
Teck Resources Limited

Consolidated Financial Statements

For the Years Ended December 31, 2016 and 2015

Teck

Management's Responsibility for Financial Reporting

Management is responsible for the integrity and fair presentation of the financial information contained in this annual report. Where appropriate, the financial information, including financial statements, reflects amounts based on the best estimates and judgments of management. The financial statements have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board. Financial information presented elsewhere in the annual report is consistent with that disclosed in the financial statements.

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Any system of internal control over financial reporting, no matter how well designed, has inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. The system of controls is also supported by a professional staff of internal auditors who conduct periodic audits of many aspects of our operations and report their findings to management and the Audit Committee.

Management has a process in place to evaluate internal control over financial reporting based on the criteria established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) 2013 framework.

The Board of Directors oversees management's responsibility for financial reporting and internal control systems through an Audit Committee, which is composed entirely of independent directors. The Audit Committee meets periodically with management, our internal auditors and independent auditors to review the scope and results of the annual audit, and to review the financial statements and related financial reporting and internal control matters before the financial statements are approved by the Board of Directors and submitted to the shareholders.

PricewaterhouseCoopers LLP, an independent registered public accounting firm, appointed by the shareholders, have audited our financial statements in accordance with Canadian generally accepted auditing standards and have expressed their opinion in the Independent Auditor's Report.



Donald R. Lindsay

President and Chief Executive Officer



Ronald A. Millos

Senior Vice President, Finance and Chief Financial Officer

February 23, 2017

Independent Auditor's Report

To the Shareholders of Teck Resources Limited

We have completed integrated audits of Teck Resources Limited's (the Company) December 31, 2016 and December 31, 2015 consolidated financial statements and its internal control over financial reporting as at December 31, 2016. Our opinions, based on our audits are presented below.

Report on the Consolidated Financial Statements

We have audited the accompanying consolidated financial statements of Teck Resources Limited, which comprise the consolidated balance sheets as at December 31, 2016 and December 31, 2015 and the consolidated statements of income (loss), comprehensive income (loss), cash flows and changes in equity for the years then ended, and the related notes, which comprise a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement. Canadian generally accepted auditing standards also require that we comply with ethical requirements.

An audit involves performing procedures to obtain audit evidence, on a test basis, about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the company's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting principles and policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a basis for our audit opinion on the consolidated financial statements.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Teck Resources Limited as at December 31, 2016 and December 31, 2015 and its financial

performance and its cash flows for the years then ended in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Report on Internal Control Over Financial Reporting

We have also audited Teck Resources Limited's internal control over financial reporting as at December 31, 2016, based on criteria established in Internal Control — Integrated Framework (2013), issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Management's Responsibility for Internal Control Over Financial Reporting

Management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in Management's Report on Internal Control Over Financial Reporting.

Auditor's Responsibility

Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit. We conducted our audit of internal control over financial reporting in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

An audit of internal control over financial reporting includes obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control, based on the assessed risk, and performing such other procedures as we consider necessary in the circumstances.

We believe that our audit provides a reasonable basis for our audit opinion on the company's internal control over financial reporting.

Definition of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that: (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Inherent Limitations

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

In our opinion, Teck Resources Limited maintained, in all material respects, effective internal control over financial reporting as at December 31, 2016, based on criteria established in Internal Control — Integrated Framework (2013) issued by COSO.

PricewaterhouseCoopers LLP

Chartered Professional Accountants

February 23, 2017

Vancouver, British Columbia

Teck Resources Limited

Consolidated Statements of Income (Loss)

Years ended December 31

(CAD\$ in millions, except for share data)	2016	2015
Revenues	\$ 9,300	\$ 8,259
Cost of sales	(6,904)	(6,980)
Gross profit	2,396	1,279
Other operating expenses		
General and administration	(99)	(108)
Exploration	(51)	(76)
Research and development	(30)	(47)
Asset impairments (Note 13(a))	(294)	(3,631)
Other operating income (expense) (Note 6)	(197)	(335)
Profit (loss) from operations	1,725	(2,918)
Finance income (Note 7)	16	5
Finance expense (Note 7)	(354)	(316)
Non-operating income (expense) (Note 8)	239	(89)
Share of income (losses) of associates and joint ventures (Note 12)	2	(2)
Profit (loss) before taxes	1,628	(3,320)
(Provision for) recovery of income taxes (Note 17)	(587)	836
Profit (loss) for the year	\$ 1,041	\$ (2,484)
Profit (loss) attributable to:		
Shareholders of the company	\$ 1,040	\$ (2,474)
Non-controlling interests	1	(10)
Profit (loss) for the year	\$ 1,041	\$ (2,484)
Earnings (loss) per share (Note 21(f))		
Basic	\$ 1.80	\$ (4.29)
Diluted	\$ 1.78	\$ (4.29)
Weighted average shares outstanding (millions)	576.4	576.2
Shares outstanding at end of year (millions)	576.9	576.3

The accompanying notes are an integral part of these financial statements.

Teck Resources Limited

Consolidated Statements of Comprehensive Income (Loss)

Years ended December 31

(CAD\$ in millions)	2016	2015
Profit (loss) for the year	\$ 1,041	\$ (2,484)
Other comprehensive income (loss) in the year		
Items that may be reclassified to profit (loss)		
Currency translation differences (net of taxes of \$ (27) and \$163)	(21)	202
Change in fair value of available-for-sale financial instruments (net of taxes of \$(2) and \$(2))	16	7
Cash flow hedges (net of taxes of \$nil and \$(1))	–	4
Share of other comprehensive income of associates and joint ventures	1	3
	(4)	216
Items that will not be reclassified to profit (loss)		
Remeasurements of retirement benefit plans (net of taxes of \$(7) and \$(18))	19	40
Total other comprehensive income for the year	15	256
Total comprehensive income (loss) for the year	\$ 1,056	\$ (2,228)
Total other comprehensive income attributable to:		
Shareholders of the company	\$ 15	\$ 241
Non-controlling interests	–	15
	\$ 15	\$ 256
Total comprehensive income (loss) attributable to:		
Shareholders of the company	\$ 1,055	\$ (2,233)
Non-controlling interests	1	5
	\$ 1,056	\$ (2,228)

The accompanying notes are an integral part of these financial statements.

Teck Resources Limited

Consolidated Statements of Cash Flows

Years ended December 31

(CAD\$ in millions)	2016	2015
Operating activities		
Profit (loss) for the year	\$ 1,041	\$ (2,484)
Depreciation and amortization	1,385	1,366
Provision for (recovery of) income taxes	587	(836)
Asset impairments	294	3,631
Gain on sale of investments and assets	(96)	(120)
Foreign exchange (gains) losses	(46)	76
Gain on debt repurchase	(49)	–
Gain on debt prepayment options	(113)	–
Finance expense	354	316
Income taxes paid	(272)	(255)
Other	331	54
Net change in non-cash working capital items	(360)	214
	3,056	1,962
Investing activities		
Property, plant and equipment	(1,416)	(1,581)
Capitalized production stripping costs	(477)	(663)
Expenditures on investments and other assets	(114)	(82)
Proceeds from the sale of investments and other assets	170	1,222
	(1,837)	(1,104)
Financing activities		
Issuance of debt	1,567	28
Repayment of debt	(2,560)	(476)
Debt interest and finance charges paid	(571)	(455)
Issuance of Class B subordinate voting shares	8	–
Dividends paid	(58)	(374)
Distributions to non-controlling interests	(21)	(27)
	(1,635)	(1,304)
Effect of exchange rate changes on cash and cash equivalents	(64)	304
Decrease in cash and cash equivalents	(480)	(142)
Cash and cash equivalents at beginning of year	1,887	2,029
Cash and cash equivalents at end of year	\$ 1,407	\$ 1,887

Supplemental cash flow information (Note 9)

The accompanying notes are an integral part of these financial statements.

Teck Resources Limited

Consolidated Balance Sheets

(CAD\$ in millions)	December 31, 2016	December 31, 2015
ASSETS		
Current assets		
Cash and cash equivalents (Note 9)	\$ 1,407	\$ 1,887
Current income taxes receivable	97	183
Trade accounts receivable	1,585	1,115
Inventories (Note 10)	1,673	1,620
	4,762	4,805
Financial and other assets (Note 11)	1,034	858
Investments in associates and joint ventures (Note 12)	1,012	1,017
Property, plant and equipment (Note 13)	27,595	26,791
Deferred income tax assets (Note 17)	112	90
Goodwill (Note 14)	1,114	1,127
	\$ 35,629	\$ 34,688
LIABILITIES AND EQUITY		
Current liabilities		
Trade accounts payable and other liabilities (Note 15)	\$ 1,902	\$ 1,673
Current income taxes payable	199	25
Debt (Note 16)	99	28
	2,200	1,726
Debt (Note 16)	8,244	9,606
Deferred income tax liabilities (Note 17)	4,896	4,828
Deferred consideration (Note 18)	723	785
Retirement benefit liabilities (Note 19)	643	626
Other liabilities and provisions (Note 20)	1,322	480
	18,028	18,051
Equity		
Attributable to shareholders of the company	17,442	16,407
Attributable to non-controlling interests	159	230
	17,601	16,637
	\$ 35,629	\$ 34,688

Contingencies (Note 23)
Commitments (Note 24)
Subsequent event (Note 30)

Approved on behalf of the Board of Directors

Tracey L. McVicar

Tracey L. McVicar

Chair of the Audit Committee

Warren S.R. Seyffert

Warren S.R. Seyffert, Q.C.

