



**Centerra Gold Inc.**  
**Management's Discussion and Analysis ("MD&A")**  
**For the Period Ended December 31, 2018**

This Management Discussion and Analysis ("MD&A") has been prepared as of February 22, 2019, and is intended to provide a review of the financial position and results of operations of Centerra Gold Inc. ("Centerra" or the "Company") for the three and twelve months ended December 31, 2018 in comparison with the corresponding periods ended December 31, 2017. This discussion should be read in conjunction with the Company's audited financial statements and the notes thereto for the year ended December 31, 2018 prepared in accordance with International Financial Reporting Standards ("IFRS"). In addition, this discussion contains forward-looking information regarding Centerra's business and operations. Such forward-looking statements involve risks, uncertainties and other factors that could cause actual results to differ materially from those expressed or implied by such forward looking statements. See "Risk Factors" and "Caution Regarding Forward-Looking Information" in this discussion. All dollar amounts are expressed in United States dollars ("USD"), except as otherwise indicated. Additional information about Centerra, including the Company's most recently filed Annual Information Form, is available at [www.centerragold.com](http://www.centerragold.com) and on the System for Electronic Document Analysis and Retrieval ("SEDAR") at [www.sedar.com](http://www.sedar.com).

***All references in this document denoted with <sup>NG</sup>, indicate a non-GAAP term which is discussed under "Non-GAAP Measures" and reconciled to the most directly comparable GAAP measure.***

## TABLE OF CONTENTS

<b>Overview .....</b>	<b>3</b>
<b>Economic Indicators .....</b>	<b>5</b>
<b>Liquidity.....</b>	<b>7</b>
<b>Mineral Reserves and Mineral Resources .....</b>	<b>9</b>
<b>Consolidated Financial and Operational Highlights .....</b>	<b>13</b>
<b>Overview of Consolidated Results.....</b>	<b>14</b>
<b>Cash Generation and Capital Management .....</b>	<b>16</b>
<b>Financial Instruments.....</b>	<b>17</b>
<b>Operating Mines and Facilities.....</b>	<b>19</b>
<b>Consolidated Fourth Quarter Results – 2018 Compared to 2017 .....</b>	<b>28</b>
<b>Construction and Development Projects .....</b>	<b>29</b>
<b>Balance Sheet.....</b>	<b>32</b>
<b>Contractual Obligations .....</b>	<b>33</b>
<b>Other Financial Information –Related Party Transactions.....</b>	<b>34</b>
<b>Quarterly Results – Previous Eight Quarters .....</b>	<b>35</b>
<b>Other Corporate Developments.....</b>	<b>36</b>
<b>Accounting Estimates, Policies and Changes .....</b>	<b>39</b>
<b>Disclosure Controls and Procedures/Internal Control Over Financial Reporting.....</b>	<b>40</b>
<b>2019 Outlook.....</b>	<b>40</b>
<b>Non-GAAP Measures .....</b>	<b>47</b>
<b>Qualified Person &amp; QA/QC .....</b>	<b>54</b>
<b>Risks That Can Affect Our Business.....</b>	<b>55</b>
<b>Caution Regarding Forward-Looking Information .....</b>	<b>56</b>

## Overview

Centerra is a Canadian-based gold mining company focused on operating, developing, exploring and acquiring gold properties worldwide and is one of the largest Western-based gold producers in Central Asia. Centerra's principal operations are the Kumtor Gold Mine located in the Kyrgyz Republic and the Mount Milligan Gold-Copper Mine located in British Columbia, Canada. The Company is currently constructing its next gold mine, the Öksüt Project in Turkey and has two promising development properties in Canada as well as exploration joint ventures or properties in Canada, Finland, Mexico, Sweden, Turkey and the United States.

Centerra's common shares are listed for trading on the Toronto Stock Exchange under the symbol CG. As of February 22, 2019, there are 292,123,716 common shares issued and outstanding and options to acquire 4,981,701 common shares outstanding under its stock option plan.

As of December 31, 2018, Centerra's significant subsidiaries are as follows:

Entity	Property - Location	Current Status	Property Ownership	
			2018	2017
Kumtor Gold Company ("KGC")	Kumtor Mine - Kyrgyz Republic	Operation	100%	100%
Thompson Creek Metals Company Inc.	Mount Milligan Mine - Canada	Operation	100%	100%
Langeloth Metallurgical Company LLC (Molybdenum Processing Plant)	Langeloth - United States	Operation	100%	100%
Öksüt Madencilik A.S. ("OMAS")	Öksüt Project - Turkey	Development	100%	100%
AuRico Metals Inc	Kemess Project - Canada	Pre-development	100%	0%
Greenstone Gold Mines LP	Greenstone Gold Property - Canada	Pre-development	50%	50%
Thompson Creek Mining Co.	Thompson Creek Mine - United States	Care and Maintenance	100%	100%
Thompson Creek Metals Company Inc.	Endako Mine - Canada	Care and Maintenance	75%	75%

As at December 31, 2018, the Company has also entered into agreements to earn an interest in joint venture exploration properties located in Canada, Mexico and Finland. In addition, the Company has exploration properties in Canada, Turkey and the United States and has strategic alliance agreements with partners to evaluate potential gold opportunities in West Africa and Sweden.

Substantially all of Centerra's revenues are derived from the sale of gold and copper. The Company's revenues are derived from gold and gold/copper concentrate production from its mines and gold and copper prices realized upon the sale of these products. Gold doré production from the Kumtor mine is purchased by Kyrgyzaltyn JSC ("Kyrgyzaltyn"), a Kyrgyz Republic state owned refinery and significant shareholder of Centerra, for processing at its refinery in the Kyrgyz Republic while gold and copper concentrate produced by the Mount Milligan mine in Canada is sold to various smelters and off-take purchasers.

The Mount Milligan Mine in Canada is subject to a streaming arrangement whereby RGLD Gold AG and Royal Gold Inc. (collectively “Royal Gold”) is entitled to purchase 35% of the gold and 18.75% of the copper produced from the Mount Milligan Mine for \$435 per ounce of gold delivered and 15% of the spot price per metric tonne of copper delivered (the “Mount Milligan Streaming Arrangement”).

The Company’s costs are comprised primarily of operating costs at the Kumtor and Mount Milligan mines and the Langeloth molybdenum processing facility, project development costs at the Öksüt Gold Project, the Kemess Project and the Greenstone Gold Property, care and maintenance costs at the Company’s molybdenum mines (Endako Mine and Thompson Creek Mine), exploration expenses relating to the Company’s own projects and its earn-in projects, administrative costs from offices worldwide and depreciation, depletion and amortization (“DD&A”).

There are many operating variables that affect the cost of producing an ounce of gold and a pound of copper. In the mine, unit costs are influenced by the ore grade and the stripping ratio. The stripping ratio is the ratio of the tonnage of waste material which must be removed per tonne of ore mined. Ore grade refers to the amount of gold and/or copper contained in a tonne of ore. The significant costs of mining include labour, diesel fuel and equipment maintenance.

At the mill, costs are impacted by the ore grade and the metallurgical characteristics of the ore, which can impact gold and copper recovery. For example, a higher-grade ore would typically result in a lower unit production cost. The significant costs of milling are labour, energy, grinding media, reagents, consumables and mill maintenance.

Mining and milling costs are also affected by the cost of labour, which depends mostly on the availability of qualified personnel in the region where the operations are located, the wages in those markets, and the number of people required. Mining and milling activities involve the use of many materials. The varying costs of acquiring these materials and the amount used in the processing of the ore also influence the cash costs of mining and milling. The non-cash costs (namely DD&A) are influenced by the amount of capital costs related to the mine’s acquisition, development and ongoing capital requirements and the estimated useful lives of capital items.

The Company’s 2018 production costs<sup>NG</sup> at its two operating mines totaled \$598 million compared to \$592 million in 2017. Production costs at Kumtor were 2.2% higher than 2017 (\$368 million in 2018 compared to \$360 million in 2017). The increase reflects the impact of higher mining costs, especially for diesel fuel (higher input prices and consumption). At Mount Milligan, production costs in 2018 were \$230 million, similar to 2017, reflecting higher labour and environmental consulting costs, offset by lower drill and blast costs.

Over the life of each mine, another significant cost that must be planned for is the closure, reclamation and decommissioning of each operating site. In accordance with standard practices for international mining companies, Centerra carries out remediation and reclamation work during the operating period of the mine, where feasible, in order to reduce the final decommissioning costs. Nevertheless, the majority of rehabilitation work can only be performed following the completion of mining operations. Centerra’s practice is to record the estimated final decommissioning costs based on conceptual closure plans, and to accrue these costs according to the principles of IFRS. Kumtor has established a reclamation trust fund to pay for these costs from the revenues generated over the life of the mine. As required by Canadian provincial laws and US federal and state laws, the Company has provided reclamation bonds for mine closure obligations at its Canadian and U.S. sites.

The Company reports the results of its operations in U.S. dollars, however not all of its costs are incurred in U.S. dollars. As such, the movement in exchange rates between currencies in which the Company incurs costs and the U.S. dollar also impact reported costs of the Company.

## Economic Indicators

### Gold Price

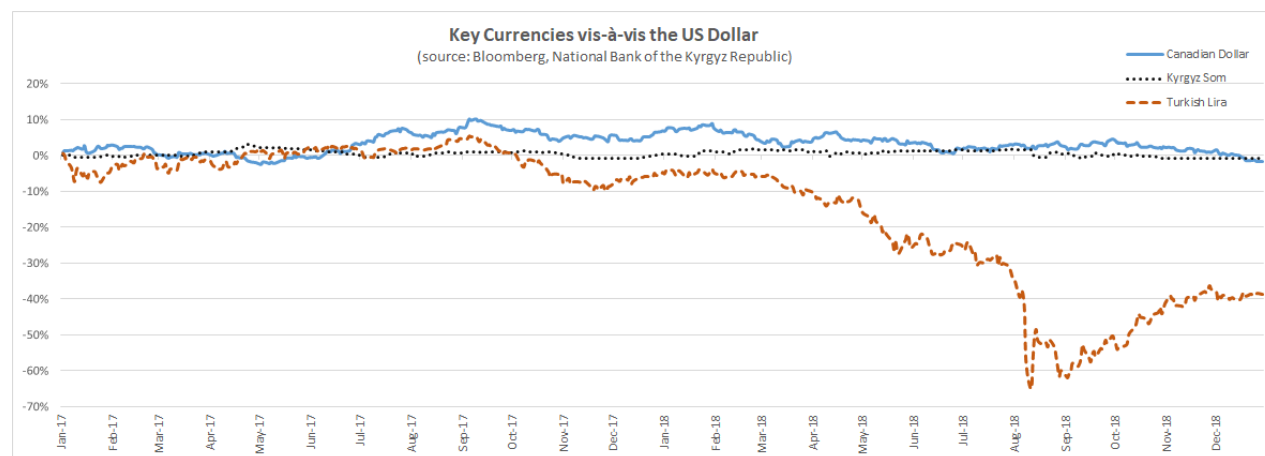
The average quarterly gold spot price of \$1,229 in the fourth quarter of 2018 was slightly above the quarterly average low point of \$1,213 reached in the third quarter of 2018. The average gold spot price for 2018 was \$1,269 per ounce, an increase of 1% over the average in 2017.

### Copper Price

The average quarterly copper spot price dropped in the fourth quarter of 2018 to \$2.80 per pound, a 11% decrease compared to the high of \$3.16 per pound reached in the first quarter of the year. The average copper spot price for 2018 was \$2.96 per pound, an increase of 6% over the average in 2017.

## Currency

**Figure A**



### Canadian Dollar

The Canadian Dollar (C\$) exhibited a sustained downward trend in 2018, depreciating 8.5% relative to the U.S. Dollar and reaching C\$1.36 per U.S. Dollar in December 2018 (December 31, 2017 C\$1.26 per U.S. Dollar).

### Kyrgyz Som

The Kyrgyz Som to U.S. Dollar exchange rate depreciated 1% over 2018. The Som value is driven by the economic growth and inflation expectations in the Kyrgyz Republic and influenced by the currencies of its main trading partners, mainly Russia and Kazakhstan.

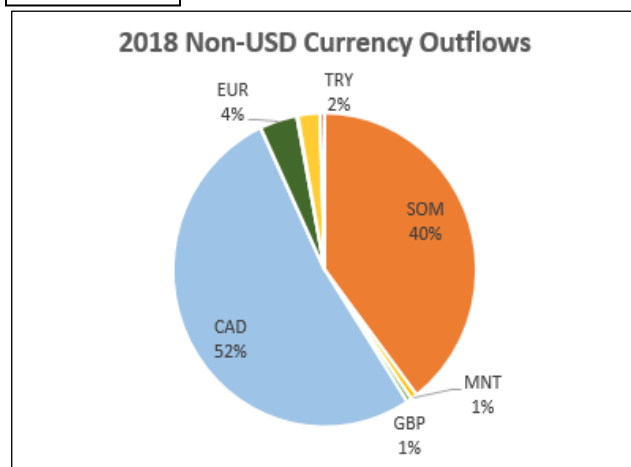
### ***Turkish Lira***

The Turkish Lira (“TRY”) depreciated markedly in 2018, closing on December 31, 2018 at 5.29 per U.S. Dollar from 3.8 at December 31, 2017 (a depreciation of 39%). Following the United States’ announcement of doubling tariffs on Turkish steel and aluminum, the USD-TRY rate increased to 7.24 on August 13, 2018, the highest level in the last 30 years, and subsequently decreased prior to the end of the year.

### **Foreign Exchange Transactions**

The Company generates its revenues through the sale of gold, copper and molybdenum in U.S. Dollars. The Company has significant operations in Canada (including its corporate head office), the Kyrgyz Republic, Turkey and the United States. During 2018, the Company incurred combined expenditures (including capital) of approximately \$1,768 million. Approximately \$624 million of this (35%) was in currencies other than the U.S. dollar. The percentage of Centerra’s non-U.S. Dollar costs by currency was as follows:

**Figure B**



In 2018, Centerra’s non-U.S. dollar costs consisted of 52% Canadian Dollars, 40% Kyrgyz Soms, 4% Euros, 1% Mongolian Tugrik, 1% British Pound, and 2% Turkish Lira. The net impact of the currency movements in the year ended December 31, 2018, after factoring in the balances in non-USD currencies held at the beginning of the year, was to decrease annual costs by \$14.5 million (increase of \$9.1 million in the year ended December 31, 2017), inclusive of the currency hedging cost of \$0.3 million (\$1.2 million gain for the year ended December 31, 2017).

### ***Diesel Fuel Prices***

One of the more significant movements in commodity prices in 2018 was the decline in the West Texas Intermediate (“WTI”) and Brent crude oil prices in the last quarter of the year.

According to the U.S. Energy Information Administration, Brent crude oil prices averaged \$71/bbl in 2018, ending the year at \$54/bbl (a decrease of \$13/bbl from the end of 2017). WTI crude oil prices averaged \$65/bbl in 2018, ending the year at \$45/bbl (a decrease of \$15/bbl from December 31, 2017).

Fuel costs represent a significant cost component for Centerra’s mining operations. Prices for Kumtor diesel fuel in 2018 generally reflected the price movements of Brent crude oil. The purchase price for diesel fuel for Kumtor in 2018 increased 26% when compared to 2017, averaging \$0.53/l for the year. Kumtor sources its fuel from Russia either directly or through Kyrgyz distributors. Kumtor’s diesel prices include additional costs such as seasonal premiums for winterizing the diesel fuel and transportation costs from the Russian refineries. The increase in price was partially offset by the Company’s diesel hedging program, which offset costs with a \$2.2 million gain in 2018.

To manage its exposure to fluctuations in diesel fuel prices, the Company has established a diesel fuel price hedge program. See “Financial Instruments – Fuel Hedges”.

## **Liquidity**

Financial liquidity provides the Company with the ability to fund future operating activities and investments. The Company’s financial risk management policy focuses on cash preservation, while maintaining the liquidity necessary to conduct operations on a day-to-day basis and advance the Company’s pre-development and development projects. The Company manages counterparty credit risk, in respect of cash and short-term investments, by maintaining bank accounts with highly-rated U.S. and Canadian banks and investing only in highly-rated Canadian and U.S. Government bills, term deposits or banker’s acceptances with highly-rated financial institutions, and corporate direct credit of highly-rated, highly-liquid issuers.

Centerra generated \$217.5 million in cash from operations in 2018 and has a balance of cash, cash equivalents and short-term investments of \$151.7 million as at December 31, 2018.

As at December 31, 2018, the Corporate Facility (defined below), had an outstanding balance of \$111 million at December 31, 2018, after net repayments of \$79 million in 2018 (outstanding balance as at December 31, 2017 - \$190 million). At December 31, 2018, the unutilized balance available to the Company under the Corporate Facility was \$389 million.

In the second quarter of 2018, after satisfying all of the required conditions precedent, the Company began drawing on the \$150 million OMAS Facility (defined below) relating to the Öksüt Project. As at December 31, 2018, the Company had drawn \$49.7 million under the facility, leaving \$100.3 million unutilized and available (see Credit Facilities – OMAS Facility).

The Company believes its cash on hand, cash flow from the Company’s Kumtor and Mount Milligan operations and cash from the Company’s existing credit facilities will be sufficient to fund its anticipated operating, construction and development cash requirements through to the end of 2019. See “Risks affecting our Business” and “Caution Regarding Forward-Looking Information”.

## **Capital Management**

The Company’s primary objective with respect to its capital management is to provide returns for shareholders by ensuring that it has sufficient cash resources to maintain its ongoing operations, pursue and support growth opportunities, continue the development and exploration of its mineral properties, while satisfying debt repayment requirements and other obligations.

Management is aware that market conditions, driven primarily by metal prices, may limit the Company’s ability to raise additional funds. The Company is also required to maintain a number of financial covenants as part of its credit facilities, which may limit the Company’s ability to access future funding. These and other factors are considered when shaping the Company’s capital management strategy.

## **Credit Facilities**

Centerra was in compliance with the terms of all of its credit facilities at December 31, 2018 and throughout 2018.

### Centerra Revolving Term Corporate Facility

In the first quarter of 2018, the Company entered into a new \$500 million four-year senior secured revolving credit facility (the "Corporate Facility"). with a lending syndicate led by The Bank of Nova Scotia and National Bank of Canada. The Corporate Facility is an amendment and restatement of a credit facility entered into by Centerra B.C. Holdings Inc. (the "Centerra B.C. Facility"), which had been entered in connection with the acquisition of Thompson Creek in October 2016, and also replaced the AuRico acquisition and EBRD facilities. The Corporate Facility is for general corporate purposes, including working capital, investments, acquisitions and capital expenditures. Funds drawn under the Corporate Facility are available to be re-drawn on a quarterly basis, at the Company's discretion, and repayment of the loaned funds may be extended until February 2022.

As at December 31, 2018, the Corporate Facility had a drawn balance of \$111 million.

### OMAS Facility

In the second quarter of 2018, OMAS, a wholly-owned subsidiary of the Company that owns the Öksüt Project, satisfied all conditions precedent required under the \$150 million five-year credit facility (the "OMAS Facility") it has entered with European Bank for Reconstruction and Development and UniCredit Bank AG. The purpose of the OMAS Facility is to assist in financing the construction of the Company's Öksüt Project. As a condition of the OMAS Facility, the Company placed \$25 million in restricted accounts with the lenders, including \$15 million which is restricted until the Öksüt Project mining lease has been extended and \$10 million which is restricted during the construction phase.

As part of an amendment to the OMAS Facility in 2018, OMAS agreed to apply all of its excess cash flow towards debt prepayment under the OMAS Facility until the Öksüt Project's mining license is extended beyond its current expiry date of January 16, 2023. OMAS intends to apply for an extension of its mining license as soon as permitted under Turkish legislation, which is two years prior to expiry of the mining license. In addition, Centerra will provide a limited guarantee of a portion of OMAS' obligations under the OMAS Facility and will agree to comply with certain covenants which are consistent with the covenants under the Corporate Facility. The lenders under the OMAS Facility may call on Centerra's guarantee if the Öksüt mining license is not extended beyond January 16, 2023.

The OMAS Facility expires on March 31, 2024 and as at December 31, 2018, had a drawn balance of \$49.7 million. As at December 31, 2018, \$6.2 million (December 31, 2017 - \$4.8 million) of deferred financing fees are being amortized over the term of the OMAS Facility.

### Caterpillar Financial Services Limited Promissory Note ("CAT Note")

In 2016, as part of the Thompson Creek Metals Company Inc. ("TCM") acquisition, the Company assumed TCM's capital equipment lease obligations owed to Caterpillar Financial Services Limited ("Caterpillar"). The Company re-financed the leases in 2017, whereby the Company purchased the assets held under the finance leases through a loan payable to Caterpillar.

Interest on the CAT Note is at three-month LIBOR + 4.93% paid quarterly in arrears. The CAT Note is secured by assets previously held under the finance leases and contain certain non-financial covenants.

In 2018, an amendment was signed extending the CAT Note until March 25, 2020 with an initial principal repayment of \$5 million, which was paid on January 25, 2019, at which time the interest rate reset to LIBOR + 3.50%.



As at December 31, 2018 the principle amount outstanding under the CAT Note is \$32 million.

### Other Facilities

On January 8, 2018, the Company entered into a \$125 million acquisition facility (“AuRico Acquisition Facility”) with the Bank of Nova Scotia, as administrative agent, lead arranger and lender, in connection with the acquisition of AuRico Metals Inc. The AuRico Acquisition Facility was repaid and cancelled after the Company entered into the Corporate Facility.

In early 2018, the Company repaid the \$76 million outstanding balance of its revolving credit facility with the European Bank for Reconstruction and Development and subsequently cancelled the facility.

