052</b>	<b>42,586</b>	<b>157,418</b>	<b>160,834</b>
Silver Equivalent Payable Ounces (000's)	3,877	3,428	15,673	13,034
<b>Cost of Sales</b>	<b>30,977</b>	<b>27,127</b>	<b>115,180</b>	<b>100,979</b>
Cost of Sales per Silver Equivalent Payable Ounce (US\$)	7.99	7.91	7.35	7.75
Cash Cost per Silver Equivalent Payable Ounce (US\$)	7.68	7.54	7.03	7.41
<b>All-In Sustaining Cash Cost per Silver Equivalent Payable Ounce (US\$)</b>	<b>10.59</b>	<b>12.42</b>	<b>10.04</b>	<b>12.34</b>
Copper Equivalent Payable Pounds (000's)	20,480	18,367	82,992	79,222
Cost of Sales per Copper Equivalent Payable Pound (US\$)	1.51	1.48	1.39	1.27
Cash Cost per Copper Equivalent Payable Pound (US\$)	1.45	1.41	1.33	1.22
<b>All-In Sustaining Cash Cost per Copper Equivalent Payable Pound (US\$)</b>	<b>2.00</b>	<b>2.32</b>	<b>1.90</b>	<b>2.03</b>
Zinc Equivalent Payable Pounds (000's)	48,904	39,648	188,750	169,248
Cost of Sales per Zinc Equivalent Payable Pound (US\$)	0.63	0.68	0.61	0.60
Cash Cost per Zinc Equivalent Payable Pound (US\$)	0.61	0.65	0.58	0.57
<b>All-In Sustaining Cash Cost per Zinc Equivalent Payable Pound (US\$)</b>	<b>0.84</b>	<b>1.07</b>	<b>0.83</b>	<b>0.95</b>

#### Additional non-IFRS measures

The Company uses other financial measures, the presentation of which is not meant to be a substitute for other subtotals or totals presented in accordance with IFRS, but rather should be evaluated in conjunction with such IFRS measures. The following other financial measures are used:

- Operating cash flows before movements in working capital - excludes the movement from period-to-period in working capital items including trade and other receivables, prepaid expenses, deposits, inventories, trade and other payables and the effects of foreign exchange rates on these items.

The terms described above do not have a standardized meaning prescribed by IFRS, and therefore the Company's definitions are unlikely to be comparable to similar measures presented by other companies. The Company's management believes that their presentation provides useful information to investors because cash flows generated from operations before changes in working capital excludes the movement in working capital items. This, in management's view, provides useful information of the Company's cash flows from operations and are considered to be meaningful in evaluating the Company's past financial performance or its future prospects. The most comparable IFRS measure is cash flows from operating activities.

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)***13. RELATED PARTY TRANSACTIONS**

During the year ended December 31, 2018, the Company recorded consulting fees of \$200 (2017 - \$200) to companies related by common directors or officers. At December 31, 2018, accounts payable and accrued liabilities include \$Nil (2017 - \$Nil) with these related parties. Related party transactions occurred in the normal course of business. As at December 31, 2018, the Company has accounts receivable outstanding from these related parties of \$Nil (2017 - \$Nil).

**(a) Compensation of directors and key management personnel**

The remuneration of the Company's directors, officers and other key management personnel during the years ended December 31, 2018 and 2017 are as follows:

	2018	2017
	\$	\$
Salaries and other short term employment benefits	2,816	2,968
Share-based payments	1,500	2,753
<b>Total compensation</b>	<b>4,316</b>	<b>5,721</b>

**(b) Principal Subsidiaries**

The consolidated financial statements include the accounts of the Company and its subsidiaries, which are entities controlled by the Company. Control exists when the Company is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are consolidated from the date that control commences until the date that control ceases.

Non-controlling interests represent equity interests in subsidiaries owned by outside parties. Changes in the parent company's ownership interest in subsidiaries that do not result in a loss of control are accounted for as equity transactions.