Director

The accompanying notes are an integral part of these financial statements.

Teck Resources Limited

Consolidated Statements of Changes in Equity

Years ended December 31

(CAD\$ in millions)	2016	2015
Class A common shares (Note 21)	\$ 7	\$ 7
Class B subordinate voting shares (Note 21)		
Beginning of year	6,627	6,502
Issued on exercise of options	10	1
Reversal of tax provision	–	124
End of year	6,637	6,627
Retained earnings		
Beginning of year	9,174	11,723
Profit (loss) for the year attributable to shareholders of the company	1,040	(2,474)
Dividends declared	(58)	(115)
Gain on purchase of non-controlling interest (Note 22(a))	8	–
Remeasurements of retirement benefit plans	19	40
End of year	10,183	9,174
Contributed surplus		
Beginning of year	173	149
Share option compensation expense (Note 21(c))	22	24
Transfer to Class B subordinate voting shares on exercise of options	(2)	–
End of year	193	173
Accumulated other comprehensive income (loss) (Note 21(e))		
Beginning of year	426	225
Other comprehensive income	15	241
Less remeasurements of retirement benefit plans recorded in retained earnings	(19)	(40)
End of year	422	426
Non-controlling interests (Note 22)		
Beginning of year	230	230
Profit (loss) for the year attributable to non-controlling interests	1	(10)
Other comprehensive income attributable to non-controlling interests	–	15
Purchase of non-controlling interest (Note 22(a))	(46)	–
Other	(5)	22
Dividends or distributions	(21)	(27)
End of year	159	230
Total equity	\$ 17,601	\$ 16,637

The accompanying notes are an integral part of these financial statements.

Notes to Consolidated Financial Statements

Years ended December 31, 2016 and 2015

1. Nature of Operations

Teck Resources Limited and its subsidiaries (Teck, we, us or our) are engaged in mining and related activities including research, exploration and development, processing, smelting, refining and reclamation. Our major products are steelmaking coal, copper, zinc and lead. We also produce precious metals, molybdenum, electrical power, fertilizers and other metals. Metal products are sold as refined metals or concentrates. Our energy assets include a partnership interest in an oil sands development project now under construction and certain oil sands leases.

Teck Resources Limited is a Canadian corporation and our registered office is at 550 Burrard Street, Vancouver, British Columbia, Canada, V6C 0B3.

2. Basis of Preparation and New IFRS Pronouncements

a) Basis of Preparation

These annual consolidated financial statements have been prepared by management in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and were approved by the Board of Directors on February 23, 2017.

b) New IFRS Pronouncements

New IFRS pronouncements that have been issued but are not yet effective are listed below. We plan to apply the new standards or interpretations in the annual period for which they are first required.

Revenue from Contracts with Customers

In May 2014, the IASB issued IFRS 15, Revenue from Contracts with Customers (IFRS 15) as a result of a joint revenue project with the Financial Accounting Standards Board (FASB).

The new revenue standard introduces a single principles-based five-step model for the recognition of revenue when control of goods is transferred to, or a service is performed, for the customer. The five steps are to: identify the contract(s) with the customer, identify the performance obligations in the contract, determine the transaction price, allocate the transaction price, and recognize revenue when the performance obligation is satisfied. IFRS 15 also requires enhanced disclosures about revenue to help investors better understand the nature, amount, timing and uncertainty of revenue and cash flows from contracts with customers.

The standard initially had an effective date of January 1, 2017 but was subsequently deferred by one year to January 1, 2018. Early application of IFRS 15 is still permitted. We are currently assessing the effect of this standard on our financial statements.

Financial Instruments

IFRS 9, Financial Instruments (IFRS 9), addresses the classification, measurement and recognition of financial assets and financial liabilities. The July 2014 publication of IFRS 9 is the completed version of the standard, replacing earlier versions of IFRS 9 and superseding the guidance relating to the classification and measurement of financial instruments in IAS 39, Financial Instruments: Recognition and Measurement (IAS 39).

2. Basis of Preparation and New IFRS Pronouncements (continued)

IFRS 9 requires financial assets to be classified into three measurement categories on initial recognition: those measured at fair value through profit and loss, those measured at fair value through other comprehensive income and those measured at amortized cost. Investments in equity instruments are required to be measured by default at fair value through profit or loss. However, there is an irrevocable option for each equity instrument to present fair value changes in other comprehensive income. Measurement and classification of financial assets is dependent on the entity's business model for managing the financial assets and the contractual cash flow characteristics of the financial asset. For financial liabilities, the standard retains most of the IAS 39 requirements. The main change is that, in cases where the fair value option is taken for financial liabilities, the part of a fair value change relating to an entity's own credit risk is recorded in other comprehensive income rather than the income statement, unless this creates an accounting mismatch.

IFRS 9 introduces a new three-stage expected credit loss model for calculating impairment for financial assets. IFRS 9 no longer requires a triggering event to have occurred before credit losses are recognized. An entity is required to recognize expected credit losses when financial instruments are initially recognized and to update the amount of expected credit losses recognized at each reporting date to reflect changes in the credit risk of the financial instruments. In addition, IFRS 9 requires additional disclosure requirements about expected credit losses and credit risk.

The new hedge accounting model in IFRS 9 aligns hedge accounting with risk management activities undertaken by an entity. Components of both financial and non-financial items will now be eligible for hedge accounting, as long as the risk component can be identified and measured. The hedge accounting model includes eligibility criteria that must be met, but these criteria are based on an economic assessment of the strength of the hedging relationship. New disclosure requirements relating to hedge accounting will be required and are meant to simplify existing disclosures. The IASB currently has a separate project on macro hedging activities and until the project is completed, the IASB has provided a policy choice for entities to either apply the hedge accounting model in IFRS 9 or IAS 39 in full. Additionally, there is a hybrid option to use IAS 39 to account for macro hedges only and to use IFRS 9 for all other hedges.

The completed version of IFRS 9 is effective for annual periods beginning on or after January 1, 2018, with early adoption permitted. We are currently assessing the effect of this standard and its related amendments on our financial statements.

Leases

In January 2016, the IASB issued IFRS 16, Leases (IFRS 16), which eliminates the classification of leases as either operating or finance leases for a lessee. Under IFRS 16, all leases are considered finance leases and will be recorded on the balance sheet. The only exemptions to this classification will be for leases that are 12 months or less in duration or for leases of low-value assets. The requirement to record all leases as finance leases under IFRS 16 will increase lease assets and lease liabilities on an entity's financial statements. IFRS 16 will also change the nature of expenses relating to leases as the straight-line lease expense previously recognized for operating leases will be replaced with depreciation expense for lease assets and finance expense for lease liabilities. IFRS 16 includes an overall disclosure objective and requires a company to disclose (a) information about lease assets and expenses and cash flows related to leases; (b) a maturity analysis of lease liabilities; and (c) any additional company-specific information that is relevant to satisfying the disclosure objective. IFRS 16 is effective from January 1, 2019 and can be applied before that date but only if IFRS 15 is also applied. We are currently assessing the effect of this standard on our financial statements.

3. Summary of Significant Accounting Policies

The significant accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all periods presented, unless otherwise stated.

Basis of Presentation

Our consolidated financial statements include the accounts of Teck Resources Limited and all of its subsidiaries. Our significant operating subsidiaries include Teck Metals Ltd. (TML), Teck Alaska Incorporated (TAK), Teck Highland Valley Copper Partnership (Highland Valley Copper), Teck Coal Partnership (Teck Coal), Teck Washington Incorporated (TWI), Compañía Minera Teck Quebrada Blanca S.A. (Quebrada Blanca) and Compañía Minera Teck Carmen de Andacollo (Carmen de Andacollo).

3. Summary of Significant Accounting Policies (continued)

All subsidiaries are entities that we control, either directly or indirectly. Control is defined as the exposure, or rights, to variable returns from involvement with an investee and the ability to affect those returns through power over the investee. Power over an investee exists when our existing rights give us the ability to direct the activities that significantly affect the investee's returns. This control is generally evidenced through owning more than 50% of the voting rights or currently exercisable potential voting rights of a company's share capital. All of our intra-group balances and transactions, including unrealized profits and losses arising from intra-group transactions, have been eliminated in full. For subsidiaries that we control but do not own 100% of, the net assets and net profit attributable to outside shareholders are presented as amounts attributable to non-controlling interests in the consolidated balance sheet and consolidated statements of income (loss) and comprehensive income (loss).