## **Mineral Reserves and Mineral Resources**

On February 22, 2019, the Company released the results of the updated mineral reserve and mineral resource estimates for the Kumtor mine, the Mount Milligan mine and re-iterated mineral reserve and mineral resource estimates for the Company’s other projects, including the Öksüt Project, the Kemess Property and the Hardrock deposit, all as of December 31, 2018. For additional details, please see the news release “*Centerra Gold 2018 Year-End Statement of Mineral Reserves and Resources and Fourth Quarter Exploration Update*” filed on SEDAR and posted on the Company’s website on February 22, 2019.

Mount Milligan’s mineral reserves and mineral resources are presented on a 100% basis. Sales of gold and copper from the Mount Milligan mine are subject to the Mount Milligan Streaming Arrangement whereby Royal Gold is entitled to 35% and 18.75% of gold and copper sales respectively. Under the Mount Milligan Streaming Arrangement this streaming arrangement, Royal Gold pays Centerra \$435 per ounce of gold delivered and 15% of the spot price per metric tonne of copper delivered.

### **Highlights:**

#### Gold Mineral Reserves

- At December 31, 2018, Centerra’s proven and probable gold mineral reserves total an estimated 14.2 million contained ounces (706.3 Mt at 0.6 g/t gold), compared to 16.3 million contained ounces (746.8 Mt at 0.7 g/t gold) the prior year. During 2018, proven and probable gold mineral reserves decreased by 2.1 million contained ounces, after processing of 977,000 contained ounces and a net deletion of 1.1 million contained ounces. The decrease in gold mineral reserve contained ounces is primarily due to the Company’s sale of the Mongolian business unit (Gatsuurt Project) that represented 1.3 million contained ounces of mineral reserves. Excluding the impact of the sale of the Company’s Mongolian business unit gold mineral reserves decreased by 782,000 contained ounces in 2018. The 2018 year-end gold mineral reserves have been verified and estimated using a gold price of \$1,250 per ounce.

#### Gold Mineral Resources

- Centerra’s measured and indicated gold mineral resources, exclusive of gold mineral reserves, increased by 2.1 million ounces of contained gold, excluding the impact of the sale of the Company’s Mongolian business unit (993,000 ounces of contained gold), to 11.3 million ounces of contained gold (758.8 Mt at 0.5 g/t gold), compared to the December 31, 2017. The increase is a result of exploration success at Kumtor and Mount Milligan and changes in the metal price assumptions at the Kemess Project.

- Centerra's inferred gold mineral resource estimate totals 6.2 million contained ounces of gold (151 Mt at 1.3 g/t gold), a decrease of 629,000 contained ounces from December 31, 2017. The decrease is primarily a result of the reduction of 511,000 of contained ounces of gold as a result of the divestiture of the Mongolian assets in 2018. In addition, at Kemess East inferred mineral resources decreased by 357,000 contained ounces of gold from additional drilling that converted a portion of the inferred ounces to the indicated category. At Kumtor inferred mineral resources increased by 8,000 contained ounces because of exploration drilling and the generation of a new constraining economic pit shell. At Öksüt additional in-fill drilling in the Keltepe open pit converted 58,000 contained ounces to the measured and indicated categories. These decreases were offset by the addition of 252,000 contained ounces at the Kemess Underground project due to the change in resource metal prices assumptions.

<b>Gold (000s attributable ozs contained) <sup>(1)(4)</sup></b>	<b>2018</b>	<b>2017</b>
Total proven and probable mineral reserves	<b>14,223</b>	16,321
Total measured and indicated mineral resources <sup>(2)</sup>	<b>11,338</b>	10,204
Total inferred mineral resources <sup>(2)(3)(4)</sup>	<b>6,191</b>	6,819

<sup>(1)</sup> Centerra's equity interests are as follows: Mount Milligan 100%, Kumtor 100%, Öksüt 100%, Kemess Underground and Kemess East 100% and Greenstone Gold properties (Hardrock, Brookbank, Key Lake, Kailey) 50%. The mineral reserves and mineral resources above reflect Centerra's equity interests in the applicable properties.

<sup>(2)</sup> Mineral resources are in addition to mineral reserves. Mineral resources do not have demonstrated economic viability.

<sup>(3)</sup> Inferred mineral resources have a great amount of uncertainty as to their existence and as to whether they can be mined economically. It cannot be assumed that all or part of the inferred mineral resources will ever be upgraded to a higher category.

<sup>(4)</sup> Production at Mount Milligan is subject to a streaming agreement which entitles Royal Gold to 18.75% of copper sales from the Mount Milligan Mine. Under the stream arrangement, Royal Gold will pay 15% of the spot price per metric tonne of copper delivered. Mineral resources for the Mount Milligan property are presented on a 100% basis.

### Copper Mineral Reserves

- Centerra's proven and probable copper mineral reserves total an estimated 2,465 million pounds of contained copper (555 Mt at 0.202% copper). The copper mineral reserves have been estimated based on a copper price of \$3.00 per pound for the Mount Milligan Mine and the Kemess Underground Project.
- At the Mount Milligan Mine, proven and probable copper mineral reserves total an estimated 1,836 million pounds of contained copper (448 Mt at 0.186% copper) at the end of December 2018, compared to 1,938 million contain pounds of copper (468 Mt 0.188% copper) as of December 31, 2017. Proven and probable copper mineral reserves decreased by 103 million contained pounds of copper, after processing 61 million contained pounds of copper in 2018. During 2018, mineral reserves decreased primarily due to mining depletion, but was also affected by geological model changes, modifications to the copper recovery curve and an increase in concentrate transportation costs.
- At the Kemess Property, proven and probable copper mineral reserves are unchanged at the Kemess Underground Project and are estimated to be 630 million pounds of contained copper (107 Mt at 0.266% copper) at the end of December 2018.

### Copper Mineral Resources

- Centerra's measured and indicated copper mineral resources, exclusive of mineral reserves, total an estimated 5,836 million pounds of contained copper (1,090 Mt at 0.243% copper). The copper mineral resources are located at the Mount Milligan Mine, the Berg Property, the Kemess Underground, and Kemess East properties that are all located in Canada.

- At Mount Milligan, measured and indicated mineral resources increased by 365 million pounds of contained copper to an estimated 1,028 million pounds of contained copper (342 Mt at 0.136% copper) at the end of December 2018 as a result of successful exploration drilling activities in 2018 and have been estimated based on a copper price of \$3.50 per pound.
- Measured and indicated resources that are exclusive of reserves increased by an estimated 588 million contained copper pounds at the Kemess Project. This increase in copper pounds is attributable to an increase of 132 million pounds of contained copper at Kemess Underground that was due to a change to the metal price assumptions (changed to standardize them across our sites) and an increase of 456 million pounds of contained copper at Kemess East because of the standardization of corporate metal prices and to the results of 9 exploration drill holes that converted some inferred material to the indicated category. The Kemess Underground measured and indicated resources are 174 Mt at 0.182% copper or an estimated 697 million pounds of contained copper and Kemess East measured and indicated resources of 177.5 Mt at 0.360% copper or an estimated 1,410 million pounds of contained copper.
- Centerra's inferred copper mineral resource estimate totals 607 million pounds of contained copper (132.0 Mt at 0.209% copper). This includes at Mount Milligan an estimated 115 million pounds of contained copper (41 Mt at 0.127% copper) that represents a year-over-year increase of 4 million pounds of contained copper that is attributable to additional in-pit drilling completed in 2018. At Kemess Underground this includes 210 million pounds of contained copper (47.7 Mt at 0.20% copper) and at Kemess East 203 million pounds of contained copper (29.3 Mt at 0.31%).

<b>Copper (million pounds contained) <sup>(1)(4)</sup></b>	<b><u>2018</u></b>	<b><u>2017</u></b>
Total proven and probable mineral reserves <sup>(2)</sup>	<b>2,465</b>	2,568
Total measured and indicated mineral resources <sup>(2)</sup>	<b>5,836</b>	5,541
Total inferred mineral resources <sup>(2)(3)(4)</sup>	<b>607</b>	1,427

<sup>(1)</sup> Centerra's equity interests are as follows: Mount Milligan 100%, Kemess Underground 100%, Kemess East 100%, Berg 100%, Thompson Creek 100%, and Endako 75%. The mineral reserves and mineral resources above reflect Centerra's equity interest in the applicable properties.

<sup>(2)</sup> Mineral resources are in addition to mineral reserves. Mineral resources do not have demonstrated economic viability.

<sup>(3)</sup> Inferred mineral resources have a great amount of uncertainty as to their existence and as to whether they can be mined economically. It cannot be assumed that all or part of the inferred mineral resources will ever be upgraded to a higher category.

<sup>(4)</sup> Production at Mount Milligan is subject to the Mount Milligan Streaming Arrangement. Under the Mount Milligan Streaming Arrangement, Royal Gold will pay 15% of the spot price per metric tonne of copper delivered. Mineral resources for the Mount Milligan property are presented on a 100% basis.

### Molybdenum Mineral Resources

- Centerra's measured and indicated molybdenum mineral resources, exclusive of mineral reserves, total an estimated 636 million pounds of contained molybdenum (683 Mt at 0.042% molybdenum). The molybdenum mineral resources are located at the Berg Property, the Thompson Creek Mine, and the Endako Mine.
- Centerra's inferred molybdenum mineral resource estimate totals 50 million pounds of contained molybdenum (62 Mt at 0.036% molybdenum).

<b>Molybdenum (million pounds contained) <sup>(1)(3)(4)</sup></b>	<b><u>2018</u></b>	<b><u>2017</u></b>
Total measured and indicated mineral resources <sup>(2)</sup>	<b>636</b>	758
Total inferred mineral resources <sup>(3)</sup>	<b>50</b>	150

<sup>(1)</sup> Centerra's equity interests are Berg 100%, Thompson Creek 100%, and Endako 75%.

<sup>(2)</sup> Mineral resources are in addition to mineral reserves. Mineral resources do not have demonstrated economic viability.

<sup>(3)</sup> Inferred mineral resources have a great amount of uncertainty as to their existence and as to whether they can be mined economically. It cannot be assumed that all or part of the inferred mineral resources will ever be upgraded to a higher category.

<sup>(4)</sup> Molybdenum mineral resources at Berg, Thompson Creek and Endako were estimated using a molybdenum price of \$14.00 per pound. The exchange rate used at Berg and Endako was 1USD:1.25CAD.

Material assumptions used to determine mineral reserves and mineral resources are as follows:

	<b><u>2018</u></b>	<b><u>2017</u></b>
<b><u>Gold price</u></b>		
Gold mineral reserves (\$/oz)	<b>\$1,250</b>	\$1,250
Gold mineral resources (\$/oz) <sup>(1)</sup>	<b>\$1,450</b>	\$1,450
<b><u>Copper price</u></b>		
Copper mineral reserves (\$/lb)	<b>\$3.00</b>	\$3.00
Copper mineral resources (\$/lb)	<b>\$3.50</b>	\$3.50
<b><u>Foreign exchange rates</u></b>		
1 USD : Cdn\$ <sup>(2)</sup>	<b>1.25</b>	1.25
1 USD : Kyrgyz som	<b>65</b>	65
1 USD : Turkish Lira	<b>3.50</b>	3.50

<sup>(1)</sup> Mineral resources at the Hardrock Project were estimated at C\$1,625, while resource estimation at Brookbank and Kailey properties used \$1,455.

<sup>(2)</sup> Cdn\$ exchange rate used for the Hardrock Project was 1USD:1.30CAD and at Brookbank and Kailey properties a rate of 1USD:1.18CAD was used.

## Consolidated Financial and Operational Highlights

<i>Unaudited (\$ millions, except as noted)</i>	<b>Three months ended December 31,</b>			<b>Year ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>% Change</b>	<b>2018</b>	<b>2017</b>	<b>% Change</b>
<b>Financial Highlights</b>						
Revenue	\$ 391.5	\$ 358.2	9%	\$ 1,129.3	\$ 1,199.0	(6%)
Cost of sales	232.2	180.8	28%	761.4	682.1	12%
Standby costs	-	-	0%	10.8	-	100%
Earnings from mine operations	155.3	171.7	(10%)	343.4	498.7	(31%)
Net earnings from continuing operations	48.9	132.5	(63%)	113.5	251.8	(55%)
Net earnings (loss) from discontinued operations	0.1	(2.5)	(104%)	(5.9)	(42.3)	(86%)
<b>Net earnings</b>	\$ 49.0	\$ 130.0	(62%)	\$ 107.5	\$ 209.5	(49%)
<b>Adjusted earnings <sup>(3)</sup></b>	\$ 49.0	\$ 108.7	(55%)	\$ 77.8	\$ 281.0	(72%)
Cash provided by operations <sup>(4)</sup>	151.6	170.4	(11%)	217.5	500.9	(57%)
Cash provided by operations before changes in working capital <sup>(3) (4)</sup>	156.8	159.9	(2%)	336.6	512.6	(34%)
Capital expenditures (sustaining) <sup>(3)</sup>	23.6	29.0	(19%)	88.5	91.8	(4%)
Capital expenditures (growth and development projects) <sup>(3)</sup>	3.1	10.5	(70%)	70.7	32.0	121%
Capital expenditures (stripping)	36.0	31.9	13%	138.8	200.2	(31%)
Total assets	\$ 2,826.7	\$ 2,772.2	2%	\$ 2,826.7	\$ 2,772.2	2%
Long-term debt and lease obligation	183.5	211.6	(13%)	183.5	211.6	(13%)
Cash, cash equivalents and restricted cash	179.2	416.6	(57%)	179.2	416.6	(57%)
<b>Per Share Data</b>						
Net earnings from continuing operations per common share - \$ basic <sup>(1)</sup>	\$ 0.17	\$ 0.45	62%	\$ 0.39	\$ 0.86	(55%)
Net earnings from continuing operations per common share - \$ diluted <sup>(1)</sup>	\$ 0.16	\$ 0.44	63%	\$ 0.38	\$ 0.86	(56%)
Net earnings per common share - \$ basic <sup>(1)</sup>	\$ 0.17	\$ 0.45	(62%)	\$ 0.37	\$ 0.72	(49%)
Net earnings per common share - \$ diluted <sup>(1)</sup>	\$ 0.17	\$ 0.44	(62%)	\$ 0.36	\$ 0.72	(50%)
Adjusted earnings per common share - \$ basic <sup>(1)(3)</sup>	\$ 0.17	\$ 0.37	(55%)	\$ 0.27	\$ 0.96	(72%)
Adjusted earnings per common share - \$ diluted <sup>(1)(3)</sup>	\$ 0.17	\$ 0.36	(54%)	\$ 0.26	\$ 0.96	(73%)
<b>Per Ounce Data (except as noted)</b>						
Average gold spot price - \$/oz <sup>(2)</sup>	1,228	1,275	(4%)	1,269	1,258	1%
Average copper spot price - \$/lbs <sup>(2)</sup>	3.12	2.57	21%	3.14	2.61	20%
Average realized gold price (Kumtor) - \$/oz <sup>(3)</sup>	1,214	1,262	(4%)	1,244	1,245	(0%)
Average realized gold price (Mount Milligan - combined) - \$/oz <sup>(3) (5)</sup>	984	978	1%	971	1,003	(3%)
Average realized gold price (consolidated) - \$/oz <sup>(3)</sup>	1,157	1,190	(3%)	1,175	1,171	0%
Average realized copper price (consolidated) - \$/lbs <sup>(3)</sup>	1.76	2.23	(21%)	2.02	2.11	(4%)
<b>Operating Highlights</b>						
Gold produced – ounces	288,367	216,752	33%	729,556	785,316	(7%)
Gold sold – ounces	269,754	242,228	11%	709,330	792,466	(10%)
Payable Copper Produced (000's lbs)	11,796	12,261	(4%)	47,091	53,596	(12%)
Copper Sales (000's payable lbs)	13,591	13,105	4%	44,370	59,719	(26%)
Operating costs (on a sales basis) <sup>(3) (6)</sup>	168.4	132.0	28%	564.5	487.1	16%
<b>Unit Costs</b>						
Adjusted operating costs on a by-product basis - \$/oz sold <sup>(3)(6)</sup>	\$ 372	\$ 320	16%	\$ 440	\$ 331	33%
Gold - All-in sustaining costs on a by-product basis – \$/oz sold <sup>(3)(6)</sup>	\$ 576	\$ 571	1%	\$ 754	\$ 687	10%
Gold - All-in sustaining costs on a by-product basis (including taxes) – \$/oz sold <sup>(3) (6)</sup>	\$ 709	\$ 708	0%	\$ 889	\$ 815	9%
Gold - All-in sustaining costs on a co-product basis (before taxes) – \$/oz sold <sup>(3)(6)</sup>	\$ 573	\$ 593	(3%)	\$ 750	\$ 737	2%
Copper - All-in sustaining costs on a co-product basis (before taxes) – \$/pound	\$ 1.53	\$ 1.70	(10%)	\$ 1.77	\$ 1.47	20%

- (1) As at December 31, 2018, the Company had 291,999,949 common shares issued and outstanding (292,123,716 common shares as of February 22, 2019). As of February 22, 2019, Centerra had 4,981,701 share options outstanding under its share option plan with exercise prices ranging from US\$2.83 per share to Cdn\$22.28 per share, with expiry dates between 2019 and 2026.
- (2) Average for the period as reported by the London Bullion Market Association (US dollar Gold P.M. Fix Rate) and London Metal Exchange (LME). This is a non-GAAP measure and is discussed under "Non-GAAP Measures".
- (3) Non-GAAP measure. See discussion under "Non-GAAP Measures".
- (4) Excludes Molybdenum business.
- (5) Combines streamed and unstreamed amounts.
- (6) Excludes Molybdenum business.

## Overview of Consolidated Results

### Year ended December 31, 2018 compared to 2017

The Company recorded net earnings of \$107.5 million in 2018, compared to \$209.5 million in 2017. The earnings in 2018 were negatively impacted by lower volumes at Mount Milligan, resulting from a temporary shutdown in the first quarter of 2018 as well as reduced capacity in the first and fourth quarters of 2018 due to water shortages. The fourth quarter 2018 was also negatively impacted by a charge for reclamation expense of \$41.8 million, mainly for additional water treatment costs at Thompson Creek Mine. Gold production at Kumtor in 2018 was also lower than the prior year due to lower grades processed. Results in 2018 included a gain of \$28.0 million on the sale of the royalty portfolio, \$9.4 million gain on the sale of the ATO property, partially offset by an asset impairment of \$8.4 million related to the sale of the Mongolian business unit and \$4.4 million of costs incurred as part of the acquisition of AuRico Metals Inc. in January 2018. The 2017 earnings include charges for a settlement reached with the Kyrgyz Republic Government of \$60 million, an impairment charge relating to the Company's Mongolian assets of \$41.3 million (\$39.7 million net of tax), a tax benefit of \$21.3 million due to new tax legislation enacted in the United States and a gain of \$9.8 million (\$6.9 million net of tax) on the sale of the ATO property in Mongolia. Excluding these items, adjusted earnings<sup>NG</sup> in 2018 and 2017 were \$77.8 million and \$281.0 million respectively.

#### ***Production:***

Gold production for 2018 totalled 729,556 ounces compared to 785,316 ounces for 2017. Gold production at Kumtor was 534,563 ounces in 2018, 5% lower than the 562,749 ounces produced in 2017. The decrease in ounces poured at Kumtor is a result of milling lower grade ore from stockpiles (3.29 g/t compared to 3.58 g/t) compared to 2017. During the year ended December 31, 2018, Mount Milligan produced 194,993 ounces of gold and 47.1 million pounds of copper, 12% lower than in 2017 for both metals.

#### ***Safety and Environment:***

Centerra had twenty-three reportable injuries in 2018, including nine lost time injuries, ten medical aid injuries and four restricted work injuries.

There were no reportable releases to the environment in 2018.

#### ***Financial Performance:***

Revenue decreased to \$1,129.3 million in 2018 from \$1,199.0 million in 2017, as a result of 10% fewer gold ounces sold (709,330 ounces compared to 792,466 ounces), 26% less copper pounds sold (44.4 million pounds compared to 59.7 million pounds) and lower average prices for both metals, partially offset by 42% higher molybdenum sales as compared to 2017.

Cost of sales increased in 2018 to \$761.4 million compared to \$682.1 million in 2017, mainly resulting from higher mining costs especially for diesel fuel at Kumtor, higher volumes in the molybdenum business, partially offset by lower sales volumes at Mount Milligan. Depreciation, depletion and amortization associated with production was \$196.9 million in 2018 as compared to \$195.0 million in 2017.

Standby costs of \$10.8 million were recorded in the first quarter of 2018 representing overhead costs at Mount Milligan during the temporary mill shutdown and subsequent ramp-up period that were unrelated to normal processing volumes.

An increase in reclamation expenses of \$41.8 million was recorded in the fourth quarter of 2018, mainly from a requirement for additional processing to treat water at Thompson Creek Mine.

In the second quarter of 2018, the Company recorded a pre-tax gain of \$28.0 million as a result of the sale of the royalty portfolio and a gain of \$9.4 million to recognize the final installments to be paid on the ATO sale.

The Company completed the sale of its Mongolian business unit on October 11, 2018 for net cash proceeds of \$35 million. Given that the Mongolian business unit was a separate component of the Company, the net Mongolian activity in 2018 and in the comparative periods of 2017 have been classified as discontinued operations in the Company's Statement of Earnings. As a result, the Company recorded a net loss of \$5.9 million and \$42.3 million from discontinued operations in 2018 and 2017 respectively. An impairment charge of \$8.4 million was recorded in discontinued operations in 2018 to impair the carrying value of the Mongolian business unit to reflect its fair value (impairment of \$39.7 million, net of tax, recorded in 2017).