The principal subsidiaries of the Company and their geographical locations as at December 31, 2018 are as follows:

Name of the subsidiary	Ownership interest	Location
Dia Bras EXMIN Resources Inc.	100%	Canada
Sociedad Minera Corona, S. A. ("Corona") <sup>1</sup>	81.84%	Perú
Dia Bras Peru, S. A. C. ("Dia Bras Peru") <sup>1</sup>	100%	Perú
Dia Bras Mexicana, S. A. de C. V. ("Dia Bras Mexicana")	100%	México
Servicios de Minería de la Sierra, S. A. de C. V.	100%	México
Bolívar Administradores, S. A. de C. V.	100%	México
Exploraciones Mineras Dia Bras, S. A. de C. V.	100%	México
EXMIN, S. A. de C. V.	100%	México

<sup>1</sup>The Company, through its wholly owned subsidiary Dia Bras Peru, holds an 81.84% interest in Corona, which represents 92.33% of the voting shares. The Company consolidates Corona's financial results and records a non-controlling interest for the 18.16% that it does not own.

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

**14. CRITICAL ACCOUNTING POLICIES AND ESTIMATES****Significant accounting judgments and estimates**

In the application of the Company's accounting policies, which are described in note 2 of the Company's December 31, 2018 consolidated financial statements, management is required to make judgments, estimates and assumptions about the effects of uncertain future events on the carrying amounts of assets and liabilities. The estimates and associated assumptions are based on management's best knowledge of the relevant facts and circumstances and historical experience. Actual results may differ from these estimates; potentially having a material future effect on the Company's consolidated financial statements.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

The following are the significant judgments that management has made in the process of applying the Company's accounting policies and that have the most significant effect on the amounts recognized in the consolidated financial statements:

**I. Impairment review of asset carrying values**

In accordance with the Company's accounting policy, at every reporting period, the Company assesses whether there are any indicators that the carrying value of its assets or CGUs may be impaired, which is a significant management judgment. Where there is an indication that the carrying amount of an asset may not be recoverable, the Company prepares a formal estimate of the recoverable amount by analyzing discounted cash flows. The resulting valuations are particularly sensitive to changes in estimates such as long-term commodity prices, exchange rates, sales volume, operating costs, and discount rates. In the event of impairment, if there is an adverse change in any of the assumptions or estimates used in the discounted cash flow model, this could result in a further impairment of the asset. Also, in accordance with the Company's accounting policy, the Company capitalizes evaluation expenditures when there is a high degree of confidence that these costs are recoverable and have a probable future benefit. As at December 31, 2018, management assessed its mining property assets and exploration and evaluation expenditures for impairment and determined that no impairment was required.

**II. Mineral reserves and resources**

The Company estimates mineral reserves and resources based on information prepared by qualified persons as defined in accordance with the Canadian Securities Administrators' National Instrument ("NI") 43-101. These estimates form the basis of the Company's life of mine ("LOM") plans, which are used for a number of important and significant accounting purposes, including: the calculation of depletion expense and impairment charges, forecasting the timing of the payment of decommissioning costs and future taxes. There are significant uncertainties inherent in the estimation of mineral reserves and the assumptions used which include commodity prices, production costs, recovery rates and exchange rates may change significantly when new information becomes available. Changes in assumptions could result in mineral reserves being revised, which in turn would impact our depletion expense, asset carrying values and the provision for decommissioning costs.

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

**III. Deferred tax assets and liabilities**

The Company's management makes significant estimates and judgments in determining the Company's tax expense for the period and the deferred tax assets and liabilities. Management interprets tax legislation in a variety of jurisdictions and makes estimates of the expected timing of the reversal of deferred tax assets and liabilities. In addition, management makes estimates related to expectations of future taxable income based on cash flows from operations and the application of existing tax laws in each jurisdiction. Assumptions used in the cash flow forecast are based on management's estimates of future production and sales volume, commodity prices, operating costs, capital expenditures, dividends, and decommissioning and reclamation expenditures. These estimates are subject to risk and uncertainty and could result in an adjustment to the deferred tax provision and a corresponding credit or charge to the statement of loss. The Company is subject to assessments by the various tax authorities who may interpret the tax laws differently. These differences may impact the final amount or the timing of the payment of taxes. The Company provides for such differences where known based on management's best estimates of the probable outcome of these matters.