Certain of our business activities are conducted through joint arrangements. Our interests in joint operations include Galore Creek Partnership (Galore Creek, 50% share), Fort Hills Energy Limited Partnership (Fort Hills, 20% share) and Waneta Dam (66.7% share), which operate in Canada and Compañía Minera Antamina (Antamina, 22.5%), which operates in Peru. We account for our interests in these joint operations by recording our share of the respective assets, liabilities, revenue, expenses and cash flows. We also have an interest in a joint venture, NuevaUnión (50% share), in Chile that we account for using the equity method (Note 12(a)).

All dollar amounts are presented in Canadian dollars unless otherwise specified.

Interests in Joint Arrangements

A joint arrangement can take the form of a joint venture or joint operation. All joint arrangements involve a contractual arrangement that establishes joint control, which exists only when decisions about the activities that significantly affect the returns of the investee require unanimous consent of the parties sharing control. A joint operation is a joint arrangement in which we have rights to the assets and obligations for the liabilities relating to the arrangement. A joint venture is a joint arrangement in which we have rights to only the net assets of the arrangement.

Joint ventures are accounted for in accordance with the policy "Investments in Associates and Joint Ventures". Joint operations are accounted for by recognizing our share of the assets, liabilities, revenue, expenses and cash flows of the joint operation in our consolidated financial statements.

Investments in Associates and Joint Ventures

Investments over which we exercise significant influence but do not control or jointly control are associates. Investments in associates are accounted for using the equity method, except when classified as held for sale. Investments in joint ventures as determined in accordance with the policy "Interests in Joint Arrangements" are also accounted for using the equity method.

The equity method involves recording the initial investment at cost and subsequently adjusting the carrying value of the investment for our proportionate share of the profit or loss, other comprehensive income or loss and any other changes in the associate's or joint venture's net assets such as dividends.

Our proportionate share of the associate's or joint venture's profit or loss and other comprehensive income or loss is based on its most recent financial statements. Adjustments are made to align any inconsistencies between our accounting policies and our associate's or joint venture's policies before applying the equity method. Adjustments are also made to account for depreciable assets based on their fair values at the acquisition date of the investment and for any impairment losses recognized by the associate or joint venture.

If our share of the associate's or joint venture's losses were equal to or exceeded our investment in the associate or joint venture, recognition of further losses would be discontinued. After our interest is reduced to zero, additional losses would be provided for and a liability recognized only to the extent that we have incurred legal or constructive obligations to provide additional funding or make payments on behalf of the associate or joint venture. If the associate or joint venture subsequently reports profits, we resume recognizing our share of those profits only when we have a positive interest in the entity.

At each balance sheet date, we consider whether there is objective evidence of impairment in associates and joint ventures. If there is such evidence, we determine the amount of impairment to record, if any, in relation to the associate or joint venture.

3. Summary of Significant Accounting Policies (continued)

Foreign Currency Translation

The functional currency of each of our subsidiaries and our joint operations, joint ventures and associates is the currency of the primary economic environment in which the entity operates. Transactions in foreign currencies are translated to the functional currency of the entity at the exchange rate in existence at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are retranslated at the period end date exchange rates.

The functional currency of Teck Resources Limited, the parent entity, is the Canadian dollar, which is also the presentation currency of our consolidated financial statements.

Foreign operations are translated from their functional currencies into Canadian dollars on consolidation. Items in the statement of income (loss) are translated using weighted average exchange rates that reasonably approximate the exchange rate at the transaction date. Items in the balance sheet are translated at the closing spot exchange rate. Exchange differences on the translation of the net assets of entities with functional currencies other than the Canadian dollar, and any offsetting exchange differences on net debt used to hedge those assets, are recognized in a separate component of equity through other comprehensive income (loss).

Exchange differences that arise relating to long-term intra-group balances that form part of the net investment in a foreign operation are also recognized in this separate component of equity through other comprehensive income (loss).

On disposition or partial disposition of a foreign operation, the cumulative amount of related exchange differences recorded in a separate component of equity is recognized in the statement of income (loss).

Revenue

Recognition

Sales of product, including by-product, are recognized in revenue when there is persuasive evidence that all of the following criteria have been met: the significant risks and rewards of ownership pass to the customer, neither continuing managerial involvement nor effective control remains over the goods sold, the selling price and costs to sell can be measured reliably, and it is probable that the economic benefits associated with the sale will flow to us. All of these criteria are generally met by the time the significant risks and rewards of ownership pass to the customer. Royalties related to production are recorded in cost of sales.

For sales of steelmaking coal and a majority of sales of metal concentrates, significant risks and rewards of ownership pass to the customer when the product is loaded onto a carrier specified by the customer. We generally retain title to these products until we receive the first contracted payment, solely to protect the collectibility of the amounts due to us, which are typically received shortly after loading. A minority of metal concentrate sales are made on consignment. For these transactions, significant risks and rewards of ownership pass to the customer at the time the product is consumed in the customer's processes.

For sales of refined metal, significant risks and rewards of ownership generally pass to the customer when the product is loaded onto a carrier specified by the customer. For these products, loading generally coincides with the transfer of title.

Pricing agreements

Steelmaking coal is sold under spot, quarterly or annual pricing contracts, and pricing is final when the product is delivered.

The majority of our cathode and metal concentrates are sold under pricing arrangements where final prices are determined by quoted market prices in a period subsequent to the date of sale. For these sales, the price is determined on a provisional basis at the date of sale and revenue is recorded at that time based on current market prices.

3. Summary of Significant Accounting Policies (continued)

Adjustments are made to the customer receivables in subsequent periods based on movements in quoted market prices up to the date of final pricing. As a result, the value of our cathode and concentrate sales receivables changes as the underlying commodity market prices vary and this adjustment mechanism has the characteristics of a derivative. Accordingly, the fair value of the embedded derivative is adjusted each reporting period by reference to forward market prices and the changes in fair value are recorded as an adjustment to other operating income (expense).

Streaming transactions

The treatment of upfront and ongoing payments received from counterparties under streaming arrangements depends on the specific terms of the arrangement. For arrangements we have entered into to date, we consider these transactions to be a disposition of a portion of the associated mineral properties, and therefore do not recognize revenue for payments received under these arrangements. Any deferred consideration recorded for streaming transactions and any ongoing payments received from our streaming transactions are recognized in profit (loss) as a reduction of cost of sales as deliveries are made under the respective streaming transaction.

Financial Instruments

We recognize financial assets and liabilities on the balance sheet when we become a party to the contractual provisions of the instrument.

Cash and cash equivalents

Cash and cash equivalents include cash on account, demand deposits and money market investments with maturities from the date of acquisition of three months or less, which are readily convertible to known amounts of cash and are subject to insignificant changes in value. Cash is classified as loans and receivables. Cash equivalents are classified as available-for-sale.

Trade receivables and payables

Trade receivables and payables are non-interest bearing if paid when due and are recognized at face amount, except when fair value is materially different, and are subsequently measured at amortized cost. Where necessary, trade receivables are net of allowances for uncollectible amounts.

Investments in marketable securities

Investments in marketable securities are classified as available-for-sale and recorded at fair value. Fair values are determined by reference to quoted market prices at the balance sheet date. Unrealized gains and losses on available-for-sale investments are recognized in other comprehensive income until investments are disposed of or when there is objective evidence of an impairment in value. Investment transactions are recognized on the trade date with transaction costs included in the underlying balance.

At each balance sheet date, we assess for any objective evidence of an impairment in value of our investments and record such impairments in non-operating income (expense) for the period. If an impairment of an investment in a marketable equity security has been recorded in profit (loss), that loss cannot be reversed through profit (loss) in future periods prior to sale.

Debt

Debt is initially recorded at fair value, less transaction costs. Debt is subsequently measured at amortized cost, calculated using the effective interest rate method.

3. Summary of Significant Accounting Policies (continued)

Derivative instruments

Derivative instruments, including embedded derivatives, are classified as at fair value through profit or loss and, accordingly, are recorded on the balance sheet at fair value. Unrealized gains and losses on derivatives held for trading are recorded as part of other operating income (expense) or non-operating income (expense) in profit depending on the nature of the derivative. Fair values for derivative instruments are determined using inputs based on market conditions existing at the balance sheet date or settlement date of the derivative. Derivatives embedded in non-derivative contracts are recognized separately unless they are closely related to the host contract.

Hedging

Certain derivative investments may qualify for hedge accounting. For fair value hedges, any gains or losses on both the hedged item and the hedging instrument are recognized in the same line item in profit (loss).

For cash flow hedges, any unrealized gains and losses on the hedging instrument relating to the effective portion of the hedge are initially recorded in other comprehensive income. Gains and losses are recognized in profit (loss) upon settlement of the hedging instrument, when the hedged item ceases to exist, or when the hedge is determined to be ineffective.

For hedges of net investments in foreign operations, any foreign exchange gains or losses on the hedging instrument relating to the effective portion of the hedge are initially recorded in other comprehensive income. Gains and losses are recognized in profit (loss) on the ineffective portion of the hedge, or when there is a disposition or partial disposition of a foreign operation being hedged.