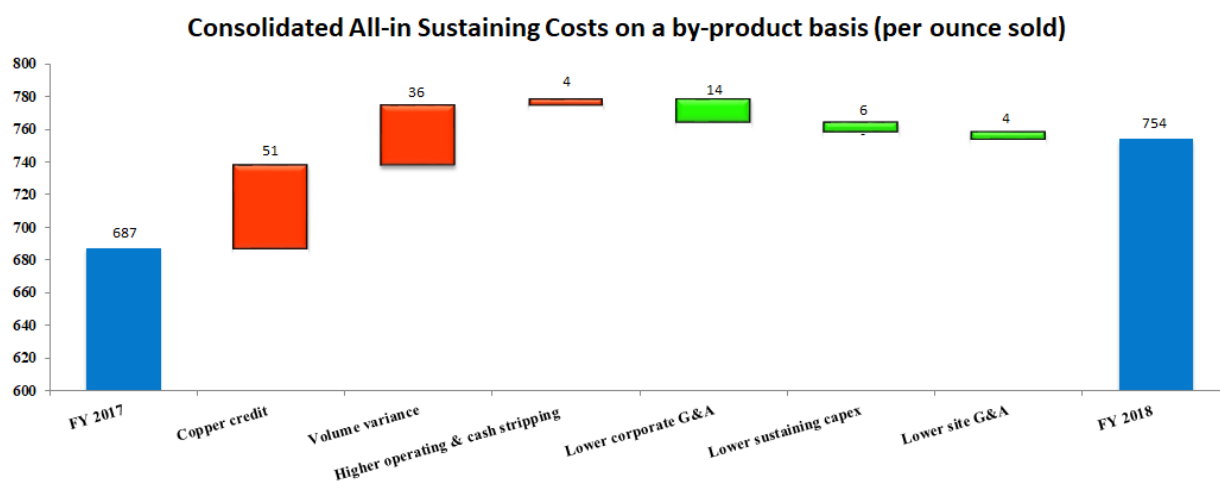
Exploration expenditures in the year ended December 31, 2018 totalled \$20.9 million compared to \$11.3 million in 2017, reflecting the resumption of exploration activities at Kumtor (\$6.1 million) in 2018 and increased spending on advanced projects, mainly at Öksüt, as compared to the prior year.

Corporate administration costs were \$29.6 million in 2018, a decrease of \$8 million compared to the same period of 2017, mainly due to a decrease in share-based compensation of \$3.3 million resulting from a decline in the Company's share price, lower costs for legal and consulting and lower employee costs, partially offset by additional administration costs associated with the acquisition of AuRico Metals Inc.

### ***Operating Costs:***

Operating costs (on a sales basis)<sup>NG</sup> increased to \$564.5 million in 2018 compared to \$487.1 million in 2017, which includes an increase in operating costs of \$61.5 million in the molybdenum business, mainly as a result of increased volumes and prices.

Centerra's all-in sustaining costs on a by-product basis per ounce of gold sold<sup>NG</sup>, which excludes revenue-based tax and income tax, increased to \$754 in 2018 from \$687 in the comparative period mainly as a result of lower copper credits from lower Mount Milligan sales, higher mining costs at Kumtor and lower gold ounces sold, partially offset by lower capitalized stripping costs at Kumtor, lower sustaining capital<sup>NG</sup> and lower administration costs in 2018 as compared to 2017.



## **Cash generation and capital management:**

### **Cashflow**

<i>Unaudited (\$ millions, except as noted)</i>	Year ended December 31,		
	2018	2017	% Change
<b>Cash provided by operations before changes in working capital<sup>NG</sup></b>	<b>336.6</b>	512.6	(34%)
- Changes in working capital	(119.1)	(11.7)	918%
<b>Cash provided by operating activities<sup>(1)</sup></b>	<b>217.5</b>	500.9	(57%)
Cash used in investing activities:			
- Capital additions (cash)	(285.9)	(278.0)	3%
- Acquisition of AuRico Metals Inc., net of cash acquired	(226.8)	-	(100%)
- Proceeds from sale of Mongolian segment	35.0	-	(100%)
- Proceeds from sale of ATO Project	-	9.8	(100%)
- Proceeds from sale of royalty assets	155.5	-	(100%)
- (Increase) decrease in restricted cash	(26.8)	248.0	(111%)
- Other investing items	(3.0)	9.6	(132%)
<b>Cash used in investing activities</b>	<b>(352.1)</b>	(10.6)	3210%
Cash received from (used in) financing activities:			
- Net drawdown (repayment) of debt	(105.3)	(208.4)	49%
- Proceeds from equity issuances (net)	1.0	2.2	(54%)
- Payment of interest and borrowing costs	(25.2)	(28.3)	(11%)
<b>Cash used in financing activities</b>	<b>(129.6)</b>	(234.5)	45%
<b>Increase (decrease) in cash and cash equivalents</b>	<b>(264.2)</b>	255.8	(203%)

<sup>(1)</sup> 2018 includes \$4.2 million of cash used by discontinued operations (\$9.5 million cash used in 2017)

**Cash provided by operations** decreased to \$217.5 million in 2018, compared to \$500.9 million in the comparative period, as a result of lower operating earnings and higher working capital levels in the current year. Comparing 2018 with 2017, Kumtor generated \$291.0 million compared to \$416.1 million, while Mount Milligan generated \$37.4 million compared to \$150.6 million, decreases mainly related to lower production at both operations. Working capital movements in 2018 reflect increased levels at all operating sites, especially for product inventory (increase in 2018 of \$27.5 million at Kumtor, \$19.0 million at Mount Milligan and \$23.7 million in the Molybdenum business) due mainly to the timing of shipments and the purchase of feed material.



**Cash used in investing activities** totalled \$352.1 million in 2018 as compared to \$10.6 million in 2017. Included in 2018 is \$226.8 million to acquire AuRico Metals Inc. and a total of \$190.5 million net proceeds received from the sale of royalty assets and the sale of the Mongolian business unit. The comparative year of 2017 includes the release of Kumtor's restricted cash of \$248.0 million and net proceeds of \$9.8 million from the sale of the ATO project.

**Cash used in financing activities** of \$129.6 million in 2018 represents the net repayment of \$155.0 million under the Corporate Facility, a drawdown of \$49.7 million under the OMAS Facility to fund the Öksüt construction project, and payment of interest and borrowing costs of \$25.2 million. The Company repaid \$208.4 million on its debt and paid interest and borrowing costs of \$28.3 million in 2017.

Cash, cash equivalents, restricted cash and short-term investments at December 31, 2018 totalled \$179.2 million, as compared to \$416.6 million at December 31, 2017.

## Capital Expenditures

### *Capital Expenditure (spent and accrued)*

\$ millions	Year ended December 31,		
	2018	2017	Change
<b>Consolidated:</b>			
Sustaining capital <sup>NG</sup>	88.5	92.0	(4%)
Capitalized stripping <sup>(1)</sup>	138.8	200.2	(31%)
Growth capital <sup>NG</sup>	16.7	18.1	(8%)
Öksüt Project development	45.2	9.0	405%
Greenstone Gold Property capital <sup>(2)</sup>	10.0	5.0	100%
Kemess Underground Project development	30.9	-	n/a
Gatsuurt Project development	-	1.8	(100%)
<b>Total <sup>(3)</sup></b>	<b>330.1</b>	<b>326.1</b>	<b>1%</b>

<sup>(1)</sup>Includes cash component of \$103.9 million in the year ended December 31, 2018 (\$149.4 million in 2017).

<sup>(2)</sup>In accordance with the Company's accounting policy, the 50% share paid on behalf of Premier Gold Mines Limited in the project is capitalized as part of mineral properties in Property, Plant & Equipment.

<sup>(3)</sup>Excludes capitalized equipment leases.

Capital expenditures in 2018 totalled \$330.1 million compared to \$326.1 million in 2017, resulting mainly from reduced spending on capitalized stripping at Kumtor (\$61.4 million) and lower sustaining capital<sup>NG</sup> for equipment rebuilds and overhauls (\$3.5 million), partially offset by higher spending on the Company's development projects (mainly at Öksüt (\$36.2 million), Kemess (\$30.9 million) and Greenstone (\$5.0 million)).

## Financial Instruments

The Company seeks to manage its exposure to fluctuations in diesel fuel prices, commodity prices and foreign exchange rates by entering into derivative financial instruments from time-to-time.

### *Fuel Hedges:*

The Company has a diesel fuel price hedging strategy using derivative instruments to manage the risk associated with changes in diesel fuel prices to the cost of operations at the Kumtor Mine. The Company hedges its exposure with crude oil futures contracts, as the price of diesel fuel closely correlates to the price of crude oil.

*Gold and Copper Derivative Contracts:*

The Company must satisfy its obligation under the Mount Milligan Streaming Arrangement by delivering refined physical gold and London Metal Exchange (“LME”) copper warrants to Royal Gold at the time of receiving payment from third-party purchasers who purchase concentrate from the Mount Milligan Mine. In order to hedge the metal price risk that arises when physical purchase and concentrate sales pricing periods do not match, the Company has entered into certain forward gold and copper purchases and forward sales contracts pursuant to which it purchases gold or copper at an average price during a future quotational period and sells gold or copper at the current spot price. These derivative contracts are not designated as hedging instruments.

*Mount Milligan Gold and Copper Facility Hedges:*

In 2017, the Company entered in a gold and copper hedge program as a condition precedent to draw on a credit facility.

As part of the amendment of the Corporate Facility in the first quarter of 2018, the hedging program is no longer required. In April 2018, the Company unwound a selection of hedges that were scheduled to settle in the second quarter of 2018. The Company realized a savings of \$0.3 million when comparing the unwind cost to the amount that would have been due to counterparties had the unwound hedges settled in the normal course. In the third quarter, the Company unwound an additional 26.7 million pounds of copper zero-cost collars that were scheduled to settle through June 2019.

The hedge positions for each of these programs as at December 31, 2018 are summarized as follows:

						As at December 31, 2018
Program	Instrument	Unit	Average strike price	Type	Settlement 2019	Fair value gain (loss) ('000')
<b>Fuel Hedges</b>	Crude oil options <sup>(1)</sup>	Barrels	\$63	Fixed	72,000	\$76
<b>Fuel Hedges</b>	Zero-cost collars <sup>(2)</sup>	Barrels	\$46/\$59	Fixed	23,000	\$26
<b>Centerra B.C. Facility Hedging Program (Strategic Hedges):</b>						
Copper Hedges	Zero-cost collars <sup>(2)</sup>	Pounds	\$2.50/\$3.28	Fixed	12.6 million	(\$26)
Gold Hedges	Zero-cost collars <sup>(2)</sup>	Ounces	\$1,250/\$1,368	Fixed	36,799	\$49
<b>Gold/Copper Hedges (Royal Gold deliverables):</b>						
Gold Derivative Contracts	Forward contracts <sup>(3)</sup>	Ounces	(4)	Float	30,360	\$559
Copper Derivative Contracts	Forward contracts <sup>(3)</sup>	Pounds	(4)	Float	2.5 million	\$296

(1) Under crude oil options, the Company can buy fuel contracts at a specified price at a certain future date.

(2) Under the zero-cost collar: (i) the Company can put the number of gold ounces or copper pounds to the counterparty at the minimum price, if the price were to fall below the minimum, and (ii) the counterparty has the option to require the Company to sell to it the number of gold ounces or copper pounds at the maximum price, if the price were to rise above the maximum.

(3) Under the Royal Gold forward contracts, the Company must sell specified quantities of gold or copper, at a specified contract price at a future date.

(4) Royal Gold hedging program with a market price determined on closing of the contract.

The remaining strategic hedging program settling in 2019 consists of 36,799 gold ounces of zero-cost collars at an average strike price range of \$1,250 to \$1,368 per ounce and 12.6 million pounds of zero-cost collars at an average strike price range of \$2.50 to \$3.28 per pound.

Centerra does not enter into off-balance sheet arrangements with special purpose entities in the normal course of its business, nor does it have any unconsolidated affiliates.

## **Operating Mines and Facilities**

### **Kumtor Mine**

The Kumtor open pit mine, located in the Kyrgyz Republic, is one of the largest gold mines in Central Asia operated by a Western-based gold producer. It has been in production since 1997 and has produced over 12.1 million ounces of gold to December 31, 2018.

### **Developments in 2018**

- Kumtor produced 534,563 ounces of gold, exceeding the upper end of its favourably revised 2018 production guidance, at an all-in sustaining costs on a by-product basis per ounce sold<sup>NG</sup> of \$694, excluding revenue-based tax, lower than its cost guidance.
- The Company continued to work with the Government of the Kyrgyz Republic to satisfy the conditions precedent to completion of the comprehensive settlement agreement entered into with the Government on September 11, 2017. The longstop date for satisfaction of all such conditions was extended a number of times by agreement of all parties and is now May 31, 2019. See “Other Corporate Developments – Kyrgyz Republic”.

## Kumtor Operating Results

(\$ millions, except as noted)	Three months ended December 31,			Year ended December 31,		
	2018	2017	% Change	2018	2017	% Change
<b>Financial Highlights:</b>						
Revenue - \$ millions	246.9	228.1	8%	660.1	685.2	(4%)
Cost of sales (cash)	57.7	44.9	28%	195.3	146.0	34%
Cost of sales (non-cash)	51.3	39.7	29%	154.6	145.7	6%
Cost of sales (total)	109.0	84.7	29%	349.9	291.7	20%
Cost of sales - \$/oz sold <sup>(1)</sup>	536	468	14%	660	530	24%
Cash provided by operations	149.6	151.0	(1%)	291.0	416.1	(30%)
Cash provided by operations before changes in working capital <sup>(1)</sup>	144.1	145.0	(1%)	345.0	424.3	(19%)
<b>Operating Highlights:</b>						
Tonnes mined - 000s	47,965	50,770	(6%)	180,331	181,878	(1%)
Tonnes ore mined – 000s	2,235	2,607	(14%)	7,356	5,084	45%
Average mining grade - g/t	3.94	2.30	71%	3.26	2.12	54%
Tonnes milled - 000s	1,445	1,668	(13%)	6,325	6,246	1%
Average mill head grade - g/t	5.49	3.76	46%	3.29	3.58	(8%)
Mill Recovery - %	87.5%	80.4%	9%	79.3%	79.1%	0%
Mining costs - total (\$/t mined material)	1.12	1.08	4%	1.17	1.10	6%
Milling costs (\$/t milled material)	12.70	9.16	39%	10.65	10.69	(0%)
Gold produced – ounces	228,096	158,165	44%	534,563	562,749	(5%)
Gold sold – ounces	203,388	180,703	13%	530,448	550,134	(4%)
Average realized gold price <sup>(1)</sup> - \$/oz sold	\$ 1,214	\$ 1,262	(4%)	\$ 1,244	\$ 1,245	(0%)
Capital Expenditures (sustaining) <sup>(1)</sup> - cash	11.8	16.5	(28%)	43.7	60.6	(28%)
Capital Expenditures (growth) <sup>(1)</sup> - cash	2.9	7.1	(59%)	16.7	18.1	(8%)
Capital Expenditures (stripping) - cash	26.3	24.4	8%	103.9	149.4	(30%)
Capital Expenditures (stripping) - non-cash	9.7	7.5	30%	34.9	50.9	(31%)
Capital expenditures (total)	50.8	55.5	(8%)	199.2	279.0	(29%)
Operating Costs (on a sales basis) <sup>(2)</sup>	57.7	44.9	28%	195.3	146.0	34%
All-in sustaining costs (including taxes) <sup>(1)</sup>	138.0	127.4	8%	461.1	480.6	(4%)
Adjusted operating costs <sup>(1)</sup> - \$/oz sold	\$ 319	\$ 298	7%	\$ 413	\$ 313	32%
Operating Costs (on a sales basis)- \$/oz sold <sup>(1)</sup>	\$ 286	\$ 247	16%	\$ 370	\$ 263	40%
Gold - All-in sustaining costs on a by-product basis - \$/oz sold <sup>(1)</sup>	\$ 508	\$ 526	(3%)	\$ 694	\$ 698	(1%)
Gold - All-in sustaining costs on a by-product basis (including taxes) - \$/oz sold <sup>(1)</sup>	\$ 679	\$ 705	(4%)	\$ 869	\$ 874	(1%)

(1) Non-GAAP measure. See discussion under “Non-GAAP Measures”

(2) Operating costs (on a sales basis) is a non-GAAP measure and is comprised of mine operating costs such as mining, processing, administration, royalties and production taxes (except at Kumtor where revenue-based taxes are excluded), but excludes reclamation costs and depreciation, depletion and amortization.

### Production:

During 2018, Kumtor focused on developing the Central Pit, through mining cut-backs 18 and 19, and unloading of ice. Mining of cut-back 18 was completed on November 12, 2018, ahead of schedule. Additionally, Kumtor carried out advanced work on cut-back 20 for pre-strip activities starting in September 2018.

Total waste and ore mined in 2018 was 180.3 million tonnes compared to 181.9 million tonnes in 2017, representing a slight decrease of 1%.

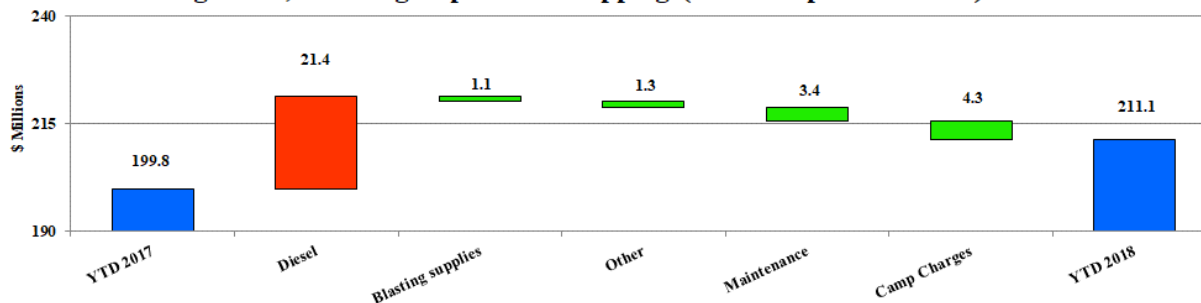
In 2018, the Company processed through the mill lower grade stockpiled ore remaining from cut-back 17 and stockpiled ore from the Sarytor Pit until August 2018, when it reached the Central Pit main ore body in cut-back 18, and started feeding the mill with high-grade ore. Kumtor produced 534,563 ounces of gold in 2018 compared to 562,749 ounces of gold in 2017. The decrease in ounces poured is as a result of blending hard ore from stockpiles with high preg-robbing Sarytor ore prior to reaching cut-back 18 high

grade ore, compared to processing higher grade stockpiled ore from cut-back 17 in the comparative period of 2017. During 2018, Kumtor's average mill head grade was 3.29 g/t with a recovery of 79.3% compared to 3.58 g/t and a recovery of 79.1% in 2017.

### ***Operating costs and All-in Measures:***

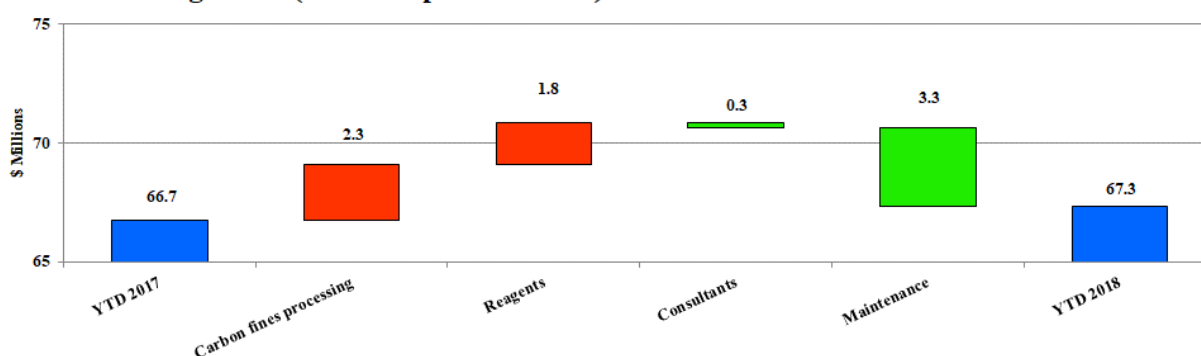
Operating costs (on a sales basis)<sup>NG</sup>, including capitalized stripping, increased in 2018 by \$3.8 million to \$299.2 million compared to \$295.4 million in 2017. The movements in the major components of operating costs (mining, milling and site support), including capitalized stripping but before changes in inventory, is explained below:

#### **Kumtor Mining Costs, including capitalized stripping (2018 compared to 2017):**



Mining costs, including capitalized stripping, totalled \$211.1 million in 2018 compared to \$199.8 million in 2017. Increased costs in 2018 include higher diesel fuel costs (\$21.4 million), which was due to higher fuel prices and higher consumption resulting from increased haulage distances. This was partially offset by lower maintenance cost on the haul trucks and the Liebherr shovels in 2018 as compared to 2017, lower camp catering costs and benefits from continuous improvement initiatives.

#### **Kumtor Milling Costs (2018 compared to 2017):**



Milling costs amounted to \$67.3 million in 2018 compared to \$66.7 million in 2017 due to higher carbon fines processing costs (\$2.3 million), which activities only commenced in 2018, and, higher mill reagents (carbon and cyanide) costs (\$1.8 million) resulting from a higher consumption rate and higher grinding balls costs due to higher mill throughput. These were partially offset by lower maintenance costs (\$3.3 million) resulting from decreased activities in 2018.

**Site support Costs (2018 compared to 2017):**

Site support costs in 2018 totalled \$51.7 million compared to \$45.1 million in the comparative year. This increase is attributable to camp charges which ceased to be allocated to mining and milling activities starting in 2018, partially offset by lower insurance premiums.

**Other Cost movements:**

Depreciation, depletion and amortization (“DD&A”) associated with sales increased to \$154.6 million in 2018 from \$145.7 million in the comparative period, mainly due to higher amortization of capitalized stripping associated with the early release of high grade ore from cut-back 18.

All-in sustaining costs on a by-product basis per ounce sold<sup>NG</sup>, which excludes revenue-based tax, was \$694 in 2018 compared to \$698 in 2017. The decrease was mainly due to lower capitalized stripping costs and decreased sustaining capital expenditures, partially offset by fewer ounces sold.