**IV. Decommissioning and restoration liabilities costs**

The Company's provision for decommissioning and restoration costs is based on management's best estimate of the present value of the future cash outflows required to settle the liability. In determining the liability, management makes estimates about the future costs, inflation, foreign exchange rates, risks associated with the cash flows, and the applicable risk-free interest rates for discounting future cash flows. Changes in any of these estimates could result in a change in the provision recognized by the Company. Also, the ultimate costs of environmental disturbance are uncertain and cost estimates can vary in response to many factors including changes to the relevant legal requirements, the emergence of new restoration techniques or experience at other mine sites.

Changes in decommissioning and restoration liabilities are recorded with a corresponding change to the carrying amounts of the assets to which they relate. Adjustments made to the carrying amounts of the asset can result in a change to the depreciation charged in the consolidated statement of loss.

**V. Functional currency**

The determination of a subsidiary's functional currency often requires significant judgment where the primary economic environment in which the subsidiary operates may not be clear. This can have a significant impact on our consolidated results based on the foreign currency translation methods described in the audited consolidated financial statements.

**Future accounting changes**

The following standards and amendments to existing standards have been published and are mandatory for annual periods beginning January 1, 2019, or later periods:

***IFRS 16, Leases ("IFRS 16")***

In January 2016, the IASB issued this standard which is effective for periods beginning on or after January 1, 2019, which replaces the current guidance in IAS 17, *Leases*, and is to be applied either retrospectively or a modified retrospective approach. Early adoption is

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

permitted, but only in conjunction with IFRS 15, *Revenue from Contracts with Customers*. Under IAS 17, lessees were required to make a distinction between a finance lease (on balance sheet) and an operating lease (off balance sheet). IFRS 16 now requires lessees to recognize a lease liability reflective of future lease payments and a "right-of-use asset" for virtually all lease contracts. The Company is in the process of determining the effect that the adoption of IFRS 16 will have on its consolidated financial statements.

**15. OFF BALANCE SHEET ARRANGEMENTS**

The Company has no off-balance sheet arrangements as at December 31, 2018.

**16. DISCLOSURE CONTROLS AND INTERNAL CONTROLS OVER FINANCIAL REPORTING ("ICFR")**Disclosure controls and procedures

The Company's management is responsible for designing and maintaining adequate internal controls over financial reporting and disclosure controls and procedures, under the supervision of the Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the financial statements in accordance with IFRS.

Management, including the CEO and CFO, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures as at December 31, 2018, as defined in the rules of the Canadian Securities Administration. Based on this evaluation, they concluded that our disclosure controls and procedures are effective in providing reasonable assurance that the information required to be disclosed in reports we filed or submitted under Canadian securities legislation was recorded, processed, summarized and reported within the time periods specified in those rules.

Internal controls over financial reporting

Management, including the CEO and CFO, is responsible for establishing and maintaining adequate internal control over financial reporting, and used the framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) to evaluate the effectiveness of our controls in 2018. Based on this evaluation, management concluded that our internal control over financial reporting was effective as at December 31, 2018 and provided a reasonable assurance of the reliability of our financial reporting and preparation of the financial statements.

No matter how well designed any system of internal control has inherent limitations. Even systems determined to be effective can provide only reasonable assurance of the reliability of financial statement preparation and presentation.

Changes in internal controls over financial reporting

There have been no changes in ICFR during the three months ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect, ICFR.