Inventories

Finished products, work in-process, raw materials and supplies inventories are valued at the lower of weighted average cost and net realizable value. Raw materials include concentrates for use at smelting and refining operations. Work in-process inventory includes inventory in the milling, smelting or refining process and stockpiled ore at mining operations.

For work in-process and finished product inventories, cost includes all direct costs incurred in production, including direct labour and materials, freight, depreciation and amortization and directly attributable overhead costs. Production stripping costs that are not capitalized are included in the cost of inventories as incurred. Depreciation and amortization of capitalized production stripping costs are included in the cost of inventory.

When inventories have been written down to net realizable value, we make a new assessment of net realizable value in each subsequent period. If the circumstances that caused the write-down no longer exist, the remaining amount of the write-down is reversed.

We use both joint-product and by-product costing for work in-process and finished product inventories. Joint-product costing is applied where the profitability of the operations is dependent upon the production of a number of primary products. Joint-product costing allocates total production costs based on the relative values of the products. Where by-product costing is used, by-products are allocated only the incremental costs of processes that are specific to the production of that product.

Supplies inventory is valued at the lower of weighted average cost and net realizable value. Cost includes acquisition, freight and other directly attributable costs.

Property, Plant and Equipment

Land, buildings, plant and equipment

Land is recorded at cost and buildings, plant and equipment are recorded at cost less accumulated depreciation and impairment losses. Cost includes the purchase price and the directly attributable costs to bring the assets to the location and condition necessary for them to be capable of operating in the manner intended by management.

3. Summary of Significant Accounting Policies (continued)

Depreciation of mobile equipment, buildings used for production, and plant and processing equipment at our mining operations is calculated on a units-of-production basis. Depreciation of buildings not used for production, and of plant and equipment at our smelting operations is calculated on a straight-line basis over the assets' estimated useful lives. Where components of an asset have different useful lives, depreciation is calculated on each component separately. Depreciation commences when an asset is ready for its intended use. Estimates of remaining useful lives and residual values are reviewed annually. Changes in estimates are accounted for prospectively.

The expected useful lives are as follows:

- Buildings and equipment (not used in production) 2–40 years
- Plant and equipment (smelting operations) 3–30 years

Mineral properties and mine development costs

The cost of acquiring and developing mineral properties or property rights, including pre-production waste rock stripping costs related to mine development and costs incurred during production to increase future output, are capitalized.

Waste rock stripping costs incurred in the production phase of a surface mine are recorded as capitalized production stripping costs within property, plant and equipment when it is probable that the stripping activity will improve access to the orebody when the component of the orebody or pit to which access has been improved can be identified, and when the costs relating to the stripping activity can be measured reliably. When the actual waste-to-ore stripping ratio in a period is greater than the expected life-of-component waste-to-ore stripping ratio for that component, the excess is recorded as capitalized production stripping costs.

Once available for use, mineral properties and mine development costs are depreciated on a units-of-production basis over the proven and probable reserves to which they relate. Since the stripping activity within a component of a mine generally only improves access to the reserves of the same component, capitalized production stripping costs incurred during the production phase of a mine are depreciated on a units-of-production basis over the proven and probable reserves expected to be mined from the same component.

Underground mine development costs are depreciated using the block depreciation method, where development costs associated with each distinct section of the mine are depreciated over the reserves to which they relate.

Exploration and evaluation costs

Property acquisition costs are capitalized. Other exploration and evaluation costs are capitalized if they relate to specific properties for which resources, as defined under National Instrument 43-101, exist or are near a specific property with a defined resource and it is expected that the expenditure can be recovered by future exploitation or sale. All other costs are charged to profit (loss) in the year in which they are incurred. Capitalized exploration and evaluation costs are considered to be tangible assets. These assets are not depreciated as they are not currently available for use. When proven and probable reserves are determined and development is approved, capitalized exploration and evaluation costs are reclassified to mineral properties within property, plant and equipment.

Development costs of oil sands properties

The costs of acquiring, exploring, evaluating and developing oil sands properties are capitalized when it is expected that these costs will be recovered through future exploitation or sale of the property. Capitalized development costs of oil sands properties are tangible assets. These assets are not depreciated as they are not currently available for use. When proven and probable reserves are determined and development is approved, capitalized development costs for oil sands properties are reclassified to mineral properties within property, plant and equipment.

Construction in-progress

Assets in the course of construction are capitalized as construction in-progress. On completion, the cost of construction is transferred to the appropriate category of property, plant and equipment, and depreciation commences when the asset is available for its intended use.

3. Summary of Significant Accounting Policies (continued)

Impairment of non-current assets

The carrying amounts of assets included in property, plant and equipment are reviewed for impairment whenever facts and circumstances indicate that the carrying amounts are less than the recoverable amounts. If there are indicators of impairment, the recoverable amount of the asset is estimated in order to determine the extent of any impairment. Where the asset does not generate cash flows that are independent from other assets, the recoverable amount of the cash-generating unit (CGU) to which the asset belongs is determined. The recoverable amount of an asset or CGU is determined as the higher of its fair value less costs of disposal and its value in use. An impairment loss exists if the asset's or CGU's carrying amount exceeds the recoverable amount, and is recorded as an expense immediately.

Fair value is the price that would be received from selling an asset in an orderly transaction between market participants at the measurement date. Costs of disposal are incremental costs directly attributable to the disposal of an asset. For mining assets, when a binding sale agreement is not readily available, fair value less costs of disposal is estimated using a discounted cash flow approach. Estimated future cash flows are calculated using estimated future commodity prices, mineral reserves and resources, and operating and capital costs. All inputs used are those that an independent market participant would consider appropriate. Value in use is determined as the present value of the future cash flows expected to be derived from continuing use of an asset or CGU in its present form. These estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU for which estimates of future cash flows have not been adjusted.

Indicators of impairment and impairment of exploration and evaluation assets or oil sands development costs are assessed on a project-by-project basis or as part of the existing operation to which they relate.

Tangible assets that have been impaired in prior periods are tested for possible reversal of impairment whenever events or significant changes in circumstances indicate that the impairment has reversed. Indicators of a potential reversal of an impairment loss mainly mirror the indicators present when the impairment was originally recorded. If the impairment has reversed, the carrying amount of the asset is increased to its recoverable amount, but not beyond the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in the prior periods. A reversal of an impairment loss is recognized into profit immediately.

Repairs and maintenance

Repairs and maintenance costs, including shutdown maintenance costs, are charged to expense as incurred, except when these repairs significantly extend the life of an asset or result in a significant operating improvement. In these instances, the portion of these repairs relating to the betterment is capitalized as part of plant and equipment.

Borrowing costs

We capitalize borrowing costs that are directly attributable to the acquisition, construction or production of an asset that takes a substantial period of time to construct or prepare for its intended use. We begin capitalizing borrowing costs when there are general or specific borrowings, expenditures are incurred, and activities are undertaken to prepare the asset for its intended use. The amount of borrowing costs capitalized cannot exceed the actual amount of borrowing costs incurred during the period. All other borrowing costs are expensed as incurred.

We discontinue the capitalization of borrowing costs when substantially all of the activities necessary to prepare the qualifying asset for its intended use or sale are complete. In addition, we cease capitalization of borrowing costs when there is suspension of activities to prepare an asset for its intended use or sale. Capitalization recommences when the activities are restarted. Capitalized borrowing costs are amortized over the useful life of the related asset.

Leased assets

Leased assets from which we receive substantially all of the risks and rewards of ownership of the asset are capitalized as finance leases at the lower of the fair value of the asset or the estimated present value of the minimum lease payments. The corresponding lease obligation is recorded within debt on the balance sheet.

Assets under operating leases are not capitalized, and rental payments are expensed based on the terms of the lease.

3. Summary of Significant Accounting Policies (continued)

Goodwill

We allocate goodwill arising from business combinations to each CGU or group of CGUs that are expected to receive the benefits from the business combination. The carrying amount of the CGU or group of CGUs to which goodwill has been allocated is tested annually for impairment or when there is an indication that the goodwill may be impaired. Any impairment is recognized as an expense immediately. Should there be a recovery in the value of a CGU, any impairment of goodwill previously recorded is not subsequently reversed.

Income Taxes

Taxes, comprising both income taxes and resource taxes, are accounted for as income taxes under IAS 12, Income Taxes and are recognized in the statement of income (loss), except where they relate to items recognized in other comprehensive income (loss) or directly in equity, in which case the related taxes are recognized in other comprehensive income (loss) or equity.

Current taxes receivable or payable are based on estimated taxable income for the current year at the statutory tax rates enacted or substantively enacted less amounts paid or received on account.

Deferred tax assets and liabilities are recognized based on temporary differences (the difference between the tax and accounting values of assets and liabilities) and are calculated using enacted or substantively enacted tax rates for the periods in which the differences are expected to reverse. The effect of tax rate changes is recognized in the period of substantive enactment.