Including revenue-based taxes, all-in sustaining costs on a by-product basis per ounce sold<sup>NG</sup> was \$869 in 2018 compared to \$874 in the comparative year. The decrease was mainly due to lower all-in sustaining costs<sup>NG</sup> (explained above) and lower revenue based taxes resulted from decreases sales revenue in 2018.

**Mount Milligan Mine**

The Mount Milligan Mine is an open pit mine located in north central British Columbia, Canada producing a gold and copper concentrate. Production at Mount Milligan is subject to the Mount Milligan Streaming Arrangement pursuant to which Royal Gold is entitled to purchase 35% of the gold produced and 18.75% of the copper production at the Mount Milligan mine for \$435 per ounce of gold delivered and 15% of the spot price per metric tonne of copper delivered.

**Developments in 2018**

On December 27, 2017, the Company reported that, due to a lack of sufficient water resources, mill processing operations at the Mount Milligan mine had been temporarily suspended. Mill processing operations resumed at partial capacity in February 2018 utilizing one ball mill to manage water requirements. The mill’s second ball circuit resumed operation in March 2018 after a build-up of sufficient water in the tailings storage facility (“TSF”) although the mill continued to operate at reduced capacity until the spring melt. Following the spring melt, Mount Milligan steadily improved mill throughput as additional water became available and improvements were made to the milling and maintenance processes.

**Water Update**

As noted earlier, starting in the fourth quarter of 2018, Mount Milligan reduced its milling throughput to properly manage its water balance during the winter season. The Company expects that the mill will return to a more normalized throughput following the onset of the 2019 spring melt in the second quarter.

In late 2018, the Company initiated a groundwater exploration drilling program at Mount Milligan. In December 2018, a five-hole (567 metres) Phase-1 scout drilling program was conducted east and north of the Tailing Storage Facility. This program followed-up results from Nuclear Magnetic Resonance (NMR) and Transient Electromagnetic (TEM) geophysical surveys completed between August and November 2018 that were designed to support water well targeting efforts for mill operations. Three of the five drill holes

in two target areas (Alpine Lake and Lower Rainbow) produced low flow water, indicating good potential as areas for water well development.

Mount Milligan continues to seek approvals to access more sources of water in the medium and long-term. The Company has already obtained approvals to (i) pump from groundwater wells within Mount Milligan's TSF, as well as from a single groundwater well outside of the TSF, for the entire life-of-mine, and (ii) pump up to 15% of the base flow from Philip Lake until April 30, 2019.

In addition, the Company expects to receive significant volumes of additional water from a number of sources (Philip Lake, Rainbow Creek, Meadows Creek and additional ground water sources within a radius of approximately 6 kilometres of the TSF). To that end, the Company has made applications to further amend its environmental assessment certificate as well as water license applications to enable drawing of water from such sources at rates that are protective of the environment. The Company continues its discussions with regulators, First Nations and other affected stakeholders regarding these applications and is seeking to have the amendments remain valid through September 2021. The approvals would enable the Company to benefit from spring melt flows for three seasons while a long-term updated water supply plan is developed.

With respect to the updated long-term water supply plan, the Company has retained a consultant to develop a methodology to assess water sources that are best able to supply water to the mill for life-of-mine while meeting environmental and other parameters. Formal applications and government review of that methodology is expected to commence shortly, and will be the subject of discussion with regulators, First Nations and other interested parties. The Company's expectation is that its updated long-term water source (or sources) will be available from and after 2021 for the entire life-of-mine. See "Caution Regarding Forward-Looking Information".

## Mount Milligan Operating Results

(\$ millions, except as noted)	Three months ended December 31,			Year ended December 31,		
	2018	2017	% Change	2018	2017	% Change
<b>Financial Highlights:</b>						
Gold sales	65.2	61.7	6%	173.5	242.9	(29%)
Copper sales	23.9	29.2	(18%)	89.5	125.9	(29%)
<b>Total Revenues</b>	<b>89.1</b>	<b>90.8</b>	<b>(2%)</b>	<b>263.0</b>	<b>368.9</b>	<b>(29%)</b>
Cost of sales (cash)	57.0	51.6	10%	176.4	209.7	(16%)
Cost of sales (non-cash)	11.3	8.9	28%	37.2	43.9	(15%)
<b>Cost of sales (total)</b>	<b>68.3</b>	<b>60.5</b>	<b>13%</b>	<b>213.7</b>	<b>253.6</b>	<b>(16%)</b>
Cash provided by (used in) operations	39.3	29.2	35%	37.4	150.6	(75%)
Cash provided by operations before changes in working capital <sup>(1)</sup>	28.5	30.3	(6%)	63.1	138.6	(54%)
<b>Operating Highlights:</b>						
Tonnes mined - 000s	8,431	9,792	(14%)	33,225	41,966	(21%)
Tonnes ore mined - 000s	3,678	4,776	(23%)	13,461	21,501	(37%)
Tonnes milled - 000s	3,753	3,840	(2%)	13,556	17,743	(24%)
Mill Head Grade Copper (%)	0.18%	0.19%	(6%)	0.20%	0.18%	12%
Mill Head Grade Gold (g/t)	0.76	0.75	1%	0.71	0.64	11%
Copper Recovery - %	82.0%	78.4%	5%	81.4%	79.0%	3%
Gold Recovery - %	67.0%	64.3%	4%	64.5%	62.4%	3%
Mining costs - total (\$/t mined material)	\$ 2.22	\$ 2.12	5%	\$ 2.22	\$ 1.86	20%
Milling costs - total (\$/t milled material)	\$ 5.81	\$ 5.70	2%	\$ 6.26	\$ 5.41	16%
Concentrate Produced (dmt)	26,861	28,158	(5%)	105,998	121,502	(13%)
Payable Copper Produced (000's lbs) <sup>(4)</sup>	11,796	12,261	(4%)	47,091	53,596	(12%)
Payable Gold Produced (oz) <sup>(4)</sup>	60,271	58,587	3%	194,993	222,567	(12%)
Gold Sales (payable oz) <sup>(4)</sup>	66,366	61,524	8%	178,882	242,331	(26%)
Copper Sales (000's payable lbs) <sup>(4)</sup>	13,591	13,105	4%	44,370	59,719	(26%)
Average Realized Price - Gold (combined) - \$/oz <sup>(1)(3)</sup>	\$ 984	\$ 978	1%	\$ 971	\$ 1,003	(3%)
Average Realized Price - Copper (combined) - \$/lb <sup>(1)(3)</sup>	\$ 1.76	\$ 2.23	(21%)	\$ 2.02	\$ 2.11	(4%)
Capital Expenditures (sustaining) <sup>(1)</sup> - cash	10.3	11.9	(14%)	42.7	30.0	42%
<b>Capital expenditures (total)</b>	<b>10.3</b>	<b>11.9</b>	<b>(14%)</b>	<b>42.7</b>	<b>30.0</b>	<b>42%</b>
<b>Operating Costs (on a sales basis) ('000s)<sup>(2)</sup></b>	<b>57.0</b>	<b>51.6</b>	<b>10%</b>	<b>176.4</b>	<b>209.7</b>	<b>(16%)</b>
<b>Adjusted Operating costs- \$/oz sold<sup>(1)</sup></b>	<b>533</b>	<b>385</b>	<b>38%</b>	<b>519</b>	<b>370</b>	<b>40%</b>
<b>Gold - All in Sustaining costs on a by-product basis - \$/oz sold<sup>(1)</sup></b>	<b>689</b>	<b>594</b>	<b>16%</b>	<b>764</b>	<b>505</b>	<b>51%</b>
<b>Gold - All in Sustaining costs on a by-product basis (including taxes) - \$/oz sold<sup>(1)</sup></b>	<b>707</b>	<b>612</b>	<b>16%</b>	<b>779</b>	<b>525</b>	<b>48%</b>
<b>Gold - All in Sustaining costs on a co-product basis - \$/oz sold<sup>(1)</sup></b>	<b>676</b>	<b>706</b>	<b>(4%)</b>	<b>751</b>	<b>663</b>	<b>13%</b>
<b>Copper - All in Sustaining costs on a co-product basis - \$/pound sold<sup>(1)</sup></b>	<b>1.53</b>	<b>1.70</b>	<b>(10%)</b>	<b>1.77</b>	<b>1.47</b>	<b>20%</b>

(1) Non-GAAP measure. See discussion under "Non-GAAP Measures"

(2) Operating costs (on a sales basis) is comprised of mine operating costs such as mining, processing, site and regional office administration, royalties and production taxes, but excludes reclamation costs and depreciation, depletion and amortization.

(3) The average realized price of gold is a combination of market price paid by third parties and \$435 per ounce paid by Royal Gold, while the average realized price of copper is a combination of market price paid by third parties and 15% of the spot price per metric tonne of copper delivered paid by Royal Gold, in each case under the Mount Milligan Streaming Arrangement.

(4) Mount Milligan payable production and sales are presented on a 100% basis (the Mount Milligan Streaming Agreement entitles it to 35% and 18.75% of gold and copper sales, respectively). Under the Mount Milligan Streaming Arrangement, Royal Gold will pay \$435 per ounce of gold delivered and 15% of the spot price per metric tonne of copper delivered. Payable production for copper and gold reflects estimated metallurgical losses resulting from handling of the concentrate and payable metal deductions, subject to metal content, levied by smelters. The current payable percentage applied is approximately 95% for copper and 97.5% for gold, which may be revised on a prospective basis after sufficient history of payable amounts is determined.

## Revenue

In 2018, revenues totalled \$ 263.0 million compared to \$ 368.9 million, mainly as a result of lower sales volumes for gold and copper and a lower realized gold price (\$971/oz compared to \$1,003/oz). Total revenue from gold was \$173.5 million in 2018 (178,882 oz sold) compared to \$242.9 million (242,331 oz sold) in 2017. Total revenue from copper was \$89.5 million (44.4 million lbs sold) in 2018, compared to \$125.9 million (59.7 million lbs) in 2017. There were ten shipments in 2018 compared to thirteen shipments in 2017, mainly due to the reduced mill operating levels in the first quarter 2018.



### ***Production:***

During 2018, mining activities focused on continued development of phases 3 and 4 in the open pit, with the majority of ore mined from phase 3 and an increasing percentage of ore from phase 4 throughout the year. The majority of waste mined through the year was from phase 4. Overburden stripping in phase 8 continued to expose the first mining benches for development with drilling and blasting of rock initiated in the fourth quarter of 2018. Total waste and ore mined in 2018 was 33.2 million tonnes and total tonnes moved was 35.8 million, compared to 42.0 million tonnes and 44.5 million respectively in 2017. Mine production for 2018 was lower than the comparative year primarily due to overall lower mill throughput through the year.

Total mill throughput was 13.6 million tonnes in 2018 compared to 17.7 million tonnes in 2017. During 2018, mill throughput averaged roughly 37,000 tonnes per calendar day (47,000 tonnes per operating day), compared to 49,000 tonnes per calendar day (54,000 tonnes per operating day) in 2017, reflecting the temporary mill shutdown in January 2018, processing with only one ball mill from early February 2018 to March 2018, the gradual ramp up during the spring melt, unplanned downtimes in July and September, and operating at a reduced throughput level from October 2018 to December 2018 to properly manage the water balance during the winter season.

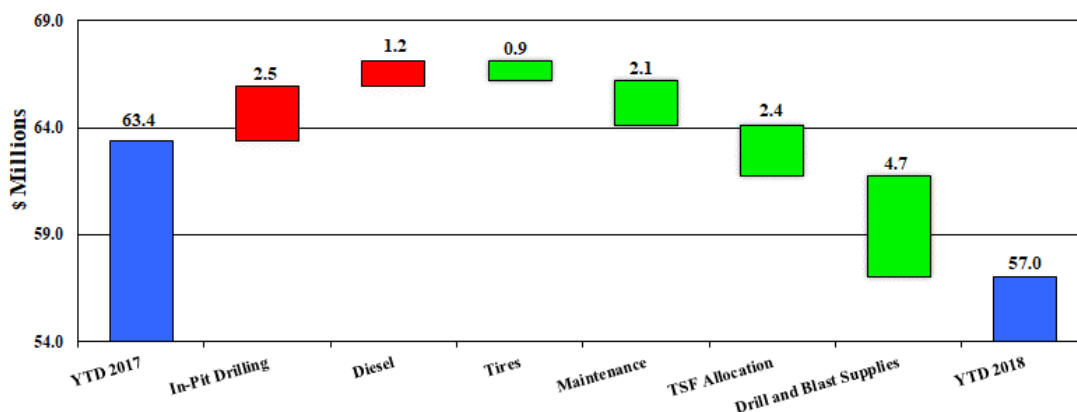
During 2018, total payable gold and copper production was 194,993 ounces and 47.1 million pounds, respectively, compared to 222,567 ounces of gold and 53.6 million pounds of copper in the same period of 2017.

### ***Operating costs and All-in Measures:***

Operating costs (on a sales basis)<sup>NG</sup>, including standby costs, in the 2018 was \$176.4 million compared to \$209.7 million in 2017. Operating costs in the fourth quarter of 2018 were lower than the same quarter of 2017 mainly due to lower sales volumes.

The movements in the major components of operating costs (mining, milling and site support), before changes in inventory, is explained below:

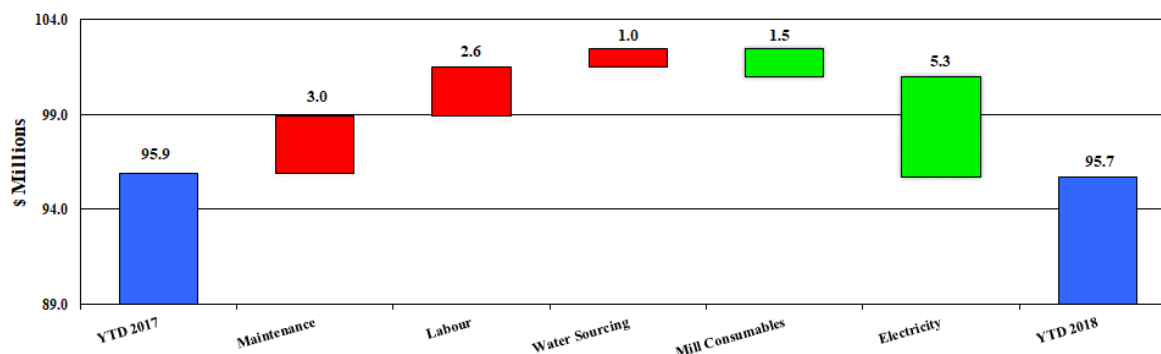
#### **Mount Milligan Mining Costs (2018 compared to 2017):**



Mining costs totalled 57.1 million in 2018, which was \$6.4 million lower than 2017. The decrease in costs for 2018 includes lower drill and blast supplies cost (\$4.7 million) due to the impact of a reduced powder factor, higher capital allocation to the tailings facility (\$2.4 million) due to higher mining costs per tonne, lower maintenance costs (\$2.1 million) resulting from timing in mining fleet rebuilds and the termination

of a long-term maintenance management agreement, lower tire costs (\$0.9 million) resulting from extended tire life due to improved road conditions. This was partially offset by higher in-pit drilling services costs (\$2.5 million) associated with long-term mine planning process improvements and higher diesel costs (\$1.2 million) due to higher prices.

#### Mount Milligan Milling Costs, including standby costs (2018 compared to 2017)



Milling costs (including standby costs of \$10.8 million) totalled \$95.6 million in 2018 compared to \$95.9 million in 2017. The slight decrease in operating costs was due to lower electricity costs (\$5.3 million) resulting from lower mill throughput and lower milling consumable costs (\$1.5 million) due to lower production. This was partially offset by higher maintenance cost (\$3.0 million) associated with primary and pebble crusher repairs, higher labour costs (\$2.6 million) due to an increase in manpower with the addition of a maintenance night shift crew and higher water sourcing costs (\$0.5 million) attributed to additional water supply.

#### Other Cost movements:

Site support costs in 2018 totalled \$44.1 million compared to \$41.2 million in 2017. The increase in site support costs includes higher labour costs (\$2.4 million) due to increased manpower, higher consultants costs (\$2.2 million) associated with water permitting. This was partially offset by lower cost of royalties (\$2.9 million) resulting from lower product sales.

DD&A was \$37.2 million in 2018 compared to \$43.9 million in the comparative 2017, reflecting decreased production and sales levels.

All-in sustaining costs before tax on a by-product basis per ounce sold<sup>NG</sup> was \$764 for 2018 compared to \$505 in 2017. The unit cost increase results mainly from lower sales where ten concentrate shipments were recorded for the year of 2018 (due to the reduced mill production) compared to thirteen concentrate shipments in the same period of 2017 (178,882 gold ounces sold versus 242,331 gold ounces sold).

Including income taxes, all-in sustaining costs on a by-product basis per ounce sold<sup>NG</sup> was \$779 for 2018 compared to \$525 in 2017.

## Molybdenum Business

The molybdenum business includes two North American primary molybdenum mines that are currently on care and maintenance: the Thompson Creek Mine ("TC Mine") (mine and mill) in Idaho, and the 75%-owned Endako Mine (mine, mill and roaster) in British Columbia. The molybdenum business also includes the Langeloth metallurgical roasting facility (the "Langeloth Facility") in Pennsylvania. TC Mine operates a molybdenum beneficiation circuit to treat molybdenum concentrates to supplement the concentrate feed sourced directly for the Langeloth Facility. This beneficiation process allows the Company to process high copper content molybdenum concentrate purchased from third parties, which is then transported from TC Mine to the Langeloth Facility for further processing.

The molybdenum business provides tolling treatment services for customers by converting molybdenum concentrates to molybdenum oxide powder and briquettes and ferromolybdenum products. Additionally, molybdenum concentrates are also purchased to convert to upgraded products which are then sold in the metallurgical and chemical markets.

## Molybdenum Operating Results

(\$ millions, except as noted)	Three months ended December 31,			Year ended December 31,		
	2018	2017	% Change	2018	2017	% Change
<b>Financial Highlights:</b>						
Molybdenum (Mo) Sales - \$ millions	52.8	36.9	43%	197.1	136.8	44%
Tolling, Calcining and Other	2.7	2.4	12%	9.2	8.2	11%
<b>Total Revenues and Other Income</b>	<b>55.5</b>	<b>39.3</b>	<b>41%</b>	<b>206.3</b>	<b>145.0</b>	<b>42%</b>
Cost of sales - cash	53.7	35.5	51%	192.7	131.2	47%
Cost of sales - non-cash	1.1	0.1	1041%	5.1	5.3	(5%)
<b>Cost of Sales - Total</b>	<b>54.9</b>	<b>35.6</b>	<b>54%</b>	<b>197.8</b>	<b>136.5</b>	<b>45%</b>
Reclamation expense	41.8	-	100%	40.4	-	100%
Care & Maintenance costs - Molybdenum mines	3.4	3.3	5%	12.3	13.2	(7%)
Total capital expenditure	1.8	0.4	336%	2.5	0.9	172%
Cash used in operations	(10.6)	(0.1)	7062%	(24.9)	(8.3)	201%
Cash (used in) provided by operations, before changes in working capital <sup>(1)</sup>	(2.8)	0.6	(589%)	(1.0)	1.0	(197%)
<b>Production Highlights (000's lbs):</b>						
Mo oxide purchased	4,809	3,516	37%	16,735	15,513	8%
Mo oxide roasted	4,612	4,825	(4%)	16,883	18,555	(9%)
Mo sold	4,251	3,831	11%	15,726	14,946	5%
Toll roasted and upgraded Mo	1,569	1,145	37%	5,586	4,736	18%

<sup>(1)</sup> Cash (used in) provided by operations before changes in working capital, is a non-GAAP measure and is discussed under "Non-GAAP Measures".

## 2018 Year compared to 2017 Year

In 2018, 16.9 million pounds of molybdenum oxide was roasted, 9% lower than in 2017, due in part to the timing of concentrate purchases which were more significant at the end of 2018 and resulted in a 15% increase in unroasted concentrates at year end. Toll roasted and upgraded molybdenum was 18% higher in 2018 than 2017, due to increased demand for upgraded molybdenum oxide.

A total of 15.7 million pounds of molybdenum were sold and 5.6 million pounds were tolled during 2018 resulting in sales revenue of \$206.3 million. The Company's average molybdenum sale price for 2018 was \$12.85 per pound compared to \$9.43 per pound in 2017. This increase largely accounts for the 44% increase in molybdenum sales revenue in 2018 versus 2017. Also contributing was a 5% increase in unit sales volume versus 2017, reflecting increased purchased volume of molybdenum in concentrates during the year.

An increase in reclamation expenses of \$51 million was recorded in the fourth quarter of 2018, mainly from a requirement for additional processing to treat water at Thompson Creek Mine. The underlying water treatment reclamation provision at Thompson Creek Mine is over a 100-year period with the initial water treatment plant capital expenditure of \$6.0 million anticipated to be incurred in year 44, with average operating expenditures between \$0.3 million and \$1.0 million per year.

In 2018, the molybdenum business consumed \$1.0 million of cash from the operations before changes in working capital<sup>NG</sup>, net of \$10.1 million in care and maintenance expenses at the two molybdenum mines and capital spending of \$2.3 million.