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

**17. CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS**

This discussion includes certain statements that may be deemed “forward-looking”. All statements in this discussion, other than statements of historical fact, addressing future exploration drilling, exploration and development activities, production activities and events or developments that the Company expects, are forward looking statements. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those expressed in forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include market prices, exploitation and exploration successes, continued availability of capital and financing, general economic, market or business conditions, and other factors which are discussed under “Risk Factors” in the Company’s Annual Information Form dated March 28, 2019 available at [www.sedar.com](http://www.sedar.com) and at [www.sec.gov](http://www.sec.gov) under the Company’s name.

The MD&A contains “forward-looking statements” within the meaning of the United States *Private Securities Litigation Reform Act* of 1995 and “forward looking information” within Canadian securities laws (collectively “forward-looking statements”) related to the Company and its operations, and in particular, the anticipated developments in the Company’s operations in future periods, the Company’s planned exploration activities, the adequacy of the Company’s financial resources and other events or conditions that may occur in the future. Statements concerning mineral reserve and resource estimates may also be deemed to constitute forward-looking statements to the extent that they involve estimates of the mineralization that will be encountered if and when the properties are developed or further developed. These statements relate to analyses and other information that are based on forecasts of future results, estimates of amounts not yet determinable and assumptions of management.

These forward-looking statements include, but are not limited to, relate to, among other things: future production of silver, lead, copper and zinc (the “metals”); future cash costs per ounce or pound of the metals; the price of the metals; the effects of domestic and foreign laws, regulations and government policies and actions affecting the Company’s operations or potential future operations; future successful development of the Yauricocha, Bolivar and Cusi near-mine exploration projects and other exploration and development projects; the sufficiency of the Company’s current working capital, anticipated operating cash flow or the Company’s ability to raise necessary funds; estimated production rates for the metals produced by the Company; timing of production; the estimated cost of sustaining capital; ongoing or future development plans and capital replacement, improvement or remediation programs; the estimates of expected or anticipated economic returns from the Company’s mining projects; future sales of the metals, concentrates or other future products produced by the Company; and the Company’s plans and expectations for its properties and operations.

Risks and uncertainties relating to foreign currency fluctuations; risks inherent in the mining industry including environmental hazards, industrial accidents, unusual or unexpected geological formations, ground control problems, flooding and mud rushes; risks associated with the estimation of mineral resources and the geology, grade and continuity of mineral deposits; the possibility that future exploration, development or mining results will not be consistent with the Company’s expectations; the potential for and effects of labour disputes or other unanticipated difficulties or shortages of labour or interruptions in production; actual material mined varying from estimates of grade, tonnage, dilution and metallurgical and other characteristics; the inherent

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

uncertainty of pilot-mining activities and cost estimates, including the potential for unexpected costs/expenses and commodity price fluctuations; uncertain political and economic environments; changes in laws or policies, foreign taxation, delays or the inability to obtain necessary governmental permits.

Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions or future events or performance (often, but not always, using words or phrases such as “expects”, “anticipates”, “plans”, “projects”, “estimates”, “assumes”, “intends”, “strategy”, “goals”, “objectives”, “potential” or variations thereof, or stating that certain actions, events or results “may”, “could”, “would”, “might” or “will” be taken, occur or be achieved, or the negative of any of these terms and similar expressions) are not statements of historical fact and may be forward-looking information. Forward-looking information is subject to a variety of known and unknown risks, uncertainties and other factors that could cause actual events or results to differ from those expressed or implied by the forward-looking information, including, without limitation: uncertainty of production and cost estimates for the Yauricocha Mine (as hereinafter defined), the Bolivar Mine (as hereinafter defined) and the Cusi Mine (as hereinafter defined); uncertainty of production at the Company's exploration and development properties; risks and uncertainties associated with developing and exploring new mines including start-up delays; risks and hazards associated with the business of mineral exploration, development and mining (including operating in foreign jurisdictions, environmental hazards, industrial accidents, unusual or unexpected geological or structure formations, pressures, cave-ins and flooding); risks and uncertainties relating to the interpretation of drill results and the geology, grade and continuity of the Company's mineral deposits; risks related to the Company's ability to obtain adequate financing for the Company's planned development activities and to complete further exploration programs; fluctuations in spot and forward markets for the metals and certain other commodities; risks related to obtaining long-term sales contracts or completing spot sales for the Company's products; the Company's history of losses and the potential for future losses; risks related to general economic conditions, including recent market and world events and conditions; inadequate insurance, or inability to obtain insurance, to cover these risks and hazards; relationships with and claims by local communities and indigenous populations; diminishing quantities or grades of mineral reserves as properties are mined; challenges to, or difficulty maintaining, the Company's title to properties and continued ownership thereof; risks related to the Company's covenants with respect to the Corporate Facility (as hereinafter defined); changes in national and local legislation, taxation, controls or regulations and political or economic developments or changes in Canada, Mexico, Peru or other countries where they may carry on business; risks related to the delay in obtaining or failure to obtain required permits, or non-compliance with permits the Company has obtained; increased costs and restrictions on operations due to compliance with environmental laws and regulations; regulations and pending legislation governing issues involving climate change, as well as the physical impacts of climate change; risks related to reclamation activities on the Company's properties; uncertainties related to title to the Company's mineral properties and the surface rights thereon, including the Company's ability to acquire, or economically acquire, the surface rights to certain of the Company's exploration and development projects; the Company's ability to successfully acquire additional commercially mineable mineral rights; risks related to currency fluctuations (such as the Canadian dollar, the United States dollar, the Peruvian sol and the Mexican peso); increased costs affecting the mining industry, including occasional high rates of inflation; increased competition in the mining industry for properties, qualified personnel and management; risks related to some of the Company's directors' and officers' involvement with other natural resource companies; the Company's ability to attract and retain qualified personnel and management to

**Sierra Metals Inc.**

Management's Discussion and Analysis

For the year ended December 31, 2018

*(In thousands of United States dollars, unless otherwise stated)*

---

grow the Company's business; risks related to estimates of deferred tax assets and liabilities; risks related to claims and legal proceedings and the Company's ability to maintain adequate internal control over financial reporting.

This list is not exhaustive of the factors that may affect any of the Company's forward-looking statements. Forward looking statements are statements about the future and are inherently uncertain, and the Company's actual achievements or other future events or conditions may differ materially from those reflected in the forward-looking statements due to a variety of risks, uncertainties and other factors, including, without limitation, those referred to in this MD&A under the heading "Other Risks and Uncertainties". The Company's forward-looking statements are based on the beliefs, expectations and opinions of management on the date the statements are made, and the Company does not assume any obligation to update forward-looking statements if circumstances or management's beliefs, expectations or opinions should change, other than as required by applicable law. For the reasons set forth above, one should not place undue reliance on forward-looking statements.

**Cautionary Note to U.S. Investors Concerning Estimates of Inferred Resources**

This document uses the term "Inferred Mineral Resources". U.S. investors are advised that while this term is recognized and required by Canadian regulations, the Securities and Exchange Commission ("SEC") does not recognize it. Inferred Mineral Resources have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an Inferred Mineral Resource will ever be upgraded to a higher category. Under Canadian rules, estimates of Inferred Mineral Resources may not form the basis of economic studies other than a Preliminary Economic Assessment (PEA).

This document also uses the terms "Measured and Indicated Mineral Resources". The Company advises U.S. investors that while these terms are recognized by Canadian regulations, the SEC does not recognize them. U.S. investors are cautioned not to assume that any part or all of mineral deposits included in these categories will ever be converted into mineral reserves. Mineral resources that are not mineral reserves do not have demonstrated economic viability. Disclosure of "contained ounces" is permitted under Canadian regulations; however, the SEC normally only permits the reporting of non-reserve mineralization as in-place tonnage and grade.