Deferred tax assets are recognized only to the extent that it is probable that future taxable profits of the relevant entity or group of entities in a particular jurisdiction will be available, against which the assets can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences arising on investments in subsidiaries, joint ventures and associates. However, we do not recognize such deferred tax liabilities where the timing of the reversal of the temporary differences can be controlled without affecting our operations or business and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets and liabilities are not recognized if the temporary differences arise from the initial recognition of goodwill or an asset or liability in a transaction, other than in a business combination, which will affect neither accounting profit nor taxable profit.

We are subject to assessments by various taxation authorities, who may interpret tax legislation differently than we do. The final amount of taxes to be paid depends on a number of factors, including the outcomes of audits, appeals or negotiated settlements. We account for such differences based on our best estimate of the probable outcome of these matters.

Employee Benefits

Defined benefit pension plans

Defined benefit pension plan obligations are based on actuarial determinations. The projected unit credit method, which sees each period of service as giving rise to an additional unit of benefit entitlement and measures each unit separately to build up the final obligation, is used to determine the defined benefit obligations, the related current service costs and, where applicable, the past service costs. Actuarial assumptions used in the determination of defined benefit pension plan assets and liabilities are based upon our best estimates, including discount rates, salary escalation, expected health care costs and retirement dates of employees.

Vested and unvested costs arising from past service following the introduction of changes to a defined benefit plan are recognized immediately as an expense when the changes are made.

3. Summary of Significant Accounting Policies (continued)

Actuarial gains and losses can arise from differences between expected and actual outcomes or changes in actuarial assumptions. Actuarial gains and losses, changes in the effect of asset ceiling rules and return on plan assets are collectively referred to as remeasurements of retirement benefit plans and are recognized immediately through other comprehensive income (loss) and directly into retained earnings. Measurement of our net defined benefit asset is limited to the lower of the surplus in the defined benefit plan and the asset ceiling. The asset ceiling is the funded status of the plan on an accounting basis, less the present value of the expected economic benefit available to us in the form of refunds from the plan or reductions in future contributions to the plan.

We apply one discount rate to the net defined benefit asset or liability for the purposes of determining the interest component of the defined benefit cost. This interest component is recorded as part of finance expense. Depending on the classification of the salary of plan members, current service costs and past service costs are included in either operating expenses or general and administration expenses.

Defined contribution pension plans

The cost of providing benefits through defined contribution plans is charged to profit (loss) as the obligation to contribute is incurred.

Non-pension post-retirement plans

We provide health care benefits for certain employees when they retire. Non-pension post-retirement plan obligations are based on actuarial determinations. The cost of these benefits is expensed over the period in which the employees render services. We fund these non-pension post-retirement benefits as they become due.

Termination benefits

We recognize a liability and an expense for termination benefits when we have demonstrably committed to either terminate employees before their normal retirement date or provide termination benefits as a result of an offer made in order to encourage voluntary retirement. We are demonstrably committed to a termination when, and only when, there is a formal plan for the termination with no realistic possibility of withdrawal. The plan should include, at a minimum, the location, function and approximate number of employees whose services are to be terminated, the termination benefits for each job classification or function, and the time at which the plan will be implemented without significant changes.

Share-Based Payments

The fair value method of accounting is used for share-based payment transactions. Under this method, the cost of share options and other equity-settled share-based payment arrangements is recorded based on the estimated fair value at the grant date, including an estimate of the forfeiture rate, and charged to other operating income (expense) over the vesting period. For employees eligible for normal retirement prior to vesting, the expense is charged to other operating income (expense) over the period from the grant date to the date they are eligible for retirement.

Share-based payment expense relating to cash-settled awards, including deferred, restricted and performance share units, is accrued over the vesting period of the units based on the quoted market value of Class B subordinate voting shares. Performance share units have an additional vesting factor determined by our total shareholder return in comparison to a group of specified companies. As these awards will be settled in cash, the expense and liability are adjusted each reporting period for changes in the underlying share price. Our performance share units are also adjusted by the vesting factor relating to our total shareholder return in comparison to the group of specified companies.

Share Repurchases

Where we repurchase any of our equity share capital, the excess of the consideration paid over book value is deducted from contributed surplus and retained earnings on a *pro rata* basis.

3. Summary of Significant Accounting Policies (continued)

Provisions

Decommissioning and restoration provisions

Future obligations to retire an asset and to restore a site, including dismantling, remediation and ongoing treatment and monitoring of the site related to normal operations are initially recognized and recorded as a provision based on estimated future cash flows discounted at a credit-adjusted risk-free rate. This decommissioning and restoration provision is adjusted at each reporting period for changes to factors including the expected amount of cash flows required to discharge the liability, the timing of such cash flows and the discount rate.

The provisions are also accreted to full value over time through periodic charges to profit. This unwinding of the discount is charged to finance expense in the statement of income (loss).

The amount of the decommissioning and restoration provision initially recognized is capitalized as part of the related asset's carrying value. The method of depreciation follows that of the underlying asset. For a closed site or where the asset that generated a decommissioning and restoration provision no longer exists, there is no longer any future benefit related to the costs and, as such, the amounts are expensed through other operating income (expense). For operating sites, a revision in estimates or a new disturbance will result in an adjustment to the provision with an offsetting adjustment to the capitalized asset retirement cost.

During the operating life of an asset, events such as infractions of environmental laws or regulations may occur. These events are not related to the normal operation of the asset. The costs associated with these provisions are accrued and charged to other operating income (expense) in the period in which the event giving rise to the liability occurs. Changes in the estimated liability resulting in an adjustment to the provision are also charged to other operating income (expense) in the period in which the estimate changes.

Other provisions

Provisions are recognized when a present legal or constructive obligation exists as a result of past events, and it is probable that an outflow of resources that can be reliably estimated will be required to settle the obligation. Where the effect is material, the provision is discounted using an appropriate credit-adjusted risk-free rate.

Research and Development

Research costs are expensed as incurred. Development costs are only capitalized when: the product or process is clearly defined; the technical feasibility has been established; the future market for the product or process is clearly defined; and we are committed, and have the resources, to complete the project.

Earnings per Share

Earnings per share is calculated based on the weighted average number of shares outstanding during the year. For diluted earnings per share, dilution is calculated based upon the net number of common shares issued should "in-the-money" options and warrants be exercised and the proceeds be used to repurchase common shares at the average market price in the year.

4. Critical Accounting Estimates and Judgments

In preparing these consolidated financial statements, we make estimates and judgments that affect the amounts recorded. Actual results could differ from our estimates. Our estimates and judgments are based on historical experience and other factors we consider to be reasonable, including expectations of future events. The judgments and other sources of estimation uncertainty that have a risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next year are outlined below.

4. Critical Accounting Estimates and Judgments (continued)

Impairment Testing

Judgment is required in assessing whether certain factors would be considered an indicator of impairment or impairment reversal. We consider both internal and external information to determine whether there is an indicator of impairment or impairment reversal present and, accordingly, whether impairment testing is required. When impairment testing is required, discounted cash flow models are used to determine the recoverable amount of respective assets. These models are prepared internally with assistance from third-party advisors when required. When market transactions for comparable assets are available, these are considered in determining the recoverable amount of assets. Significant assumptions used in preparing discounted cash flow models include commodity prices, reserves and resources, mine plans, operating costs, capital expenditures, discount rates, foreign exchange rates and inflation rates. Notes 13(a) and 14 outline the significant inputs used when performing goodwill and other asset impairment testing. These inputs are based on management's best estimates of what an independent market participant would consider appropriate. Changes in these inputs may alter the results of impairment testing, the amount of the impairment charges or reversals recorded in the statement of income (loss) and the resulting carrying values of assets.

Joint Arrangements

We are a party to a number of arrangements over which we do not have control. Judgment is required in determining whether joint control over these arrangements exists and, if so, which parties have joint control and whether each arrangement is a joint venture or joint operation. In assessing whether we have joint control, we analyse the activities of each arrangement and determine which activities most significantly affect the returns of the arrangement over its life. These activities are determined to be the relevant activities of the arrangement. If unanimous consent is required over the decisions about the relevant activities, the parties whose consent is required would have joint control over the arrangement. The judgments around which activities are considered the relevant activities of the arrangement are subject to analysis by each of the parties to the arrangement and may be interpreted differently. When performing this assessment, we generally consider decisions about activities such as managing the asset while it is being designed, developed and constructed, during its operating life, and during the closure period. We may also consider other activities including the approval of budgets, expansion and disposition of assets, financing, significant operating and capital expenditures, appointment of key management personnel, representation on the board of directors, and other items. When circumstances or contractual terms change, we reassess the control group and the relevant activities of the arrangement.