## **Consolidated Fourth Quarter Results - 2018 compared to 2017**

Net earnings in the fourth quarter of 2018 were \$49.0 million (\$0.17 per common share - basic), including a charge of \$41.8 million for additional water treatment at the Thompson Creek Mine, compared to \$130.0 million in the same period of 2017. The fourth quarter 2017 result includes a tax benefit of \$21.3 million as a result of a change in tax legislation enacted in the U.S. Excluding this item, adjusted earnings<sup>NG</sup> in the fourth quarter of 2017 were \$108.7 million or \$0.37 per common share (basic). The following provides an overview of the major items impacting the fourth quarter of 2018 as compared to 2017:

- Gold production for the fourth quarter of 2018 increased 33% to 288,367 ounces poured, including 228,096 ounces from Kumtor and 60,271 ounces from Mount Milligan. The 44% increase in ounces poured at Kumtor is primarily due to processing higher grade and recovery ore from cut-back 18 stockpiles, compared to the remaining lower grade stockpiled ore from cut-back 17 and the Sarytor Pit processed in the same quarter of 2017. During the fourth quarter of 2018, Kumtor's average mill head grade was 5.49 g/t with a recovery of 87.5%, compared to 3.76 g/t and a recovery of 80.4% in the fourth quarter of 2017.
- In the fourth quarter of 2018, Mount Milligan produced 26,861 dry metric tonnes (dmt) of concentrate, containing 11.8 million pounds of copper and 60,271 ounces of gold, compared to 28,158 dmt containing 12.3 million pounds of copper and 58,587 ounces of gold in the fourth quarter of 2017. Lower mining rate in the fourth quarter of 2018 was primarily due to lower processing levels resulting from the water inventory management strategy.
- Revenues in the fourth quarter of 2018 increased 9% to \$391.5 million, reflecting higher sales volumes at Kumtor and at Mount Milligan for both gold and copper and significantly higher sales from the Molybdenum business due to higher molybdenum prices, partially offset by lower average realized gold and copper prices<sup>NG</sup> as compared to the fourth quarter of 2017.
- Cost of sales for the fourth quarter of 2018 increased 28% to \$232.2 million compared to the same quarter of 2017. The increase reflects higher sales volumes for gold, copper and molybdenum as compared to the fourth quarter of 2017.
- Regional administration costs decreased to \$4.1 million in the fourth quarter of 2018 (from \$5.8 million in the comparative quarter), as a result of lower employee costs due to a restructuring of the management team at the end of 2017.

- Corporate administration costs decreased by \$1.4 million as compared to the same period of 2017, as a result of lower legal, consulting and employee costs.
- In the fourth quarter of 2018, an increase in reclamation expenses of \$41.8 million was recorded, mainly for additional water treatment requirements at the Thompson Creek Mine.
- Exploration expenditures in the fourth quarter of 2018 totalled \$6.5 million compared to \$4.7 million in the comparative period of 2017, reflecting increased drilling activities in the current quarter.
- The Company accrued a \$21.3 million tax benefit in the fourth quarter of 2017 due to the enactment of the U.S. Tax Cuts and Jobs Act, which reduced the applicable U.S. corporate tax rate from 35% to 21% and repealed the Alternative Minimum Tax. See “Overview of Consolidated Results”.
- Cash provided by operations was \$151.6 million in the fourth quarter of 2018 compared to \$170.4 million in the same period of 2017.
- Cash used in investing activities in the fourth quarter of 2018 totalling \$51.8 million represents mainly spending on capital additions less proceeds from the sale of the Mongolian segment. This compares to \$64.9 million of cash used in investing activities in the same quarter of 2017, mainly for capital additions.
- Capital expenditures (spent and accrued) in the fourth quarter of 2018 were \$94.3 million as compared to \$71.8 million in the same period of 2017. Sustaining capital<sup>NG</sup> in the fourth quarter of 2018 of \$23.6 million compares to \$29.4 million in the same period of 2017 and reflects lower spending on capital repairs of approximately \$6 million, at both Kumtor and Mount Milligan. Growth capital<sup>NG</sup> in the fourth quarter of 2018 of \$2.9 million compares to \$7.1 million that was spent in the fourth quarter of 2017, all spent entirely at Kumtor. Development project spending totalled \$31.4 million in the current period, with \$2.4 million spent at the Greenstone Gold Property, \$15.2 million at the Öksüt Project and \$13.8 million at the Kemess Project, which was acquired in 2018. Capitalized stripping in the fourth quarter of 2018 was \$36.0 million compared to \$31.9 million in the fourth quarter of 2017. In the fourth quarter of 2018, the mining fleet at Kumtor focused primarily on waste stripping from cut-backs 19 and 20.
- All-in sustaining costs (on a by-product basis) per ounce sold<sup>NG</sup>, which excludes revenue-based tax and income tax, in the fourth quarter of 2018, increased to \$576 compared to \$571 in the same period of 2017. The increase reflects a 16% unit cost increase at Mount Milligan in the fourth quarter of 2018, mainly due to lower copper credits and higher operating costs, partially offset by greater gold ounces sold. This was partially offset by a 3% decrease in unit costs at Kumtor, resulting from higher ounces sold, and 22% lower sustaining capital<sup>NG</sup> in the fourth quarter of 2018.

## Construction and Development Projects

### Öksüt Construction Project:

The Öksüt Project is a gold deposit situated in Turkey approximately 300 kilometres southeast of Ankara and 48 kilometres south of Kayseri, the provincial capital. The nearest administrative centre is at Develi (population 64,000) located approximately 10 kilometres north of the Project. Öksüt Madencilik Sanayi ve Ticaret Anonim Şirketi (OMAS), a wholly-owned subsidiary of the Company, owns the rights to mine and explore the Öksüt Project.

## 2018 Developments:

- In January 2018, OMAS received a pastureland permit for the Öksüt Project, which was the last remaining permit needed to begin project construction.
- In February 2018, the Öksüt Project received Board approval for the construction and development of the property.
- Also in February 2018, OMAS received an Investment Incentive Certificate (“IIC”) from the Turkish Ministry of Economy.
- In late March 2018, construction activities commenced with a contractor mobilizing equipment and breaking ground on main road access construction.
- On November 23, 2018, OMAS achieved a key safety milestone operating lost time incident-free for 1,000,000 man/hours on the project.

## Construction Highlights – 2018 Year:

As at December 31, 2018 the Öksüt Project construction is approximately 38% complete. The following summarizes construction activities up to December 31, 2018:

- Work on the main access roads began in April 2018, with the sub-base level now completed.
- Topsoil stripping has been completed within the plant construction area, with topsoil stripping continuing in the waste rock dump area, and at the powder magazine locations.
- Power sub-station construction as of December 31 is approximately 73% completed.
- ADR (absorption, desorption, and refining) plant civil work is completed, while the steel erection on the ADR and workshop is ongoing. Progress to date on the ADR plant area is approximately 52% completed. All major equipment for the ADR plant is onsite, as well as all the ADR pumps.
- Crusher area civil work is completed in all areas from the truck dump to the ore stockpile. The primary (Jaw) crusher and the secondary crushers (Cone) have been placed onto their perspective foundations. The stacker conveyor has been assembled, but not yet installed. The gabion basket retaining wall has been completed. As of December 31, 2018, the crusher area construction overall is approximately 28% completed.
- Heap leach area phase 1A, 1B and 1C earthworks are completed with some the pipework installed. The three-process pond main excavations have been completed
- Construction of the boundary fence around the property is substantially completed.
- Water infrastructure work is ongoing with the 10.4 km, 200mm steel pipeline from well number 1 to the raw water tank completed, tested and buried.
- Cyanide and reagent storage excavation and shed foundations have been completed.
- Construction of administration area buildings are ongoing with the laboratory and gatehouse buildings erected and currently in the fit-out stage of construction. Foundations for all other buildings have been completed.
- Waste rock dump construction phase 1 and 2 earthworks, and drainage have been completed. The northside water storage pond excavation is completed.
- Approximately 2.5 km (of a total of 7 km) of the haul roads have been completed to top of sub-base level.

The project is on time and on budget and the Company continues to expect that the first gold pour from the Öksüt Project will occur in the first quarter of 2020.

During the year, the Company spent \$43.9 million, mainly on development activities and associated fees as explained above.

In the comparative periods of 2017, the Company spent \$8.9 million on development activities to progress access and site preparation and detailed engineering plans.

### **Kemess Underground Project:**

On January 8, 2018, the Company completed the acquisition of AuRico, which has a 100% interest in the Kemess Project located in north-central British Columbia, Canada, approximately 250 kilometres north of Smithers, 430 kilometres northwest of Prince George and 209 kilometres from the Mount Milligan mine. The Kemess Project site (or “Kemess”) includes infrastructure from the past producing Kemess South mine. There are currently no mining activities at the Kemess site and on-site activities consist of care and maintenance work and surface preparation work for future construction activities and initial development activities until such time when a decision is made to proceed with the development and construction of the proposed Kemess Underground Project.

In 2018, the Company spent \$14.5 million on care and maintenance, \$30.9 million on capital expenditures at Kemess, including access corridor construction which will provide access between the existing Kemess South facilities and the Kemess Underground mine, and \$2.6 million on pre-development activities to advance engineering and various studies. Capital expenditures included access corridor construction, trenching, earthworks and piping required for the water discharge system, materials required to start the fabrication of the water treatment plant and mobile equipment purchases.

On July 6, 2018, the Company received its amended Mines Act Permit approving the Kemess underground mine plan and reclamation program for the Kemess Underground Project. This permit allows the Company to commence construction activities associated with a water treatment and water discharge system, and would allow the Company to proceed with other construction activities. On September 21, 2018, the Company received its effluent discharge permit which allows discharging treated water from the site. As noted above, the Board has not made any decision on the development and construction of the proposed Kemess Underground Project.

### **Greenstone Gold Property:**

The Greenstone Gold property is located in northern Ontario, Canada approximately 275 kilometres northeast of Thunder Bay, Ontario.

In 2018, the Greenstone Partnership signed Long-term Relationship Agreements with Long Lake #58 First Nation in June 2018 and the Metis Nation of Ontario in December 2018 that provide for environmental, employment, training, business and contracting opportunities, along with a framework for regulatory permitting. The Greenstone Partnership received approval from the Canadian Environmental Assessment Agency (“CEAA”) on December 10, 2018 for its Environmental Impact Study and Environmental Assessment (“EIS/EA”) and is anticipating approval from the Ontario Ministry of Environment, Conservation and Parks (“MECP”) in the first quarter 2019.

During the year ended December 31, 2018, the Company spent \$10.0 million, mainly on advancing engineering on certain key infrastructure programs, consultation with local Indigenous communities on draft environmental condition reports and permitting activities, and negotiations of long-term relationship agreements with local Indigenous groups.

In the comparative period of 2017, the Company spent \$9.8 million on development activities to progress access and site preparation and detailed engineering plans.

As at December 31, 2018, Centerra's funding towards its C\$185 million commitment in the Greenstone Partnership totalled C\$92.8 million (\$71.3 million).

## **Balance Sheet**

### ***Inventory***

Total inventory at December 31, 2018 was \$598.7 million (2017 - \$507.9 million) including product inventory of \$389.3 million (2017 - \$298.9 million) and supplies inventory of \$209.4 million (2017 - \$209.0 million). The consolidated increase year over year of \$90.7 million is all attributable to product inventories and reflects increases at Kumtor of \$42.8 million, \$23.8 million at Mount Milligan, both due to the timing of shipments and \$23.6 million at the Langeloth processing facility due to the timing of receipt of molybdenum feed material.

### ***Property, Plant and Equipment***

The aggregate book value of property, plant and equipment at December 31, 2018 was \$1.9 billion, which compares to \$1.7 billion at the end of 2017. The increase in 2018 of \$211.6 million is mainly due to the acquisition of AuRico, including the Kemess Project which added \$206 million, the further spending in 2018 at Öksüt of \$46.3 million and the removal of the Mongolian assets which reduced capitalized assets by roughly \$40 million.

### ***Asset Retirement Obligations***

The total future asset retirement obligations were estimated by management based on the estimated costs to reclaim the mine sites and facilities and the estimated timing of the costs to be incurred in future periods.

The Company has estimated the net present value of the total asset retirement obligations to be \$212.4 million as at December 31, 2018 (2017 - \$167.0 million). The significant increase in 2018 reflects changes in reclamation costs, mainly for water treatment at the Thompson Creek Mine, as a result of the Company's decision in 2018 not to pursue the final development phase of the mine given the current molybdenum price environment. The increase also includes the recognition of additional closure costs at the Kemess Project acquired in January 2018, the removal of the Mongolian provision as a result of the sale of the business unit and impacts from regularly scheduled updates to the Company's closure costs estimates at its various other properties. Payment of these obligations is expected to commence over the next 1 to 20 years.

These liabilities are secured by a combination of reclamation bonds, cash on deposit and a reclamation trust fund as prescribed by the regulatory bodies in the jurisdictions where these mines operate and project agreements with relevant governments. For further details, refer to note 16 in the Company's 2018 Consolidated Financial Statements.

### ***Share capital and share options***

As of February 22, 2019, Centerra had 292,123,716 common shares outstanding and options to acquire 4,981,701 common shares outstanding under its stock option plan with exercise prices ranging between US\$2.83 and Cdn\$22.28 per share, with expiry dates ranging between 2019 and 2026.



## Contractual Obligations

The following table summarizes Centerra's contractual obligations as of December 31, 2018, including payments due over the next five years and thereafter:

<i>\$ millions</i>	<b>Total</b>	<b>Due in Less than One Year</b>	<b>Due in 1 to 3 Years</b>	<b>Due in 4 to 5 Years</b>	<b>Due After 5 Years</b>
<b>Kumtor</b>					
Reclamation trust fund <sup>(1)</sup>	<b>\$38.2</b>	\$6.0	\$18.0	\$12.0	\$2.2
Capital equipment <sup>(2)</sup>	<b>0.7</b>	0.7	-	-	-
Operational supplies	<b>53.9</b>	53.9	-	-	-
Lease of premises	<b>0.4</b>	0.2	0.2	-	-
<b>Mount Milligan</b>					
Operational supplies	<b>13.7</b>	13.7	-	-	-
Promissory note (equipment)	<b>32.0</b>	5.0	27.0	-	-
Lease of premises	<b>1.1</b>	0.1	0.2	0.2	0.6
Equipment lease	<b>2.5</b>	0.9	1.4	0.2	-
<b>Öksüt</b>					
Project development	<b>80.6</b>	70.0	10.6	-	-
Loan repayment (principal only)	<b>49.7</b>	-	-	-	49.7
Equipment lease	<b>0.3</b>	0.3	-	-	-
Lease of premises	<b>0.1</b>	0.1	-	-	-
<b>Kemess Project</b>					
Project development	<b>8.2</b>	8.2	-	-	-
Equipment lease	<b>2.8</b>	2.8	-	-	-
<b>Greenstone Project</b>					
Project development	<b>0.1</b>	0.1	-	-	-
<b>Corporate and other</b>					
Loan repayment (principal only)	<b>111.0</b>	-	-	111.0	-
Lease of premises <sup>(3)</sup>	<b>2.0</b>	0.4	0.6	0.7	0.3
Derivative liability	<b>0.1</b>	0.1	-	-	-
<b>Total contractual obligations <sup>(4)</sup></b>	<b>\$397.4</b>	\$162.5	\$58.0	\$124.1	\$52.8

(1) Centerra's future estimated decommissioning and reclamation costs for the Kumtor mine are present-valued at \$51.5 million to be incurred beyond 2026. The settlement agreement with the Kyrgyz Republic Government requires this restricted cash to be funded at a rate of \$6 million per year until the Reclamation Trust Fund reaches the total estimated reclamation cost for the Kumtor Project (no less than \$69 million). The estimated future cost of closure, reclamation and decommissioning of the project are used as the basis for calculating the amount remaining to be deposited in the Reclamation Trust Fund (\$38.2 million). On December 31, 2018 the balance in the Reclamation Trust Fund was \$30.8 million (2017 - \$26.4 million), with the remaining \$38.2 million to be funded over the life of the mine.

(2) Agreements as at December 31, 2018 to purchase capital equipment.

(3) Lease of the Toronto corporate office premises expiring in November 2024.

(4) Excludes trade payables and accrued liabilities.

## Other Financial Information- Related Party Transactions

### Kyrgyzaltyn JSC

Revenues from the Kumtor gold mine are subject to a management fee of \$1.00 per ounce based on sales volumes, payable to Kyrgyzaltyn, a shareholder of the Company and a state-owned entity of the Kyrgyz Republic.

The table below summarizes the management fees paid and accrued by KGC to Kyrgyzaltyn and the amounts paid and accrued by Kyrgyzaltyn to KGC according to the terms of a Restated Gold and Silver Sale Agreement (“Sales Agreement”) between KGC, Kyrgyzaltyn and the Government of the Kyrgyz Republic dated June 6, 2009.

(\$ millions)	2018	2017
<b>Sales:</b>		
Gross gold and silver sales to Kyrgyzaltyn	\$ 669.0	\$ 695.3
Deduct: refinery and financing charges	(4.8)	(4.4)
Net sales revenue received from Kyrgyzaltyn	\$ 664.2	\$ 690.9
<b>Expenses:</b>		
Contracting services provided by Kyrgyzaltyn	\$ 1.4	\$ 1.3
Management fees payable to Kyrgyzaltyn	0.5	0.6
Expenses paid to Kyrgyzaltyn	\$ 1.9	\$ 1.8

### Related party balances

The assets and liabilities of the Company include the following amounts receivable from and payable to Kyrgyzaltyn:

(\$ millions)	2018	2017
Amounts receivable (a)	\$ 0.2	\$ -
Amount payable	\$ 1.2	\$ 1.2

(a) Subsequent to December 31, 2018, the balance receivable from Kyrgyzaltyn was paid in full.

Gold produced by the Kumtor Mine is purchased at the mine site by Kyrgyzaltyn for processing at its refinery in the Kyrgyz Republic pursuant to the Sale Agreement. Amounts receivable from Kyrgyzaltyn arise from the sale of gold to Kyrgyzaltyn. Kyrgyzaltyn is required to pay for gold delivered within 12 days from the date of shipment. Default interest is accrued on any unpaid balance after the permitted payment period of 12 days. The obligations of Kyrgyzaltyn are partially secured by a pledge of 2,850,000 shares of Centerra owned by Kyrgyzaltyn.

### Transactions with directors and key management

The Company transacts with key individuals from management and with its directors who have authority and responsibility to plan, direct and control the activities of the Company. The nature of these dealings in

2018 were in the form of payments for services rendered in their capacity as director (director fees, including share-based payments) and as employees of the Company (salaries, benefits and share-based payments).

For 2018, key management personnel are defined as the executive officers of the Company including the President and Chief Executive Officer, the Vice President and Chief Financial Officer, the Vice President and Chief Operating Officer, the Vice President and General Counsel and the Vice President, Business Development & Exploration.

In the year ended December 31, 2018, compensation of directors was \$2.2 million, including share-based compensation expense of \$0.9 million (December 31, 2017 - \$2.2 million, including share-based compensation credit of \$1.1 million). Compensation of key management personnel in 2018 was \$5.5 million, including share-based compensation of \$1.3 million, (December 31, 2017 - \$8.1 million, including share-based compensation of \$2.6 million).

Disclosure regarding related party transactions is included in Note 25 of the Company's December 31, 2018 Annual Financial Statements.

## Quarterly Results – Previous Eight Quarters

Over the last eight quarters, Centerra's results reflect the impact of decreasing input costs (mainly for consumables) which have seen a continued decrease since 2016, except for diesel fuel prices which increased in over 2017 and 2018. Over the same periods, gold prices progressively increased over the 2017 year, stabilizing into the first half of 2018 and declining in the third and fourth quarters. In 2017, the Euro, Canadian dollar and Kyrgyz som appreciated against the U.S. dollar thereby putting pressure on operating costs spent in these currencies. In 2018, the Canadian dollar, Euro and Kyrgyz som depreciated against the U.S. dollar benefiting operating costs spent in these currencies. The Company reduced its carrying value of its Mongolian assets by \$41.3 million (pre-tax) in the second quarter of 2017 and recorded a provision of \$60 million in connection with the Strategic Agreement with the Kyrgyz Government in the third quarter of 2017. An after-tax gain of \$21.3 million on the sale of the Company's royalty portfolio and an after-tax gain of \$9.4 million on the final instalments of the ATO property sale (gain of \$6.9 million on the initial instalment booked in the third quarter of 2017) were recorded in the second quarter of 2018. The third quarter of 2018 includes a charge to impair the carrying value of the Company's Mongolian business unit of \$8.4 million (included in loss from discontinued operations), in relation to the Company's sale of its Mongolian business unit. An increase in reclamation expenses of \$41.8 million was recorded in the fourth quarter of 2018 mainly to record an increase in water treatment costs at Thompson Creek Mine. The quarterly production profile at Kumtor for 2017 was more consistent across each quarter, while in 2018 it was more concentrated in the last half of the year, impacting mostly the fourth quarter. Non-cash costs have progressively increased at Kumtor due to its expanded mining fleet and the increased amortization of capitalized stripping resulting from increased stripping as the Central pit has become larger. The quarterly financial results for the last eight quarters are shown below:

\$ million, except per share data Quarterly data unaudited	2018				2017			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Revenue	392	259	243	235	358	276	279	285
Net earnings (loss)	49	6	44	9	130	(1)	23	57
Basic earnings (loss) per share	0.17	0.02	0.15	0.03	0.45	-	0.08	0.20
Diluted earnings (loss) per share	0.17	0.01	0.15	0.03	0.43	-	0.08	0.20

## Other Corporate Developments

The following is a summary of corporate developments with respect to matters affecting the Company and its subsidiaries. Readers are cautioned that there are a number of legal and regulatory matters that are currently affecting the Company and that the following is only a brief summary of such matters. For a more complete discussion of these matters, see the Company's news releases and its 2017 Annual Information Form and specifically the section entitled "Risks that can affect our business" therein available on SEDAR at [www.sedar.com](http://www.sedar.com). The following summary also contains forward-looking statements and readers are referred to "Caution Regarding Forward-looking Information".