If we have joint control over the arrangement, an assessment of whether the arrangement is a joint venture or joint operation is required. This assessment is based on whether we have rights to the assets, and obligations for the liabilities, relating to the arrangement or whether we have rights to the net assets of the arrangement. In making this determination, we review the legal form of the arrangement, the terms of the contractual arrangement, and other facts and circumstances. In a situation where the legal form and the terms of the contractual arrangement do not give us rights to the assets and obligations for the liabilities, an assessment of other facts and circumstances is required, including whether the activities of the arrangement are primarily designed for the provision of output to the parties and whether the parties are substantially the only source of cash flows contributing to the arrangement. In such circumstances, we may consider the application of other facts and circumstances to conclude that a joint arrangement is a joint operation. This conclusion requires judgment and is specific to each arrangement. Other facts and circumstances have led us to conclude that Antamina and Fort Hills are joint operations for the purposes of our consolidated financial statements. The other facts and circumstances considered for both of these arrangements are the provisions for output to the parties of the joint arrangements. For both Antamina and Fort Hills, we will take our share of the output from the assets directly over the life of the arrangement. We have concluded that this, combined with other factors, gives us direct rights to the assets and obligations for the liabilities of these arrangements, proportionate to our ownership interests.

4. Critical Accounting Estimates and Judgments (continued)

Streaming Transactions

When we enter into a long-term streaming arrangement linked to production at specific operations, judgment is required in assessing the appropriate accounting treatment of the transaction on the closing date and in future periods. We consider the specific terms of each arrangement to determine whether we have disposed of an interest in the reserves and resources of the respective operation. This assessment considers what the counterparty is entitled to and the associated risks and rewards attributable to them over the life of the operation. These include the contractual terms related to the total production over the life of the arrangement as compared to the expected production over the life of the mine, the percentage being sold, the percentage of payable metals produced, the commodity price referred to in the ongoing payment and any guarantee relating to the upfront payment if production ceases.

As for both of the streaming arrangements entered into in 2015 (Note 13(b) and Note 18), there is no guarantee associated with the upfront payment and we have concluded that we have effectively disposed of the interest in the gold and silver mineral interests at each of these operations over the life of the arrangement. Accordingly, we consider these arrangements a disposition of a mineral interest.

When the ongoing payment we receive is based on future commodity prices at the date deliveries are made, this may be considered an embedded derivative (Note 26(c)). The valuation of embedded derivatives in these arrangements is an area of estimation and is determined using discounted cash flow models. These models require a variety of inputs, including, but not limited to, contractual terms, market prices, forward curve prices, mine plans and discount rates. Changes in these assumptions could affect the carrying value of derivative assets or liabilities and the amount of unrealized gains or losses recognized in other operating income (expense).

Estimated Recoverable Reserves and Resources

Mineral reserve and resource estimates are based on various assumptions relating to operating matters as set forth in National Instrument 43-101, Standards of Disclosure for Mineral Projects. These include production costs, mining and processing recoveries, cut-off grades, long-term commodity prices and, in some cases, exchange rates, inflation rates and capital costs. Cost estimates are based on feasibility study estimates or operating history. Estimates are prepared by appropriately qualified persons, but will be affected by forecasted commodity prices, inflation rates, exchange rates, capital and production costs, and recoveries, among other factors. Estimated recoverable reserves and resources are used to determine the depreciation of property, plant and equipment at operating mine sites, in accounting for capitalized production stripping costs, in performing impairment testing, and in forecasting the timing of the payment of decommissioning and restoration costs. Therefore, changes in the assumptions used could affect the carrying value of assets, depreciation and impairment charges recorded in the statement of income (loss) and the carrying value of the decommissioning and restoration provision.

Decommissioning and Restoration Provisions

The decommissioning and restoration provision is based on future cost estimates using information available at the balance sheet date. The decommissioning and restoration provision is adjusted at each reporting period for changes to factors such as the expected amount of cash flows required to discharge the liability, the timing of such cash flows and the discount rate. The decommissioning and restoration provision requires other significant estimates and assumptions, including the requirements of the relevant legal and regulatory framework and the timing, extent and costs of required decommissioning and restoration activities. To the extent the actual costs differ from these estimates, adjustments will be recorded and the income statement may be affected.

Current and Deferred Taxes

We calculate current and deferred tax provisions for each of the jurisdictions in which we operate. Actual amounts of income tax expense are not final until tax returns are filed and accepted by the relevant authorities. This occurs subsequent to the issuance of our financial statements and the final determination of actual amounts may not be completed for a number of years. Therefore, profit (loss) in subsequent periods will be affected by the amount that estimates differ from the final tax return.

4. Critical Accounting Estimates and Judgments (continued)

Judgment is required in assessing whether deferred tax assets and certain deferred tax liabilities are recognized on the balance sheet and what tax rate is expected to be applied in the year when the related temporary differences reverse, particularly in regard to the utilization of tax loss carry-forwards. We also evaluate the recoverability of deferred tax assets based on an assessment of our ability to use the underlying future tax deductions before they expire against future taxable income. Deferred tax liabilities arising from temporary differences on investments in subsidiaries, joint ventures and associates are recognized unless the reversal of the temporary differences is not expected to occur in the foreseeable future and can be controlled. Assumptions about the generation of future taxable profits and repatriation of retained earnings depend on management's estimates of future production and sales volumes, commodity prices, reserves and resources, operating costs, decommissioning and restoration costs, capital expenditures, dividends and other capital management transactions. Judgment is also required on the application of income tax legislation. These estimates and judgments are subject to risk and uncertainty and could result in an adjustment to the deferred tax provision and a corresponding credit or charge to profit (loss).

5. Expenses by Nature

(CAD\$ in millions)	2016	2015
Wage-related costs:		
Wages and salaries	\$ 858	\$ 913
Employee benefits and other wage-related costs	250	243
Bonus payments	162	125
Post-employment benefits and pension costs	112	94
	1,382	1,375
Transportation	1,270	1,292
Depreciation and amortization	1,385	1,366
Raw material purchases	876	741
Fuel and energy	596	646
Operating supplies consumed	558	596
Maintenance and repair supplies	586	599
Contractors and consultants	427	482
Overhead costs	293	270
Royalties	312	198
Other operating costs	13	76
	7,698	7,641
Less:		
Capitalized production stripping costs	(477)	(663)
Change in inventory	(137)	233
Total cost of sales, general and administration, exploration and research and development expenses	\$ 7,084	\$ 7,211

Approximately 29% (2015 — 28%) of our costs are incurred at our foreign operations where the functional currency is the U.S. dollar.

6. Other Operating Income (Expense)

(CAD\$ in millions)	2016	2015
Settlement pricing adjustments (Note 26(b))	\$ 153	\$ (280)
Share based compensation	(171)	(13)
Environmental and care and maintenance costs	(144)	(49)
Social responsibility and donations	(25)	(10)
Gain on sale of assets	62	74
Gain on formation of NuevaUnión (Note 12(a))	–	37
Commodity derivatives (Note 26(b) and Note 26(c))	32	(12)
Restructuring	(8)	(22)
Take or pay contract costs	(48)	(13)
Other	(48)	(47)
	\$ (197)	\$ (335)

7. Finance Income and Finance Expense

(CAD\$ in millions)	2016	2015
Finance income		
Investment income	\$ 16	\$ 5
Total finance income	\$ 16	\$ 5
Finance expense		
Debt interest	\$ 476	\$ 442
Letters of credit and standby fees	62	20
Net interest expense on retirement benefit plans	14	13
Accretion on decommissioning and restoration provisions (Note 20(a))	55	59
Other	13	4
	620	538
Less capitalized borrowing costs (Note 13(e))	(266)	(222)
Total finance expense	\$ 354	\$ 316

8. Non-Operating Income (Expense)

(CAD\$ in millions)	2016	2015
Foreign exchange gains (losses)	\$ 46	\$ (76)
Provision for marketable securities	(3)	(21)
Gain on debt prepayment options (Note 26(c))	113	–
Gain on sale of investments	34	8
Gain on debt repurchases (Note 16(a) and Note 16(b))	49	–
	\$ 239	\$ (89)

9. Supplemental Cash Flow Information

(CAD\$ in millions)	December 31, 2016	December 31, 2015
Cash and cash equivalents		
Cash	\$ 254	\$ 247
Investments with maturities from the date of acquisition of three months or less	1,153	1,640
	\$ 1,407	\$ 1,887
(CAD\$ in millions)	2016	2015
Net change in non-cash working capital items		
Trade accounts receivable	\$ (480)	\$ 18
Inventories	(86)	242
Trade accounts payable and other liabilities	206	(46)
	\$ (360)	\$ 214
Non-cash financing and investing transactions		
Formation of NuevaUnión (Note 12(a))	\$ —	\$ 486

10. Inventories

(CAD\$ in millions)	December 31, 2016	December 31, 2015
Supplies	\$ 586	\$ 638
Raw materials	204	198
Work in-process	521	432
Finished products	449	408
	1,760	1,676
Less long-term portion (Note 11)	(87)	(56)
	\$ 1,673	\$ 1,620

Cost of sales of \$6.9 billion (2015 — \$7.0 billion) include \$6.3 billion (2015 — \$6.5 billion) of inventories recognized as an expense during the year.

Total inventories held at net realizable value amounted to \$53 million at December 31, 2016 (December 31, 2015 — \$352 million). Total inventory write-downs in 2016 were \$7 million (2015 — \$127 million), and were included as part of cost of sales. Of the \$127 million of inventory write-downs in 2015, \$6 million was included as part of other operating expenses as they related to the closed Duck Pond mine. Total reversals of inventory write-downs previously recorded were \$23 million in 2016 (2015 — \$nil) as a result of an increase in net realizable value primarily relating to commodity price increases. These reversals were included as part of cost of sales.