### Kyrgyz Republic

#### Strategic Agreement

As previously disclosed, Centerra and its Kyrgyz subsidiaries (Kumtor Gold Company ("KGC") and Kumtor Operating Company) entered into a comprehensive settlement agreement (the "Strategic Agreement") with the Government of the Kyrgyz Republic (the "Kyrgyz Government") on behalf of the Kyrgyz Republic on September 11, 2017. The Strategic Agreement includes, among other things:

- (i) full and final reciprocal releases and resolution of all existing arbitral and environmental claims, disputes, proceedings and court orders, and releases of the Company and its Kyrgyz subsidiaries from future claims covering the same subject matter as the existing environmental claims arising from approved mine activities;
- (ii) the agreement of KGC to:
  - a. make a one-time lump sum payment totaling \$57 million to a new, government-administered Nature Development Fund (\$50 million) following closing and to a new, government administered Cancer Care Support Fund (\$7 million); the \$7 million to the Cancer Care Support Fund was paid in 2017;
  - b. within 12 months of closing make a further one-time payment of \$3 million to the new, government administered Cancer Care Support Fund;
  - c. make annual payments of \$2.7 million to the Nature Development Fund, conditional on the Government continuing to comply with its obligations under the Strategic Agreement; and
  - d. accelerate its annual payments to Kumtor's Reclamation Trust Fund in the amount of \$6 million a year until the total amount contributed by KGC reaches the total estimated reclamation cost for the Kumtor Project (representing the independent assessment of Kumtor's current reclamation costs) subject to a minimum total reclamation cost of \$69 million (which is broadly in line with KGC's current estimated reclamation cost for the Kumtor Project);

The releases of liability and outstanding payments are subject to a range of initial conditions precedent designed to protect Centerra, KGC and KOC, including (i) the approval by the Kyrgyz Government of various outstanding items, including the Kumtor life-of-mine (LOM) plan, official reserves report and the tailings dam expansion, (ii) compliance by the Kyrgyz Government with its obligations under the project agreements entered into by the Government, KOC and KGC in 2009 (the "Kumtor Project Agreements"),

(iii) continued operation of the Kumtor Mine by KGC and KOC with all necessary permits, (iv) no expropriatory action having been taken by the Kyrgyz Government, and (v) termination of the environmental disputes and the civil and criminal proceedings instigated by the Kyrgyz General Prosecutor's Office on terms satisfactory to Centerra. The Kyrgyz Government approvals noted in (i) above have all been obtained and most of the civil and criminal proceedings (other than the SIETS environmental claims discussed below) have been terminated.

The Company is continuing to work closely with the Kyrgyz Government to expeditiously satisfy the remaining conditions precedent to the Strategic Agreement, including the termination of certain legal proceedings. The initial longstop date for the satisfaction of all of the conditions precedent to completion of the Strategic Agreement has been extended by agreement of all the parties a number of times, most recently to May 31, 2019.

In connection with the Strategic Agreement, the arbitration previously commenced by Centerra, KGC and KOC against the Government of the Kyrgyz Republic and Kyrgyzaltyn has been suspended until May 31, 2019. During the suspension, the parties will work towards completing the Strategic Agreement and the resolution of all outstanding matters affecting the Kumtor Project.

#### Kyrgyz Republic Claims

##### SIETS Claims

As previously disclosed, on May 25, 2016, the Bishkek Inter-District Court in the Kyrgyz Republic ruled against Kumtor Operating Company ("KOC"), Centerra's wholly-owned subsidiary, on two claims made by the State Inspectorate Office for Environmental and Technical Safety of the Kyrgyz Republic ("SIETS") in relation to the placement of waste rock at the Kumtor waste dumps and unrecorded wastes from Kumtor's effluent and sewage treatment plants. The Inter-District Court awarded damages of 6,698,878,290 Kyrgyz soms (approximately \$96.6 million at current exchange rates) and 663,839 Kyrgyz soms (approximately \$9,600 at current exchange rates), respectively. On June 1, 2016, the Inter-District Court ruled against KOC on two other claims made by SIETS in relation to alleged land damage and failure to pay for water use. The Inter-District Court awarded damages of 161,840,109 Kyrgyz soms (approximately \$2.3 million) and 188,533,730 Kyrgyz soms (approximately \$2.7 million), respectively.

On March 27, 2018, upon the application of SIETS, the Bishkek City Court terminated each of the SIETS claims noted above. However, in April 2018, SIETS successfully appealed the decisions to terminate these claims and the claims have been returned to the court of first instance for further consideration. Despite this development, the Company expects these claims to be resolved in connection with the Strategic Agreement.

##### Kyrgyz Republic General Prosecutor's Office Proceedings

The Company is and was subject to a number of other criminal proceedings commenced by the Kyrgyz Republic General Prosecutor's Office and other Kyrgyz Republic state agencies as described below.

##### *Criminal Investigation into Environmental Matters*

KGC is also aware of an outstanding criminal investigation in the Kyrgyz Republic which concerns the same subject matter as the SIETS claims described above. The Company expects that this investigation will be terminated in connection with the Strategic Agreement.

### *Land Use Claim*

As previously noted, KGC had challenged the purported 2012 cancellation of its land use (surface) rights over the Kumtor concession areas in the Kyrgyz Republic courts as well as in its arbitration claim (described above). On August 28, 2017, the Bishkek Inter-District Court terminated the proceeding commenced by the GPO in respect of Kumtor's land use rights over the Kumtor concession area. The Company received new land use certificates on January 24, 2019.

### *Kyrgyz State Tax Orders*

In August 2018, KGC commenced a claim in the Kyrgyz courts (refiled on September 26, 2018) seeking to invalidate orders of the Kyrgyz Republic State Tax Service which reassessed taxes (including sanctions and penalties) owing from KGC for the period from 2016 to 2017 in the amount of 1,377,709,739.44 Kyrgyz Soms (approximately \$20 million), primarily in relation to the alleged failure to pay taxes on high altitude premiums paid to employees at the Kumtor mine site. The Kyrgyz court held a hearing in December 2018 and satisfied KGC's claim to invalidate the orders. This court decision came into effect on January 10, 2019 after the customary appeal period expired.

### *GPO Review of Kumtor Project Agreements*

On June 14, 2016, according to reports in the Kyrgyz Republic, the Kyrgyz Republic President instructed the GPO to investigate the legality of the agreements relating to the Kumtor Project which were entered into in 2003, 2004 and 2009. The 2009 Restated Investment Agreement governing the Kumtor Project which was entered into in 2009 superseded entirely the 2003 and 2004 agreements. The 2009 Restated Investment Agreement was negotiated with the Kyrgyz Republic Government, Kyrgyzaltyn and their international advisers, and approved by all relevant Kyrgyz Republic state authorities, including the Kyrgyz Republic Parliament and any disputes under the 2009 Restated Investment Agreement are subject to resolution by international arbitration. The Company understands that this investigation has been closed with respect to certain individuals.

### Management Assessment of Outstanding Kumtor Matters

As noted above, the Strategic Agreement contained no admission on the part of Centerra or its Kyrgyz subsidiaries of: (i) any environmental wrongdoing, (ii) any non-compliance with Kyrgyz law or the Kumtor Project Agreements or (iii) any pre-existing obligation to make additional environmental or Reclamation Trust Fund payments or environmental remediation efforts. The Company and KGC continue to dispute all of the allegations noted above.

While the Strategic Agreement provides a pathway for the resolution of all outstanding matters affecting the Kumtor Project, there are no assurances that all of the conditions precedent to the completion of the settlement contained in the Strategic Agreement will be satisfied. If the settlement contained in the Strategic Agreement is not completed, there are no assurances that (i) the Company will be able to successfully resolve any or all of the outstanding matters affecting the Kumtor Project or that any future discussions between the Kyrgyz Republic Government and Centerra will result in a mutually acceptable resolution; or (ii) the Kyrgyz Republic Government and/or Parliament will not take actions that are inconsistent with the Government's obligations under the Strategic Agreement or Kumtor Project Agreements, including adopting a law "denouncing" or purporting to cancel or invalidate the Kumtor Project Agreements or laws enacted in relation thereto which have the effect of nationalization of the Kumtor Project.

The inability to successfully resolve all such matters, whether through the Strategic Agreement or otherwise, could lead to suspension of operations of the Kumtor Project and would have a material adverse impact on the Company's future cash flows, earnings, results of operations and financial condition.

Furthermore, if all such claims are not resolved as provided for in the Strategic Agreement and despite the Company's view that all disputes related to the 2009 Restated Investment Agreement should be determined in arbitration, there are risks that the arbitrator may (i) reject the Company's claims; (ii) determine it does not have jurisdiction; and/or (iii) stay the arbitration pending determination of certain issues by the Kyrgyz Republic courts. Even if the Company receives an arbitral award in its favour against the Kyrgyz Republic and/or Kyrgyzaltyn, there are no assurances that it will be recognized or enforced in the Kyrgyz Republic. Accordingly, the Company may be obligated to pay part of or the full amounts of, among others, the SIETS claims and the Kyrgyz State tax orders, regardless of the action taken by the arbitrator. The Company does not have insurance or litigation reserves to cover these costs. If the Company were obligated to pay these amounts, it would have a material adverse impact on the Company's future cash flows, earnings, results of operations and financial condition.

## **Other**

In 2018, the Company initiated a review of its long-term water treatment options at the Endako Mine, as a result of ongoing discussions concerning mine reclamation obligations among regulatory and industry bodies in British Columbia. These discussions are ongoing but may result in amended regulations in 2019. As a result, the Company expects to update its technical studies and environmental studies for the Endako mine in 2019, the result of which may require an increase to Endako's asset retirement obligation.

The Company operates in multiple countries around the world and accordingly is subject to, and pays, taxes under the various regimes in those jurisdictions in which it operates. These tax regimes are determined under general corporate income tax and other laws of the respective jurisdiction. The Company has historically filed, and continues to file, all required tax returns and to pay the taxes reasonably determined to be due. The tax rules and regulations in many countries are complex and subject to interpretation. From time to time the Company's tax filings are subject to review and in connection with such reviews disputes can arise with the taxing authorities over the Company's interpretation of the country's tax laws. The Company records provisions for future disbursements considered probable. As at December 31, 2018, the Company did not have any material provision for claims or taxation assessments.

## **Accounting Estimates, Policies and Changes**

### **Accounting Estimates**

The preparation of consolidated financial statements in accordance with IFRS requires management to make judgments, estimates and assumptions that affect the application of the Company's accounting policies, which are described in note 3 of the consolidated financial statements, the reported amounts of assets and liabilities and disclosure of commitments and contingent liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. The determination of estimates requires the exercise of judgment based on various assumptions and other factors such as historical experience, current and expected economic conditions. Actual results could differ from those estimates.

Management's estimates and underlying assumptions are reviewed on an ongoing basis. Any changes or revisions to estimates and underlying assumptions are recognized in the period in which the estimates are revised and in any future periods affected. Changes to these critical accounting estimates could have a material impact on the consolidated financial statements.

The key sources of estimation uncertainty and judgment used in the preparation of the consolidated financial statements that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities and earnings within the next financial year are outlined in detail in note 4 of the December 31, 2018 financial statements.

### **Recently adopted and recently issued but not adopted accounting guidance**

Note 5 in the consolidated financial statements for the year ended December 31, 2018 describes the new policy adopted on January 1, 2018 for IFRS 15, *Revenue from Contracts with Customers*, and presents a list of recently issued accounting standards not yet adopted by the Company, providing a brief description on the nature of these changes and potential impact on the Company. The recently issued accounting standards and amendments are as follows: IFRS 16, *Leases* and IFRIC 23, *Uncertainty over Income Tax Treatments*.

The Company concluded that there were no material changes to amount and timing of revenue recognized as a result of adopting IFRS 15. The Company has assessed the impact of adopting IFRS 16 and estimates it will recognize additional lease liabilities and corresponding assets of approximately \$21.0 million on January 1, 2019. It is expected that the adoption of IFRIC 23 on January 1, 2019 will not have a material impact on the Company's financial statements.

### **Disclosure Controls and Procedures and Internal Control Over Financial Reporting ("ICFR")**

The Company's management, including the CEO and CFO, is responsible for the design of disclosure controls and procedures ("DC&P") and internal controls over financial reporting ("ICFR"). Centerra adheres to the Committee of Sponsoring Organizations of the Treadway Commission's (COSO) revised 2013 Internal Control Framework for the design of its ICFR.

The evaluation of DC&P and ICFR was carried out under the supervision of and with the participation of management, including Centerra's CEO and CFO. Based on these evaluations, the CEO and the CFO concluded that the design and operation of these DC&P and ICFR were effective throughout 2018.

### **2019 Outlook**

Production, cost and capital forecasts for 2019 are forward-looking information and are based on key assumptions and subject to material risk factors that could cause actual results to differ materially. These risks are discussed herein under the headings "Risks That Can Affect Our Business", "Material Assumptions & Risks" and "Caution Regarding Forward-Looking Information" in this document. Also refer to the Company's most recent Annual Information Form and specifically the section entitled "Risks That Can Affect Our Business" therein available on SEDAR.



## 2019 Gold Production

Centerra's 2019 gold production is expected to be between 690,000 to 740,000 ounces. Kumtor's gold production forecast is expected to be in the range of 535,000 ounces to 565,000 ounces with approximately 28% of the production expected to be in the fourth quarter of 2019. At Mount Milligan, mill throughput is expected to be reduced during the remainder of the winter season to properly manage the water balance until the water flow increases in the spring, after which, mill throughput levels are expected to return to full capacity once the spring melt has commenced, typically in April. In the second half of 2019, the Company expects to achieve an average daily throughput of approximately 55,000 tonnes per calendar day. For the full year, the Company expects Mount Milligan's total (streamed and unstreamed) payable gold production to be in the range of 155,000 to 175,000 ounces.

## 2019 Copper Production

Centerra expects total (streamed and unstreamed) payable copper production from the Mount Milligan Mine to be in the range of 65 million pounds to 75 million pounds.

Centerra's 2019 production is forecast as follows:

2019 Production Guidance	Units	Kumtor	Mount Milligan <sup>(1)</sup>	Centerra
<b>Gold<sup>(2)</sup></b>				
Unstreamed Gold Payable Production	(Koz)	535 – 565	101 – 114	636 – 679
Streamed Gold Payable Production <sup>(1)</sup>	(Koz)	–	54 – 61	54 – 61
<b>Total Gold Payable Production<sup>(2)</sup></b>	<b>(Koz)</b>	<b>535 – 565</b>	<b>155 – 175</b>	<b>690 – 740</b>
<b>Copper<sup>(3)</sup></b>				
Unstreamed Copper Payable Production	(Mlb)	–	53 – 61	53 – 61
Streamed Copper Payable Production <sup>(1)</sup>	(Mlb)	–	12 – 14	12 – 14
<b>Total Copper Payable Production<sup>(3)</sup></b>	<b>(Mlb)</b>	<b>–</b>	<b>65 – 75</b>	<b>65 – 75</b>
<b>Concentrate production in dry tonnes</b>	<b>(Kt)</b>			

1. Royal Gold streaming agreement entitles Royal Gold to 35% and 18.75% of gold and copper sales, respectively, from the Mount Milligan mine. Under the stream arrangement, Royal Gold will pay \$435 per ounce of gold delivered and 15% of the spot price per metric tonne of copper delivered.
2. Gold production assumes 81.6% recovery at Kumtor and 60.0% recovery at Mount Milligan.
3. Copper production assumes 81.8% recovery for copper at Mount Milligan.

## 2019 All-in Sustaining Unit Costs<sup>NG</sup>

Centerra's 2019 all-in sustaining costs per ounce sold<sup>NG</sup> are calculated on a by-product basis and are forecast as follows:

<b>2019 All-in Sustaining Unit Costs</b> <sup>NG (4)</sup>	<b>Kumtor</b>	<b>Mount Milligan</b> <sup>(2)</sup>	<b>Centerra</b> <sup>(2)</sup>
<b>Ounces sold forecast</b>	<b>535,000 – 565,000</b>	<b>155,000 – 175,000</b>	<b>690,000-740,000</b>
<b>All-in sustaining costs on a by-product basis</b> <sup>(1), (2)</sup>	<b>\$666 - \$703</b>	<b>\$727 - \$821</b>	<b>\$723 – \$775</b>
Revenue-based tax <sup>(3)</sup> and taxes <sup>(3)</sup>	171 – 180	21 - 24	135 – 145
<b>All-in sustaining costs on a by-product basis, including taxes</b> <sup>(1), (2), (3)</sup>	<b>\$837 – \$883</b>	<b>\$748 – \$845</b>	<b>\$858 – \$920</b>
<b>Gold - All-in sustaining costs on a co-product basis (\$/ounce)</b> <sup>(1),(2)</sup>	<b>\$666 - \$703</b>	<b>\$803 - \$906</b>	<b>\$741 - \$795</b>
<b>Copper - All-in sustaining costs on a co-product basis (\$/pound)</b> <sup>(1),(2)</sup>	–	<b>\$1.93 - \$2.23</b>	<b>\$1.93 – \$2.23</b>

- 1) All-in sustaining costs per ounce sold, all-in sustaining costs per ounce sold on a by-product basis, all-in sustaining costs on a by-product basis including taxes per ounce sold and all-in sustaining costs on a co-product basis (gold and copper) on a per unit basis are non-GAAP measures and are discussed under “Non-GAAP Measures”.
- 2) Mount Milligan payable production and ounces sold are on a 100% basis (the Mount Milligan Streaming Arrangement entitles Royal Gold to 35% and 18.75% of gold and copper sales, respectively). Unit costs and consolidated unit costs include a credit for forecasted copper sales treated as by-product for all-in sustaining costs and all-in sustaining costs plus taxes. The copper sales are based on a copper price assumption of \$2.80 per pound sold for Centerra’s 81.25% share of copper production and the remaining 18.75% of copper revenue at \$0.42 per pound (15% of spot price, assuming spot at \$2.80 per pound), representing the Mount Milligan Streaming Arrangement. Payable production for copper and gold reflects estimated metallurgical losses resulting from handling of the concentrate and payable metal deductions, subject to metal content, levied by smelters.
- 3) Includes revenue-based tax at Kumtor and the British Columbia mineral tax at Mount Milligan based on a forecast gold price assumption of \$1,200 per ounce sold.
- 4) Results in chart may not add due to rounding.

## 2019 Exploration Expenditures

Planned exploration expenditures for 2019 are expected to be \$30 million, including approximately \$20 million for brownfields exploration (Kumtor - \$11 million, Mount Milligan - \$3 million, Öksüt - \$2.5 million and Kemess - \$2 million) and the balance for generative and other exploration programs.

## 2019 Capital Expenditures

Centerra’s projected capital expenditures for 2019, excluding capitalized stripping, are estimated to be \$275 million, including \$91 million of sustaining capital<sup>NG</sup> and \$184 million of growth capital<sup>NG</sup>.

Projected capital expenditures (excluding capitalized stripping) include:

<b>Projects</b>	<b>2019 Sustaining Capital<sup>(1)</sup></b> (\$ millions)	<b>2019 Growth Capital<sup>(1)</sup></b> (\$ millions)
Kumtor Mine	45	14
Mount Milligan Mine	37	-
Öksüt Project	-	123
Kemess Underground Project	-	26
Greenstone Gold Property	-	21
Other (Thompson Creek Mine, Endako Mine (75%), Langeloth facility and Corporate)	9	-
<b>Consolidated Total</b>	<b>\$91</b>	<b>\$184</b>

(1) Sustaining capital and growth are non-GAAP measures and are discussed under “Non-GAAP Measures”.

### ***Kumtor***

At Kumtor, 2019 total capital expenditures, excluding capitalized stripping, are forecast to be \$59 million. Spending on sustaining capital<sup>NG</sup> of \$45 million relates primarily to major overhauls and replacements of the heavy-duty mine equipment (\$39 million).

Growth capital<sup>NG</sup> investment at Kumtor for 2019 is forecast at \$14 million which includes capital expenditures for tailings dam construction (\$6 million), pit dewatering projects (\$2 million) and other projects (\$6 million).

The cash component of capitalized stripping costs related to the development of the open pit is expected to be \$88 million of the \$108 million total capitalized stripping estimated in 2019.

### ***Mount Milligan***

At Mount Milligan, 2019 sustaining capital expenditures are forecast to be \$37 million and relates primarily to tailing dam construction (\$23 million), mine equipment rebuilds and replacements (\$8 million) and water supply improvement projects (\$3 million) and other projects (\$3 million).

### ***Öksüt Project***

At Öksüt, 2019 planned capital spending is expected to be approximately \$123 million. The total cost of construction is expected to be approximately \$220 million (including contingency) to first gold pour which is anticipated in the first quarter of 2020. At December 31, 2018 construction activities at the Öksüt site are approximately 38% complete as noted above. In 2019, stripping is expected to commence in June and ore stockpiling in July.

### ***Kemess Underground Project***

In 2019, total spending at the Kemess Underground Project (KUG) is estimated at \$40 million including \$14 million for care and maintenance and \$26 million on capitalized pre-construction activities. Most of the pre-construction costs are related to the construction of a water treatment plant and water discharge system. The Company has substantially all permits and approvals in place after receiving the amended Mines Act Permit and effluent discharge permit in 2018. In 2019, the Company plans to advance the water treatment plant and water discharge system construction, continue to maintain the Kemess site, progress detailed engineering and complete optimization studies on the project.

### ***Greenstone Gold Property***

Centerra's guidance for 2019 expenditures relating to the Greenstone Gold Property (50-50 joint venture with Premier Gold) including the Hardrock Project is approximately \$41.6 million (Cdn\$54 million), on a 100% basis, with objective to optimize the economics of the Hardrock Project and to continue to de-risk the project. The 2019 program includes detailed engineering (\$13 million) on higher risk areas to confirm

and optimize the capex, operating costs, mine plan updates and infill drilling to further improve accuracy of the resource model. The program will also advance and finalize long-term relationship agreements with local indigenous groups including community relations (\$8.3 million), environmental and permitting activities to complete the EA/EIA approvals (\$2.2 million) and project support, property acquisitions and administration (\$15.5 million).

The forecast spending for 2019 will be fully funded by Centerra with 50% of spending accounted for as pre-development project spending or exploration and expensed through Centerra's income statement. The remaining 50% of spending will be capitalized on Centerra's balance sheet and be accounted for as an acquisition cost of the Greenstone Gold Property.

### 2019 Corporate Administration

Corporate and administration expense for 2019 is forecast to be \$31 million (including \$6 million of stock-based compensation expense).

### 2019 Depreciation, Depletion and Amortization

Consolidated depreciation, depletion and amortization (DD&A) expense included in costs of sales expense for 2019 is forecasted to be in the range of \$220 million to \$240 million including Kumtor's DD&A expense of \$170 million to \$180 million, Mount Milligan's DD&A expense of \$38 million to \$45 million, and Langeloth and other properties' DD&A expense range of \$12 million to \$15 million.

### 2019 Taxes

Pursuant to the Restated Investment Agreement, Kumtor's operations are not subject to corporate income taxes. Instead, the Restated Investment Agreement imposes a tax of 13% on gross revenue (plus 1% for the Issyk-Kul Oblast Development Fund).

The Mount Milligan operations are subject to corporate income tax and British Columbia mineral tax. Corporate income tax for 2019 is forecast to be nil, while British Columbia mineral tax is forecast to be between \$3.2 million and \$4.2 million.

### Sensitivities

Centerra's revenues, earnings and cash flows for 2019 are sensitive to changes in certain key inputs or currencies. The Company has estimated the impact of any such changes on revenues, net earnings and cash from operations.

	Change	Impact on (\$ millions)				Impact on (\$ per ounce sold)
		Costs	Revenues	Cash flows	Net Earnings (after tax)	AISC <sup>(3)</sup> on by-product basis
Gold price <sup>(1)</sup>	<b>\$50/oz</b>	5.4 – 6.0	32.5 – 34.5	26.7 – 28.7	26.7 – 28.7	2 – 2
Copper price <sup>(1)</sup>	<b>10%</b>	4.5 – 5.5	18.0 – 20.0	13.0 – 14.5	13.0 – 14.5	16 – 19
Diesel fuel	<b>10%</b>	8.9 – 10.4	-	8.9 – 10.4	8.9 – 10.4	12 – 14
Kyrgyz som <sup>(2)</sup>	<b>1 som</b>	1.2 – 1.7	-	1.2 – 1.7	1.2 – 1.7	2 – 2
Turkish Lira <sup>(2)</sup>	<b>1 lira</b>	12.5 – 14.0	-	12.5 – 14.0	-	-

- (1) Gold and copper price sensitivities include the impact of the hedging program set up to mitigate gold and copper price risks.
- (2) Appreciation of currency against the U.S. dollar will result in higher costs and lower cash flow and earnings, depreciation of currency against the U.S. dollar results in decreased costs and increased cash flow and earnings.
- (3) Non-GAAP measure. See discussion under “Non-GAAP Measures”.

## Material Assumptions and Risks

Material assumptions or factors used to forecast production and costs for 2019 include the following:

- a gold price of \$1,200 per ounce,
- a copper price of \$2.80 per pound,
- a molybdenum price of \$12 per pound,
- exchange rates:
  - \$1USD:\$1.30 Canadian dollar,
  - \$1USD:69.0 Kyrgyz som,
  - \$1USD:5.00 Turkish lira,
  - \$1USD:0.79 Euro,
- diesel fuel price assumption:
  - \$0.54/litre at Kumtor,
  - \$0.87/litre (CAD\$1.13/litre) at Mount Milligan.

The assumed diesel price of \$0.54/litre at Kumtor assumes that no Russian export duty will be paid on the fuel exports from Russia to the Kyrgyz Republic. Diesel fuel for Kumtor is sourced from separate Russian suppliers. The diesel fuel price assumptions were made when the price of oil was approximately \$60 per barrel. Crude oil is a component of diesel fuel purchased by the Company, such that changes in the price of Brent crude oil generally impacts diesel fuel prices. The Company established a hedging strategy to manage changes in diesel fuel prices on the cost of operations at the Kumtor mine. The Company targets to hedge up to 50% of crude oil component of monthly diesel purchases exposure.

Other material assumptions were used in forecasting production and costs for 2019. These material assumptions include the following:

- The Mount Milligan processing facility continues to have access to sufficient water supplies to operate year-round at the intended capacity. This includes management’s expectations of annual average precipitation, reduction in water losses/deferrals to the sands and gravels, that we continue to successfully draw water from existing permitted water wells, identify and access new water wells available for permitting and capture permissible water sources from within the existing operations. Guidance assumes that Mount Milligan will pump water from nearby Philip Lake, Rainbow Creek and Meadows Creek after receiving approvals of amendments to the Mount Milligan’s Environmental Assessment Certificate and related permits.
- The Company and the Kyrgyz Republic Government (“Government”) continue to work constructively to complete the Kumtor Strategic Agreement, the Government does not take any actions that are contrary to the Strategic Agreement and/or the Kumtor Project Agreement and which have a material adverse impact on the Kumtor operations, and the Kyrgyz proceedings are not reinstated or progressed contrary to the terms of the Strategic Agreement and/or the Kumtor Project Agreements.
- The mine plans, expertises and related permits and authorizations at Kumtor which have been received to date for 2019 are not withdrawn and that any further approvals are obtained in a timely manner from relevant governmental agencies in the Kyrgyz Republic.
- Any recurrence of political or civil unrest in the Kyrgyz Republic will not impact operations, including movement of people, supplies and gold shipments to and from the Kumtor mine and/or power to the mine site.

- Any sanctions imposed on Russian entities do not have a negative effect on the costs or availability of inputs or equipment to the Kumtor Project.
- Any political issues in Turkey do not have a negative effect on the Öksüt Project.
- The movement in the Central Valley Waste Dump at Kumtor, initially referred to in the Annual Information Form for the year ended December 31, 2013, and in the Lysii and Sarytor Waste Dumps, does not accelerate and will be managed to ensure continued safe operations, without impact to gold production.
- The buttress constructed at the bottom of the Davidov glacier continues to function as designed.
- The Company can manage the risks associated with the increased height of the pit walls at Kumtor.
- The dewatering program at Kumtor continues to produce the expected results and the water management system works as planned.
- The pit walls at Kumtor and Mount Milligan remain stable.
- The resource block model at Kumtor and Mount Milligan reconcile as expected against production.
- Grades and recoveries at Kumtor and Mount Milligan remain consistent with the 2019 production plan to achieve the forecast gold and copper production.
- The Kumtor mill and the Mount Milligan mill continues to operate as expected, including that there are no unplanned suspension of operations due to (among other things), mechanical or technical performance issues.
- There are no changes to any existing agreements and relationships with affected First Nations groups which would materially and adversely impact our operations.
- There are no unfavourable changes to concentrate sales arrangements at Mount Milligan and roasting arrangements at the Langeloth facility.
- There are no adverse regulatory changes affecting the Kumtor and Mount Milligan operations and the Company's molybdenum assets.
- Exchange rates, prices of key consumables, costs of power, water usage fees, and any other cost assumptions at all operations and projects of the Company are not significantly higher than prices assumed in planning.
- No unplanned delays in or interruption of scheduled production from our mines, including due to climate/weather conditions, political or civil unrest, natural phenomena, regulatory or political disputes, equipment breakdown or other developmental and operational risks.
- Third party logistic providers can meet Centerra's logistics needs.
- The Company and its applicable subsidiaries throughout the year continue to meet the terms of their respective credit facilities to maintain current borrowings and compliance with applicable financial covenants.

The Company cannot give any assurances with respect to the above noted factors.

Production, cost and capital forecasts for 2019 are forward-looking information and are based on key assumptions and subject to material risk factors that could cause actual results to differ materially and which are discussed herein under the headings "Material Assumptions & Risks" and "Caution Regarding Forward-Looking Information" in this document and under the heading "Risks That Can Affect Our Business" in the Company's most recent Annual Information Form.

## Non-GAAP Measures

This document contains the following non-GAAP financial measures: all-in sustaining costs per ounce sold on a by-product basis, all-in sustaining costs per ounce sold on a by-product basis including taxes, and all-in sustaining costs per ounce sold on a co-product basis. In addition, non-GAAP financial measures include operating costs (on a sales basis), adjusted operating costs and adjusted operating costs per ounce sold, as well as capital expenditures (sustaining) and capital expenditures (growth) and cash provided by operations before changes in working capital. These financial measures do not have any standardized meaning prescribed by GAAP and are therefore unlikely to be comparable to similar measures presented by other issuers, even as compared to other issuers who may be applying the World Gold Council (“WGC”) guidelines, which can be found at <http://www.gold.org>.

Management believes that the use of these non-GAAP measures will assist analysts, investors and other stakeholders of the Company in understanding the costs associated with producing gold, understanding the economics of gold mining, assessing our operating performance, our ability to generate free cash flow from current operations and to generate free cash flow on an overall Company basis, and for planning and forecasting of future periods. However, the measures do have limitations as analytical tools as they may be influenced by the point in the life cycle of a specific mine and the level of additional exploration or expenditures a company has to make to fully develop its properties. Accordingly, these non-GAAP measures should not be considered in isolation, or as a substitute for, analysis of our results as reported under GAAP.

### Definitions

The following is a description of the non-GAAP measures used in this MD&A. The definitions are similar to the WGC’s Guidance Note on these non-GAAP measures:

- *Production costs* represent operating costs associated with the mining, milling and site administration activities at the Company’s operating sites, excluding costs unrelated to production such as mine standby and community costs related to current operations.
- *Operating costs (on a sales basis)* include mine operating costs such as mining, processing, site support, royalties and operating taxes (except at Kumtor where revenue-based taxes are excluded), but exclude depreciation, depletion and amortization (DD&A), reclamation costs, financing costs, capital development and exploration.
- *Adjusted operating costs per ounce sold* include operating costs (on a sales basis), regional office administration, mine standby costs, community costs related to current operations, refining fees and by-product credits.
- *All-in sustaining costs on a by-product basis per ounce sold* include adjusted operating costs, the cash component of capitalized stripping costs, corporate general and administrative expenses, accretion expenses, and sustaining capital, net of copper and silver credits. The measure incorporates costs related to sustaining production. Copper and silver credits represent the expected revenue from the sale of these metals.
- *All-in sustaining costs on a by-product basis per ounce sold including taxes*, include revenue-based tax at Kumtor and taxes (mining and income) at Mount Milligan.
- *All-in sustaining costs on a co-product basis per ounce of gold sold or per pound of copper sold*, operating costs are allocated between copper and gold based on production. To calculate the allocation of operating costs, copper production has been converted to ounces of gold equivalent using the copper production for the periods presented, as well as an average of the futures prices during the quotation period for copper and gold sold from Mount Milligan. For the twelve months ended December 31, 2018, 422 pounds of copper was equivalent to one ounce of gold.

- *Adjusted earnings* is calculated by adjusting net earnings (loss) as recorded in the condensed interim consolidated statements of income (loss) and comprehensive income (loss) for non-recurring items.
- *Capital expenditure (Sustaining)* is a capital expenditure necessary to maintain existing levels of production. The sustaining capital expenditures maintain the existing mine fleet, mill and other facilities so that they function at levels consistent from year to year.
- *Capital expenditure (Growth)* is capital expended to expand the business or operations by increasing productive capacity beyond current levels of performance.
- *Growth projects* are defined as projects that are beyond the exploration stage but are pre-operational. For 2018, growth projects include Öksüt, Kemess and the Greenstone Gold Property.
- *Average realized gold price* is calculated by dividing revenue (including third party sales and the fixed amount received under the Mount Milligan Streaming Arrangement) derived from gold sales by the number of ounces sold.
- *Average realized copper price* is calculated by dividing revenue (including third party sales and the fixed amount received under the Mount Milligan Streaming Arrangement) derived from copper sales by the number of pounds sold.
- *Free cash flow (unlevered)* is calculated as cash provided by operations less additions to property, plant and equipment.
- *Cash provided by operations before changes in working capital* starts with cash provided by operations and removes the changes in working capital as presented in the Company's Statement of Cash Flows.



**Adjusted Operating Cost and All-in Sustaining Costs on a by-product basis (including and excluding taxes) per ounce of gold are non-GAAP measures and can be reconciled as follows:**

(Unaudited - \$ millions, unless otherwise specified)	Three months ended December 31,						Year ended December 31,					
	Consolidated <sup>(1)</sup>		Kumtor <sup>(1)</sup>		Mount Milligan <sup>(1)</sup>		Consolidated <sup>(1)</sup>		Kumtor <sup>(1)</sup>		Mount Milligan <sup>(1)</sup>	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Cost of sales excluding molybdenum segment, as reported	177.3	145.2	109.0	84.7	68.3	60.5	563.6	545.4	349.9	291.7	213.7	253.6
Less: Non-cash component	62.6	48.6	51.3	39.7	11.3	8.9	191.8	189.6	154.6	145.7	37.2	43.9
Cost of sales, cash component	114.7	96.6	57.7	45.0	57.0	51.6	371.8	355.8	195.3	146.0	176.5	209.7
Adjust for:												
Regional office administration	4.1	5.8	4.1	5.8	-	-	13.8	18.2	13.8	18.2	-	-
Selling and marketing	1.9	0.9	-	-	1.9	0.9	5.0	4.7	-	-	5.0	4.7
Refining fees	2.0	1.9	1.7	1.6	0.3	0.3	5.7	5.5	4.8	4.4	0.9	1.1
By-product credits - copper	(23.9)	(29.2)	-	-	(23.9)	(29.2)	(89.5)	(125.9)	-	-	(89.5)	(125.9)
Community costs related to current operations	1.4	1.4	1.4	1.4	-	-	5.3	3.7	5.3	3.7	-	-
Adjusted Operating Costs	100.2	77.5	64.8	53.8	35.4	23.6	312.0	262.0	219.2	172.3	92.9	89.6
Corporate general administrative and other costs	6.3	7.1	-	0.1	0.2	0.8	30.1	39.9	0.1	0.3	1.1	2.2
Accretion expense	0.4	0.5	0.3	0.3	0.1	0.2	1.9	1.9	1.3	1.3	0.6	0.6
Capitalized stripping and ice unload	26.3	24.4	26.3	24.4	-	-	103.9	149.4	103.9	149.4	-	-
Capital expenditures (sustaining)	22.2	28.9	11.8	16.5	10.1	11.9	86.8	91.2	43.7	60.6	42.2	30.0
All-in Sustaining Costs on a by-product basis	155.4	138.3	103.3	95.2	45.7	36.5	534.7	544.3	368.1	383.9	136.8	122.4
Revenue-based taxes	34.7	32.2	34.7	32.2	-	-	93.0	96.7	93.0	96.7	-	-
Income and mining taxes	1.2	1.1	-	-	1.2	1.1	2.7	4.7	-	-	2.7	4.7
All-in Sustaining Costs on a by-product basis (including taxes)	191.4	171.5	138.0	127.4	47.0	37.6	630.3	645.7	461.1	480.6	139.4	127.1
Ounces sold (000)	269.8	242.2	203.4	180.7	66.4	61.5	709.3	792.5	530.4	550.1	178.9	242.3
Adjusted Operating Costs - \$ /oz sold	372	320	319	298	533	385	440	331	413	313	519	370
Gold - All-in Sustaining Costs on a by-product basis - \$ /oz sold	576	571	508	526	689	594	754	687	694	698	764	505
Gold - All-in Sustaining Costs on a by-product basis (including taxes) - \$ /oz sold	709	708	679	705	707	612	889	815	869	874	779	525
Gold - All-in Sustaining Costs on a co-product basis (before taxes) - \$ /oz sold	573	593	508	526	676	706	750	737	694	698	751	663
Copper - All-in Sustaining Costs on a co-product basis (before taxes) - \$ /pound sold	1.53	1.70	n/a	n/a	1.53	1.70	1.77	1.47	n/a	n/a	1.77	1.47
<sup>(1)</sup> Results may not add due to rounding												

## Adjusted earnings can be reconciled as follows:

Adjusted earnings is intended to provide investors with information about the Company's continuing income generating capabilities. Hence, this measure adjusts for the earnings impact of non-recurring items.

(\$ millions, except as noted)	Three months ended December 31,		Year ended December 31,	
	2018	2017	2018	2017
<b>Net earnings (loss)</b>	<b>\$ 49.0</b>	<b>\$ 130.0</b>	<b>\$ 107.5</b>	<b>\$ 209.5</b>
Adjust for non-recurring items:				
Kyrgyz Republic settlement		-	-	60.0
Asset Impairment- Mongolia (net of tax)	-	-	8.4	39.7
AuRico Metals Inc. acquisition and integration expenses	-	-	4.4	-
Gain on sale of royalty portfolio	-	-	(28.0)	-
Proceeds from sale of ATO (net of tax)	-	-	(9.4)	(6.9)
Income tax benefit from US tax reform	-	(21.3)	-	(21.3)
Tax adjustment	-	-	(5.2)	-
<b>Adjusted net earnings</b>	<b>\$ 49.0</b>	<b>\$ 108.7</b>	<b>\$ 77.8</b>	<b>\$ 281.0</b>
<b>Net earnings (loss) per share - basic</b>	<b>\$ 0.17</b>	<b>\$ 0.45</b>	<b>\$ 0.37</b>	<b>\$ 0.72</b>
<b>Net earnings (loss) per share - diluted</b>	<b>\$ 0.17</b>	<b>\$ 0.44</b>	<b>\$ 0.36</b>	<b>\$ 0.72</b>
<b>Adjusted net earnings per share - basic</b>	<b>\$ 0.17</b>	<b>\$ 0.37</b>	<b>\$ 0.27</b>	<b>\$ 0.96</b>
<b>Adjusted net earnings per share - diluted</b>	<b>\$ 0.17</b>	<b>\$ 0.36</b>	<b>\$ 0.26</b>	<b>\$ 0.96</b>

## Free cash flow (unlevered) is calculated as follows:

(\$ millions, except as noted)	Three months ended December 31,		Year ended December 31,	
	2018	2017	2018	2017
<b>Cash provided by operations <sup>(1)</sup></b>	<b>\$ 151.6</b>	<b>\$ 170.4</b>	<b>\$ 217.5</b>	<b>\$ 500.9</b>
<b>Adjust for:</b>				
Additions to property, plant and equipment <sup>(1)</sup>	(86.1)	(64.4)	(285.9)	(278.0)
<b>Free cash flow (deficit)</b>	<b>\$ 65.5</b>	<b>\$ 106.0</b>	<b>\$ (68.4)</b>	<b>\$ 222.9</b>

<sup>(1)</sup> as presented in the Company's Consolidated Statements of Cash Flows.

**Sustaining capital, growth capital and capitalized stripping presented in the All-in Sustaining cost measures can be reconciled as follows:**

Three months ended December 31,	Kumtor	Mount Milligan	Turkey	All other	Consolidated
(\$ millions) (Unaudited)					
<b>2018</b>					
Capitalized stripping –cash	26.3	-	-	-	26.3
Sustaining capital - cash	11.9	10.1	-	-	22.0
Growth capital - cash	2.9	-	-	-	2.9
Greenstone Gold Property pre-development capital cash	-	-	-	2.4	2.4
Kemess Property pre-development capital cash	-	-	-	13.7	13.7
Öksüt project development capital - cash	-	-	15.2	-	15.2
Molybdenum business capital - cash	-	-	-	1.5	1.5
Prepayment for capital	1.0	0.1	2.2	-	3.3
Adjustment for changes in accruals and other non-cash items included in additions to PP&E	0.1	(2.2)	(0.3)	0.3	(2.1)
Greenstone Gold Property translation adjustment	-	-	-	1.0	1.0
<b>Total - Additions to PP&amp;E <sup>(1)</sup></b>	<b>42.2</b>	<b>8.0</b>	<b>17.1</b>	<b>18.8</b>	<b>86.1</b>
<b>2017</b>					
(\$ millions) (Unaudited)					
Capitalized stripping –cash	24.4	-	-	-	24.4
Sustaining capital - cash	16.4	11.9	-	-	28.3
Growth capital - cash	7.1	-	-	-	7.1
Öksüt project development capital - cash	-	-	1.8	-	1.8
Prepayment for capital	(0.8)	1.3	0.8	-	1.3
Adjustment for changes in accruals and other non-cash items included in additions to PP&E	-	-	-	1.6	1.6
<b>Total - Additions to PP&amp;E <sup>(1)</sup></b>	<b>47.1</b>	<b>13.2</b>	<b>2.6</b>	<b>1.6</b>	<b>64.4</b>

Year ended December 31,	Kumtor	Mount Milligan	Turkey	All other	Consolidated
(\$ millions) (Unaudited)					
<b>2018</b>					
Capitalized stripping –cash	103.9	-	-	-	103.9
Sustaining capital - cash	43.7	42.2	-	-	85.9
Growth capital - cash	16.7	-	-	-	16.7
Greenstone Gold Property pre-development capital cash	-	-	-	10.0	10.0
Kemess Property pre-development capital cash	-	-	-	30.7	30.7
Öksüt project development capital - cash	-	-	43.9	-	43.9
Molybdenum business capital - cash	-	-	-	2.3	2.3
Prepayment for capital	3.0	1.7	9.4	-	14.1
Adjustment for changes in accruals and other non-cash items included in additions to PP&E	(3.9)	(9.0)	(9.5)	0.3	(22.1)
Greenstone Gold Property translation adjustment	-	-	-	0.6	0.6
<b>Total - Additions to PP&amp;E <sup>(1)</sup></b>	<b>163.4</b>	<b>34.9</b>	<b>43.8</b>	<b>43.8</b>	<b>285.9</b>
<b>2017</b>					
(\$ millions) (Unaudited)					
Capitalized stripping –cash	149.4	-	-	-	149.4
Sustaining capital - cash	59.0	27.2	-	0.1	86.3
Growth capital - cash	18.0	-	-	-	18.0
Gatsuurt project development capital cash	-	-	-	2.4	2.4
Greenstone Gold Property pre-development capital cash	-	-	-	3.8	3.8
Öksüt project development capital - cash	-	-	6.6	-	6.6
Molybdenum business capital - cash	-	-	-	0.5	0.5
Prepayment for capital	2.4	6.1	2.1	-	10.6
Adjustment for changes in accruals and other non-cash items included in additions to PP&E	(1.6)	0.8	-	1.3	0.5
<b>Total - Additions to PP&amp;E <sup>(1)</sup></b>	<b>227.2</b>	<b>34.1</b>	<b>8.7</b>	<b>8.1</b>	<b>278.0</b>