Long-term inventories consist of ore stockpiles and other in-process materials that are not expected to be processed within one year.

11. Financial and Other Assets

(CAD\$ in millions)	December 31, 2016	December 31, 2015
Long-term receivables and deposits	\$ 241	\$ 221
Available-for-sale marketable equity securities carried at fair value	163	198
Debt prepayment options (Note 26(c))	139	–
Pension plans in a net asset position (Note 19(a))	283	272
Long-term portion of inventories (Note 10)	87	56
Intangibles	74	79
Other	47	32
	\$ 1,034	\$ 858

12. Investments in Associates and Joint Ventures

(CAD\$ in millions)	NuevaUnión (a)	Other	Total
At January 1, 2015	\$ –	\$ 32	\$ 32
Contributions	923	17	940
Changes in foreign exchange rates	36	8	44
Share of losses	–	(2)	(2)
Share of other comprehensive income	–	3	3
At December 31, 2015	\$ 959	\$ 58	\$ 1,017
Contributions	13	8	21
Changes in foreign exchange rates	(28)	(1)	(29)
Share of income	2	–	2
Share of other comprehensive income	–	1	1
At December 31, 2016	\$ 946	\$ 66	\$ 1,012

a) NuevaUnión

On November 24, 2015, we combined our Relincho project and the El Morro project owned by Goldcorp Inc. (Goldcorp) into a single project named NuevaUnión. We accounted for this transaction as a disposition of a subsidiary in exchange for an investment in a joint venture. This was a non-cash transaction (Note 9). We measured the fair value of NuevaUnión using a combination of a discounted cash flow model and a market transaction approach based on management's best estimates of what inputs a market participant would consider appropriate. We applied the requirements of IAS 28, Investments in Associates and Joint Ventures and, accordingly, we recognized a gain of \$37 million on this transaction (Note 6), which is only to the extent of Goldcorp's interest in the joint venture. We did not remeasure our retained interest in Relincho to fair value on closing of the transaction.

13. Property, Plant and Equipment

(CAD\$ in millions)	Exploration and Evaluation	Mineral Properties	Land, Buildings, Plant and Equipment	Capitalized Production Stripping Costs	Construction In-Progress	Total
At December 31, 2014						
Cost	\$ 2,268	\$ 19,561	\$ 12,021	\$ 2,916	\$ 2,977	\$ 39,743
Accumulated depreciation	–	(4,151)	(5,553)	(1,114)	–	(10,818)
Net book value	\$ 2,268	\$ 15,410	\$ 6,468	\$ 1,802	\$ 2,977	\$ 28,925
Year ended December 31, 2015						
Opening net book value	\$ 2,268	\$ 15,410	\$ 6,468	\$ 1,802	\$ 2,977	\$ 28,925
Additions	39	129	374	726	1,048	2,316
Disposals (Note 12(a) and Note 13(b))	(827)	(206)	(12)	–	–	(1,045)
Impairment (a)	–	(1,885)	(10)	–	(1,062)	(2,957)
Depreciation and amortization	–	(404)	(571)	(464)	–	(1,439)
Decommissioning and restoration provision change in estimate	–	(476)	(38)	–	–	(514)
Capitalized borrowing costs	–	80	–	–	142	222
Other	–	(3)	(12)	–	–	(15)
Changes in foreign exchange rates	120	580	435	82	81	1,298
Closing net book value	\$ 1,600	\$ 13,225	\$ 6,634	\$ 2,146	\$ 3,186	\$ 26,791
At December 31, 2015						
Cost	1,600	18,001	13,208	3,761	3,186	39,756
Accumulated depreciation	–	(4,776)	(6,574)	(1,615)	–	(12,965)
Net book value	\$ 1,600	\$ 13,225	\$ 6,634	\$ 2,146	\$ 3,186	\$ 26,791
Year ended December 31, 2016						
Opening net book value	\$ 1,600	\$ 13,225	\$ 6,634	\$ 2,146	\$ 3,186	\$ 26,791
Additions	24	47	173	531	1,112	1,887
Disposals	–	–	(10)	–	–	(10)
Impairment (a)	–	–	(26)	–	(268)	(294)
Depreciation and amortization	–	(356)	(657)	(500)	–	(1,513)
Transfers between classifications	–	–	276	–	(276)	–
Decommissioning and restoration provision change in estimate	–	633	26	–	–	659
Capitalized borrowing costs	–	91	–	–	175	266
Other	(9)	–	(6)	–	–	(15)
Changes in foreign exchange rates	(2)	(78)	(58)	(16)	(22)	(176)
Closing net book value	\$ 1,613	\$ 13,562	\$ 6,352	\$ 2,161	\$ 3,907	\$ 27,595
At December 31, 2016						
Cost	\$ 1,613	\$ 18,667	\$ 13,517	\$ 4,269	\$ 3,907	\$ 41,973
Accumulated depreciation	–	(5,105)	(7,165)	(2,108)	–	(14,378)
Net book value	\$ 1,613	\$ 13,562	\$ 6,352	\$ 2,161	\$ 3,907	\$ 27,595

13. Property, Plant and Equipment (continued)

a) Asset Impairments

Year Ended December 31, 2016

During the year ended December 31, 2016, we recorded asset impairments of \$294 million, of which \$222 million related to the Fort Hills project, \$46 million related to a project at our Trail Operations that will not be completed and \$26 million related to the Wintering Hills Wind Power Facility, which we have entered into an agreement to sell and expect to close in the first quarter of 2017.

As a result of changes in reported reserves and resources at Carmen de Andacollo and an increase in future development costs associated with the Fort Hills project, we performed a detailed review of the recoverable amounts of these CGUs as at December 31, 2016. We estimated the recoverable amount of these CGUs on a fair value less costs of disposal basis (FVLCD) using a discounted cash flow methodology and taking into account assumptions likely to be made by market participants. This is classified as a Level 3 measurement within the fair value measurement hierarchy (Note 27).

We have determined that the estimated recoverable amount of Carmen de Andacollo exceeded its carrying value as at December 31, 2016 and accordingly, no impairment charge was recorded.

We have estimated a post-tax recoverable amount for Fort Hills of \$2.52 billion, which was lower than the carrying value as at December 31, 2016. Accordingly, we have recorded a pre-tax impairment of our property, plant and equipment through profit (loss) of \$222 million (post-tax \$164 million). This affects the profit (loss) of our Energy segment (Note 25).

Cash flow projections were based on current life of mine plans and exploration potential for both CGUs. For Carmen de Andacollo, the cash flows cover a period of 44 years. Fort Hills cash flows cover a period of 44 years.

The key inputs used to estimate the FVLCD of Carmen de Andacollo and Fort Hills as at December 31, 2016 were derived in the same manner as those inputs used in our 2016 goodwill impairment testing as outlined in Note 14 and include the following:

Commodity Prices

For copper and Western Canadian Select (WCS) oil prices, we used the current price in the initial year and gradually escalated that over the following three years, reaching real long-term prices in 2021 of US\$3.00 per pound and US\$57 per barrel for WCS oil.

Discount Rates

A 6.0% real, 8.1% nominal post-tax discount rate was used to discount cash flow projections for Carmen de Andacollo based on a mining weighted average cost of capital. A 5.5% real, 7.6% nominal post-tax discount rate was used to discount cash flow projections for the Fort Hills project based on an oils sands weighted average cost of capital.

Foreign Exchange Rates

The long-term Canadian-U.S. dollar foreign exchange rate assumption used from 2021 onwards was 1 U.S. dollar to 1.25 Canadian dollars.

Inflation Rates

The inflation rate for all FVLCD calculations was 2%.

Sensitivity Analysis

We noted impairment indicators at Carmen de Andacollo and Fort Hills and the recoverable amounts of the associated CGUs have been estimated. The recoverable amount of Carmen de Andacollo exceeded its carrying value and we did not record an impairment charge. We have adjusted the carrying value of Fort Hills down to its recoverable amount as at December 31, 2016.

13. Property, Plant and Equipment (continued)

These recoverable amounts are most sensitive to changes in long-term copper and WCS oil prices, the Canadian-U.S. dollar exchange rates (for Fort Hills) and discount rates. The key inputs used in our determination of recoverable amounts interrelate significantly with each other and with our operating plans. For example, a decrease in long-term commodity prices would result in us making amendments to the mine plans that would partially offset the effect of lower prices through lower operating and capital costs. It is difficult to determine how all of these factors would interrelate, but in estimating the effect of changes in these assumptions on fair values, we believe that all of these factors need to be considered together. A linear extrapolation of these effects becomes less meaningful as the change in assumption increases.

Fort Hills has been written down to its recoverable amount. Ignoring the above described interrelationships, in isolation a US\$1 decrease in the long-term WCS oil price would result in an additional reduction in the recoverable amount of \$120 million. A \$0.01 strengthening of the Canadian dollar against the U.S. dollar would result in an additional reduction in the recoverable amount of \$42 million. A 25 basis point increase in the discount rate would result in an additional reduction in the recoverable amount of approximately \$120 million.