<sup>(1)</sup> as presented in the Company's Consolidated Statements of Cash Flows

## Reconciliation of Cash Provided by Operations Before Changes in Working Capital:

(\$ millions)

Three months ended December 31, 2018					
	Kumtor	Mount Milligan	Molybdenum	Other	Consolidated
Cash provided by (used in) operations	149.6	39.3	(10.6)	(26.6)	151.6
Add back (deduct):					
Change in operating working capital	(5.4)	(10.8)	7.8	13.6	5.2
<b>Net cash provided by (used in) operations before changes in working capital</b>	<b>144.1</b>	<b>28.5</b>	<b>(2.8)</b>	<b>(13.0)</b>	<b>156.8</b>

Three months ended December 31, 2017					
	Kumtor	Mount Milligan	Molybdenum	Other	Consolidated
Cash provided by (used in) operations	151.0	29.2	(0.1)	(9.6)	170.4
Add back (deduct):					
Change in operating working capital	(5.9)	1.1	0.7	(6.4)	(10.5)
<b>Net cash provided by (used in) operations before changes in working capital</b>	<b>145.0</b>	<b>30.3</b>	<b>0.6</b>	<b>(16.0)</b>	<b>159.9</b>

Year ended December 31, 2018					
	Kumtor	Mount Milligan	Molybdenum	Other	Consolidated
Cash provided by (used in) operations	291.0	37.4	(24.9)	(86.0)	217.5
Add back (deduct):					
Change in operating working capital	54.0	25.7	23.9	15.5	119.1
<b>Net cash provided by (used in) operations before changes in working capital</b>	<b>345.0</b>	<b>63.1</b>	<b>(1.0)</b>	<b>(70.5)</b>	<b>336.6</b>

Year ended December 31, 2017					
	Kumtor	Mount Milligan	Molybdenum	Other	Consolidated
Cash provided by (used in) operations	416.1	150.6	(8.3)	(57.5)	500.9
Add back (deduct):					
Change in operating working capital	8.2	(12.0)	9.3	6.1	11.7
<b>Net cash provided by (used in) operations before changes in working capital</b>	<b>424.3</b>	<b>138.6</b>	<b>1.0</b>	<b>(51.3)</b>	<b>512.6</b>

## Average realized sales price for gold

The average realized gold price per ounce sold is calculated by dividing gold sales revenue, gross together with the final pricing adjustments and mark-to-market adjustments by the ounces sold, as shown in the table below:

<u>Average realized sales price for gold</u>	Three months ended December 31,		Year ended December 31,	
	2018	2017	2018	2017
<b>Gold sales reconciliation (\$ millions)</b>				
Gold sales - Kumtor	246.9	228.1	660.1	685.2
<b><u>Gold sales - Mt. Milligan</u></b>				
Gold sales related to cash portion of Royal Gold stream	10.0	9.3	27.1	37.0
Mark-to-market adjustments on sales to Royal Gold	(2.5)	(1.1)	(1.8)	(1.4)
Final adjustments on sales to Royal Gold	(0.7)	(0.2)	(1.2)	(0.2)
Total gold sales under Royal Gold stream	6.8	8.0	24.1	35.4
Gold sales to third party customers	53.3	48.7	149.3	200.0
Mark-to-market adjustments	2.8	4.0	3.6	2.6
Final pricing adjustments	1.7	(0.2)	(3.0)	4.6
Final metal adjustments	1.0	1.5	0.4	1.4
Total gold sales to third party customers	58.8	52.5	150.3	208.6
Gold sales, net of adjustments	65.6	60.5	174.4	244.0
Refining and treatment costs	(0.3)	(0.3)	(0.9)	(1.1)
Total gold sales	65.3	60.2	173.5	242.9
<b>Total gold revenue - Consolidated</b>	<b>312.2</b>	<b>288.3</b>	<b>833.6</b>	<b>928.1</b>
<b>Ounces of gold sold</b>				
Gold ounces sold - Kumtor	203,388	180,703	530,448	550,134
Ounces sold to Royal Gold - Mt. Milligan	22,970	21,266.0	62,261	77,503
Ounces sold to third party customers - Mt. Milligan	43,396	40,258.2	116,621	164,828
<b>Total ounces sold - Consolidated</b>	<b>269,754</b>	<b>242,228</b>	<b>709,330</b>	<b>792,466</b>
<b>Average realized sales price for gold on a per ounce basis</b>				
Average realized sales price - Kumtor	1,214	1,262	1,244	1,245
Average realized gold price - Royal Gold	435	435	435	435
Average realized gold price - Mark-to-market adjustments	(109)	(52)	(29)	(18)
Average realized gold price - Final pricing adjustments	(30)	(9)	(19)	(3)
<b>Average realized gold price - Mt. Milligan - Royal Gold</b>	<b>296</b>	<b>374</b>	<b>387</b>	<b>414</b>
Average realized gold price - Third party	1,228	1,210	1,280	1,213
Average realized gold price - Mark-to-market adjustments	65	99	31	16
Average realized gold price - Final pricing adjustments	39	(5)	(26)	28
Average realized gold price - Final metal adjustments	23	37	3	8
<b>Average realized gold price - Mt. Milligan - Third party</b>	<b>1,332</b>	<b>1,304</b>	<b>1,289</b>	<b>1,266</b>
<b>Average realized gold price - Mt. Milligan - Combined</b>	<b>984</b>	<b>978</b>	<b>971</b>	<b>1,003</b>
<b>Average realized sales price for gold - Consolidated</b>	<b>1,157</b>	<b>1,190</b>	<b>1,175</b>	<b>1,171</b>

## Average realized sales price for Copper - Mount Milligan

The average realized copper price per pound is calculated by dividing copper sales revenue, gross together with the final pricing adjustments and mark-to-market adjustments per pound, as shown in the table below:

Average realized sales price for Copper - Mount Milligan	Three months ended December 31,		Year ended December 31,	
	2018	2017	2018	2017
<b>Copper sales reconciliation (\$ millions)</b>				
Copper sales related to cash portion of Royal Gold stream	1.0	1.3	3.5	5.0
Mark-to-market adjustments on Royal Gold stream	(0.3)	0.2	0.3	(0.5)
Final adjustments on sales to Royal Gold	(0.4)	0.3	(0.1)	0.7
Total copper sales under Royal Gold stream	0.3	1.8	3.6	5.2
Copper sales to third party customers	31.6	31.2	108.2	133.9
Mark-to-market adjustments	(4.1)	(2.0)	(3.3)	(1.5)
Final pricing adjustments	0.3	2.3	(5.6)	5.9
Final metal adjustments	(0.6)	(0.2)	(1.3)	(0.3)
Total copper sales to third party customers	27.3	31.3	98.1	138.1
Copper sales, net of adjustments	27.6	33.1	101.6	143.3
Refining and treatment costs	(3.7)	(3.9)	(12.2)	(17.4)
<b>Copper sales</b>	<b>23.9</b>	<b>29.2</b>	<b>89.5</b>	<b>125.9</b>
<b>Pounds of copper sold (000's lbs)</b>				
Pounds sold to Royal Gold	2,626	2,506	8,311	11,232
Pounds sold to third party customers	10,965	10,599	36,058	48,487
<b>Total pounds sold</b>	<b>13,591</b>	<b>13,105</b>	<b>44,370</b>	<b>59,719</b>
<b>Average realized sales price for copper on a per pound basis</b>				
Copper sales related to cash portion of Royal Gold stream	0.38	0.53	0.42	0.45
Mark-to-market adjustments on Royal Gold stream	(0.11)	0.08	0.03	(0.05)
Final pricing adjustments on Royal Gold stream	(0.14)	0.10	(0.02)	0.06
<b>Average realized copper price - Royal Gold</b>	<b>0.13</b>	<b>0.71</b>	<b>0.43</b>	<b>0.46</b>
Average realized copper price - Third party	2.88	2.94	3.00	2.76
Average realized copper price - Mark-to-market adjustments	(0.38)	(0.19)	(0.09)	(0.03)
Average realized copper price - Final pricing adjustments	0.03	0.22	(0.15)	0.12
Average realized copper price - Metal pricing adjustments		(0.02)	(0.01)	(0.01)
<b>Average realized copper price - Third party</b>	<b>2.49</b>	<b>2.97</b>	<b>2.72</b>	<b>2.84</b>
<b>Average realized copper price - Combined</b>	<b>1.76</b>	<b>2.23</b>	<b>2.02</b>	<b>2.11</b>

## Qualified Person & QA/QC

The scientific and technical information in this document, including the production estimates were prepared in accordance with the standards of the Canadian Institute of Mining, Metallurgy and Petroleum and National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”) and were prepared, reviewed, verified and compiled by Centerra’s geological and mining staff under the supervision of Mr. Gordon Reid, Professional Engineer and Centerra’s Vice-President and Chief Operating Officer, who is the qualified person for the purpose of NI 43-101. Sample preparation, analytical techniques, laboratories used and quality assurance-quality control protocols used during the exploration drilling programs are done consistent with industry standards and independent certified assay labs are used.

The Kumtor deposit is described in Centerra’s most recently filed Annual Information Form and a technical report dated March 20, 2015 (with an effective date of December 31, 2014), which are both filed on SEDAR at [www.sedar.com](http://www.sedar.com). The technical report is prepared in accordance with NI 43-101 and describes the exploration history, geology and style of gold mineralization at the Kumtor deposit. Sample preparation, analytical techniques, laboratories used and quality assurance-quality control protocols used during the drilling programs at the Kumtor site are described in the technical report.

The Mount Milligan deposit is described in Centerra's most recently filed Annual Information Form and a technical report dated March 22, 2017 (with an effective date of December 31, 2016) prepared in accordance with NI 43-101, both of which are available on SEDAR at [www.sedar.com](http://www.sedar.com). The technical report describes the exploration history, geology and style of gold mineralization at the Mount Milligan deposit. Sample preparation, analytical techniques, laboratories used and quality assurance-quality control protocols used during the exploration drilling programs are done consistent with industry standards and independent certified assay labs.

The Öksüt deposit is described in Centerra's most recently filed Annual Information Form and in a technical report dated September 3, 2015 (with an effective date of June 30, 2015) prepared in accordance with NI 43-101 both of which are available on SEDAR at [www.sedar.com](http://www.sedar.com). The technical report describes the exploration history, geology and style of gold mineralization at the Öksüt deposit. Sample preparation, analytical techniques, laboratories used and quality assurance-quality control protocols used during the drilling programs at the Öksüt Project are the same as, or similar to, those described in the technical report.

The Kemess project is described in a technical report dated July 14, 2017 prepared in accordance with NI 43-101. The technical report has been filed on SEDAR at [www.sedar.com](http://www.sedar.com) by AuRico Metals Inc. The technical report describes the exploration history, geology and style of gold mineralization at the Kemess Underground deposit and the Kemess East project. Sample preparation, analytical techniques, laboratories used and quality assurance-quality control protocols used during the drilling programs at the Kemess Project are the same as, or similar to, those described in the technical report.

The Hardrock deposit is described in a technical report dated December 21, 2016 prepared in accordance with NI 43-101. The technical report has been filed on SEDAR at [www.sedar.com](http://www.sedar.com). The technical report describes the exploration history, geology and style of gold mineralization at the Hardrock deposit. Sample preparation, analytical techniques, laboratories used and quality assurance-quality control protocols used during the drilling programs at the Hardrock Project are the same as, or similar to, those described in the technical report.

## **Risks That Can Affect Our Business**

There are a number of risk factors that Centerra believes can have a material effect on the profitability, future cash flows, earnings, results of operations, stated mineral reserves and mineral resources and financial condition of the Company. If any event arising from these risks occurs, the Company's business, prospects, financial condition, results of operations or cash flows could be adversely affected, the trading price of Centerra's common shares could decline and all or part of any investment in Centerra may be lost.

A detailed discussion of risk factors is included under the heading "Risks that Can Affect our Business" in our most recent Annual Information Form (2017) available on SEDAR at [www.sedar.com](http://www.sedar.com), which is incorporated herein by reference. The Risks listed in the 2017 AIF remain relevant except as provided below:

- With the purchase on January 8, 2018 of AuRico Metals Inc. relevant risk factors apply to the Kemess Project.
- The risks related to Mongolia and the Boroo Mine and Gatsuurt Project are no longer applicable to the Company given the October 12, 2018 sale of the Mongolian business unit, including the Boroo Gold Mine and processing facility and the Gatsuurt Gold Project to OZD ASIA PTE Ltd. ("OZD").

- In addition to the reported risk of seismic activity, the Company's operations are subject to adverse events brought on by both natural and man-made disasters including but not limited to severe weather conditions, forest fires and avalanche. These events could damage or destroy or adversely affect the operations at our physical facilities and similar events could also affect the facilities of our suppliers. Any such damage or destruction could adversely affect our financial results, future cash flows and earnings because of the reduced availability of supplies, decreased production output or increased operating costs.  
While the risks were taken into account when determining the design criteria for our operations, there can be no assurance that the Company's operations will not be adversely affected by this kind of activity. Although we believe we have reasonable insurance arrangements in place to cover certain of such incidents related to damage or destruction, there can be no assurance that these arrangements will be sufficient to fully protect us against such losses.
- As discussed elsewhere in this document, additional activities and permitting are in progress at the Mount Milligan mine site to mitigate risks related to "The Company's mining production depends on the availability of sufficient water supplies". See "Operating Mines and Facilities – Mount Milligan Mine – Water Update". The Company is actively managing its water management inventory strategy at Mount Milligan. While we have made, or are making the applications needed to access additional water from a number of sources, there are no assurances that the Company will receive the required permits and amendments to its environmental assessment certificates, or that they will be received in the time periods expected by management. Any failure to find medium and long-term solutions to the water sufficiency issues at Mount Milligan, or the re-occurrence of any water availability issues, may adversely impact the Company's future cash flows, earnings, result of operations and financial conditions.

It should be noted that additional risks and uncertainties not currently known to the Company, or that are currently deemed immaterial, may also materially and adversely affect the Company's business operations, prospects, financial condition, results of operations, or cash flows.

## Caution Regarding Forward-Looking Information

*Information contained in this document which are not statements of historical facts, and the documents incorporated by reference herein, may be "forward-looking information" for the purposes of Canadian securities laws. Such forward-looking information involves risks, uncertainties and other factors that could cause actual results, performance, prospects and opportunities to differ materially from those expressed or implied by such forward looking information. The words "believe", "expect", "anticipate", "contemplate", "plan", "intends", "continue", "budget", "estimate", "may", "will", "schedule", "understand" and similar expressions identify forward-looking information. These forward-looking statements relate to, among other things: the Company's expectations regarding the timing of the Kumtor Settlement Agreement and the successful resolution of outstanding claims and proceedings impacting the Kumtor Project and its current and former employees; expectations regarding the positive receipt and timing of environmental assessment certificate amendments and permits to implement the Company's medium term water strategy, including the details of any such amendment and permit, and the Company's plans and timing for developing and submitting requests to implement a long term solution to the Mount Milligan water sufficiency issues, including consultations with Indigenous communities and regulators; expectations regarding the construction progress at the Öksüt project and first gold pour; the Company's cash at hand, working capital, future cash flows and existing credit facilities being sufficient to fund anticipated operating cash requirements and statements found under the heading "2019 Outlook", including forecast 2019 production figures and costs, capital and exploration expenditures and taxes.*

*Forward-looking information is necessarily based upon a number of estimates and assumptions that, while considered reasonable by Centerra, are inherently subject to significant political, business, economic and competitive uncertainties and contingencies. Known and unknown factors could cause actual results to differ materially from those projected in the forward-looking information. Factors that could cause actual results or events to differ*



materially from current expectations include, among other things: (A) strategic, legal, planning and other risks, including: political risks associated with the Company's operations in the Kyrgyz Republic and Canada; risks that any of the conditions precedent to the Strategic Agreement will not be satisfied in a timely manner or at all, particularly as the Government may not bind the General Prosecutor's Office or the Parliament of the Kyrgyz Republic; a decision by the General Prosecutor's Office, or its successor the Anti-Corruption Service of the State Committee for National Security, to re-open at any time civil or criminal proceedings against Centerra, its subsidiaries or other stakeholders; the failure of the Government to comply with its continuing obligations under the Strategic Agreement, including the requirement that it comply at all times with its obligations under the Kumtor Project Agreements, allow for the continued operation of the Kumtor Mine by KGC and KOC and not take any expropriatory action; actions by the Government or any state agency or the General Prosecutor's Office that serve to restrict or otherwise interfere with the payment of funds by KGC and KOC to Centerra; resource nationalism including the management of external stakeholder expectations; the impact of changes in, or to the more aggressive enforcement of, laws, regulations and government practices, including with respect to the environment, in the jurisdictions in which the Company operates including any delays or refusals to grant required permits and licenses, unjustified civil or criminal action against the Company, its affiliates or its current or former employees; risks that community activism may result in increased contributory demands or business interruptions; the impact of any actions taken by the Kyrgyz Republic Government and Parliament relating to the Kumtor Project Agreements which are inconsistent with the rights of Centerra and KGC under the Kumtor Project Agreements; any impact on the purported cancellation of Kumtor's land use rights at the Kumtor Project; the risks related to other outstanding litigation affecting the Company's operations in the Kyrgyz Republic and elsewhere; the impact of the delay by relevant government agencies to provide required approvals, expertises and permits; potential impact on the Kumtor Project of investigations by Kyrgyz Republic instrumentalities; the impact of constitutional changes in Turkey; the impact of any sanctions imposed by Canada, the United States or other jurisdictions against various Russian individuals and entities; potential defects of title in the Company's properties that are not known as of the date hereof; the inability of the Company and its subsidiaries to enforce their legal rights in certain circumstances; the presence of a significant shareholder that is a state-owned company of the Kyrgyz Republic; risks related to anti-corruption legislation; risks related to the concentration of assets in Central Asia; Centerra's future exploration and development activities not being successful; Centerra not being able to replace mineral reserves; Indigenous claims and consultative issues relating to the Company's properties which are in proximity to Indigenous communities; and potential risks related to kidnapping or acts of terrorism; (B) risks relating to financial matters, including: sensitivity of the Company's business to the volatility of gold, copper and other mineral prices, the use of provisionally-priced sales contracts for production at Mount Milligan, reliance on a few key customers for the gold-copper concentrate at Mount Milligan, use of commodity derivatives, the imprecision of the Company's mineral reserves and resources estimates and the assumptions they rely on, the accuracy of the Company's production and cost estimates, the impact of restrictive covenants in the Company's credit facilities which may, among other things, restrict the Company from pursuing certain business activities or making distributions from its subsidiaries, the Company's ability to obtain future financing, the impact of global financial conditions, the impact of currency fluctuations, the effect of market conditions on the Company's short-term investments, the Company's ability to make payments including any payments of principal and interest on the Company's debt facilities depends on the cash flow of its subsidiaries; and (C) risks related to operational matters and geotechnical issues and the Company's continued ability to successfully manage such matters, including the movement of the Davidov Glacier, waste and ice movement and continued performance of the buttress at the Kumtor Project; the occurrence of further ground movements at the Kumtor Project and mechanical availability; the risk of having sufficient water to continue operations at Mount Milligan and achieve expected mill throughput; the success of the Company's future exploration and development activities, including the financial and political risks inherent in carrying out exploration activities; inherent risks associated with the use of sodium cyanide in the mining operations; the adequacy of the Company's insurance to mitigate operational risks; mechanical breakdowns; the Company's ability to replace its mineral reserves; the occurrence of any labour unrest or disturbance and the ability of the Company to successfully re-negotiate collective agreements when required; the risk that Centerra's workforce may be exposed to widespread epidemic; seismic activity in the vicinity of the Company's properties; long lead times required for equipment and supplies given the remote location of some of the Company's operating properties; reliance on a limited number of suppliers for certain consumables, equipment and components; the Company's ability to accurately predict decommissioning and reclamation costs; the Company's ability to attract and retain qualified personnel; competition for mineral acquisition opportunities; and risks associated with the conduct of joint ventures/partnerships; the Company's ability to manage its projects effectively and to mitigate the potential lack of availability of contractors, budget and timing overruns and project resources.

See section titled “Risks that can affect our business” in the Company’s most recently filed Annual Information Form available on SEDAR at [www.sedar.com](http://www.sedar.com).

Furthermore, market price fluctuations in gold and copper, as well as increased capital or production costs or reduced recovery rates may render ore reserves containing lower grades of mineralization uneconomic and may ultimately result in a restatement of reserves. The extent to which resources may ultimately be reclassified as proven or probable reserves is dependent upon the demonstration of their profitable recovery. Economic and technological factors which may change over time always influence the evaluation of reserves or resources. Centerra has not adjusted mineral resource figures in consideration of these risks and, therefore, Centerra can give no assurances that any mineral resource estimate will ultimately be reclassified as proven and probable reserves.

Mineral resources are not mineral reserves, and do not have demonstrated economic viability, but do have reasonable prospects for economic extraction. Measured and indicated resources are sufficiently well defined to allow geological and grade continuity to be reasonably assumed and permit the application of technical and economic parameters in assessing the economic viability of the resource. Inferred resources are estimated on limited information not sufficient to verify geological and grade continuity or to allow technical and economic parameters to be applied. Inferred resources are too speculative geologically to have economic considerations applied to them to enable them to be categorized as mineral reserves. There is no certainty that mineral resources of any category can be upgraded to mineral reserves through continued exploration.

There can be no assurances that forward-looking information and statements will prove to be accurate, as many factors and future events, both known and unknown could cause actual results, performance or achievements to vary or differ materially, from the results, performance or achievements that are or may be expressed or implied by such forward-looking statements contained herein or incorporated by reference. Accordingly, all such factors should be considered carefully when making decisions with respect to Centerra, and prospective investors should not place undue reliance on forward looking information. Forward-looking information is as of February 22, 2019. Centerra assumes no obligation to update or revise forward looking information to reflect changes in assumptions, changes in circumstances or any other events affecting such forward-looking information, except as required by applicable law.