Carmen de Andacollo was written down to its recoverable amount as at December 31, 2015 and the estimated recoverable amount has not changed significantly since that date. Accordingly, the recoverable amount is sensitive to any change in the long-term copper price assumption or discount rate. Ignoring the above described interrelationships, in isolation a US\$0.01 decrease in the long-term copper price and a 25 basis point increase in the discount rate would result in a reduction in the recoverable amount of approximately \$13 million and \$19 million, respectively.

Year Ended December 31, 2015

In light of economic conditions in the third and fourth quarters of 2015, we identified CGUs with carrying values that exceeded the estimated recoverable amounts and recorded impairments. The FVLCD was estimated using a discounted cash flow methodology taking into account assumptions likely to be made by market participants, which is classified as a Level 3 estimate within the fair value measurement hierarchy (Note 27).

The impairment charges recorded during the year ended December 31, 2015 in each reportable segment are as follows:

Reportable Segment	Steelmaking Coal	Copper	Zinc	Energy	
Cash-generating unit	Steelmaking Coal Assets CGU	Carmen de Andacollo	Pend Oreille	Fort Hills	
Nature of the asset	Steelmaking Coal Mines in Canada	Copper Mine in Chile	Zinc Mine in U.S.	Oil Sands in Canada	
(CAD\$ in millions)					
Post-tax recoverable amount	\$ 9,969	\$ 954	\$ 49	\$ 1,786	
Post-tax impairment of property, plant and equipment	\$ 981	\$ 231	\$ 19	\$ 785	
Post-tax impairment of goodwill (Note 14)	501	174	–	–	
Total post-tax impairment	\$ 1,482	\$ 405	\$ 19	\$ 785	
(CAD\$ in millions)	Steelmaking Coal Assets CGU	Carmen de Andacollo	Pend Oreille	Fort Hills	Total
Impairment recorded in profit (loss)	\$ 2,032	\$ 506	\$ 31	\$ 1,062	\$ 3,631
Less tax effect — recovery	(550)	(101)	(12)	(277)	(940)
Post-tax impairment recorded in profit (loss)	\$ 1,482	\$ 405	\$ 19	\$ 785	\$ 2,691

13. Property, Plant and Equipment (continued)

The key inputs used to estimate the FVLCD of each CGU as at December 31, 2015, when indicators were identified, were derived in the same manner as those inputs used in our 2016 goodwill impairment testing as outlined in Note 14 and include the following:

Commodity Prices

For steelmaking coal, copper, zinc and WCS oil prices, we used the 2015 current price in the initial year and gradually escalated that over the following three years, reaching real long-term prices in 2020 of US\$130 per tonne for steelmaking coal, US\$3.00 per pound for copper, US\$1.00 per pound for zinc and US\$60 per barrel for WCS oil.

Discount Rates

A 6.2% real, 8.3% nominal post-tax discount rate was used to discount cash flow projections for all of our FVLCD discounted cash flow models as at December 31, 2015.

Foreign Exchange Rates

The long-term Canadian-U.S. dollar foreign exchange rate assumption used from 2020 onwards was 1 U.S. dollar to 1.25 Canadian dollars.

Inflation Rates

The inflation rate for all FVLCD calculations was 2%.

b) Gold Stream Agreement

In 2015, Carmen de Andacollo sold an interest in gold reserves and resources from the Carmen de Andacollo mine (Andacollo mine) to RGLD Gold AG (RGLDAG), a wholly owned subsidiary of Royal Gold, Inc. Under the terms of the agreement, RGLDAG is entitled to an amount of gold equal to 100% of the payable gold produced from the Andacollo mine until 900,000 ounces have been delivered, and 50% thereafter. RGLDAG pays a cash price of 15% of the monthly average gold price at the time of each delivery. Carmen de Andacollo and Royal Gold Chile Limitada, a wholly owned subsidiary of Royal Gold, Inc., terminated an earlier agreement entered into in 2010. Under the terminated agreement, Royal Gold Chile Limitada was entitled to a payment based on 75% of payable gold produced from Andacollo mine until 910,000 ounces had been delivered, and 50% thereafter.

We received cash proceeds of \$206 million (US\$162 million) as a result of Carmen de Andacollo entering into the new agreement and terminating the separate agreement from 2010. We recorded the transaction on a net basis as a sale of an incremental mineral property interest, and the net consideration was accounted for as a recovery of mineral property costs. Accordingly, no gain or loss was recognized on the transaction. We account for the 15% ongoing payment as a reduction of our cost of sales and not as revenue, as we consider it to be payment for the mineral interest and mining and refining services. The 15% ongoing payment contains an embedded derivative relating to the gold price that is marked to market each period with changes flowing through profit (loss) (Note 26(c)).

c) Exploration and Evaluation

Significant exploration and evaluation projects include Galore Creek and oil sands properties.

d) Finance Leases

The carrying value of property, plant and equipment held under finance lease at December 31, 2016 is \$220 million (2015 — \$166 million). Ownership of leased assets remains with the lessor.

13. Property, Plant and Equipment (continued)

e) Borrowing Costs

Borrowing costs are capitalized at a rate based on our weighted average cost of borrowing or at the rate on the project-specific debt, as applicable. These projects are shown as part of mineral properties and leases, land, buildings, plant and equipment, or construction in-progress. Our weighted average borrowing rate used for capitalization of borrowing costs in 2016 was 5.7% (2015 — 5.0%).

14. Goodwill

(CAD\$ in millions)	Steelmaking Coal Operations	Quebrada Blanca	Carmen de Andacollo	Total
January 1, 2015	\$ 1,203	\$ 356	\$ 151	\$ 1,710
Changes in foreign exchange rates	–	69	23	92
Impairment (Note 13(a))	(501)	–	(174)	(675)
December 31, 2015	\$ 702	\$ 425	\$ –	\$ 1,127
Changes in foreign exchange rates	–	(13)	–	(13)
December 31, 2016	\$ 702	\$ 412	\$ –	\$ 1,114

The allocation of goodwill to CGUs or groups of CGUs reflects how goodwill is monitored for internal management purposes.

In the third and fourth quarters of 2015, in light of market conditions, we recorded goodwill impairment of \$675 million. The key inputs used in determining the impairments in 2015 were determined on a basis consistent with those outlined below and are summarized in Note 13(a).

In 2016, we performed our annual goodwill impairment testing at October 31 and did not identify any impairment losses. The recoverable amounts for our goodwill impairment testing were determined based on a FVLCD approach. The FVLCD was calculated using a discounted cash flow methodology taking account of assumptions that would be made by market participants.

Cash flow projections are based on expected mine life. For our steelmaking coal operations, the cash flows cover periods of 16 to 45 years with a steady state thereafter until reserves and resources are exhausted. For Quebrada Blanca, the cash flows cover a period of 25 years, with a steady state thereafter until reserves and resources are exhausted.

Given the nature of expected future cash flows used to determine the recoverable amount, a material change could occur over time as the cash flows are significantly affected by the key assumptions described below.

The key inputs, where applicable, used to estimate the FVLCD were determined as follows:

Commodity Prices

Commodity price assumptions are based on a number of factors, including forward curves in the near term, and are benchmarked with external sources of information, including information published by our peers and market transactions, where possible, to ensure they are within the range of values used by market participants.

For steelmaking coal, we used the current price in the initial year and gradually de-escalated the price, reaching a real long-term price in 2021 of US\$130 per tonne. For copper, we used the current price in the initial year and gradually escalated the price, reaching a real long-term price in 2021 of US\$3.00 per pound.

Reserves and Resources

Future mineral production is included in projected cash flows based on mineral reserve and resource estimates and on exploration and evaluation work undertaken by appropriately qualified persons.

14. Goodwill (continued)

Operating Costs and Capital Expenditures

Operating costs and capital expenditures are based on life of mine plans and internal management forecasts. Cost estimates incorporate management experience and expertise, current operating costs, the nature and location of each operation, and the risks associated with each operation. Future capital expenditures are based on management's best estimate of expected future capital requirements, which are generally for the extraction and processing of existing reserves and resources. All committed and anticipated capital expenditures based on future cost estimates have been included in the projected cash flows. Operating cost and capital expenditure assumptions are continuously subjected to ongoing optimization and review by management.

Discount Rates

A 5.8% real, 7.9% nominal post-tax discount rate was used to discount cash flow projections for our goodwill FVLCD discounted cash flow models.

Foreign Exchange Rates

Foreign exchange rates are benchmarked with external sources of information based on a range used by market participants. The long-term Canadian-U.S. dollar foreign exchange assumption used from 2021 onwards was 1 U.S. dollar to 1.25 Canadian dollars.

Inflation Rates

Inflation rates are based on average historical inflation for the location of each operation and long-term government targets. The inflation rate for all FVLCD calculations was 2%.

Sensitivity Analysis

Our annual goodwill impairment test carried out as at October 31, 2016 resulted in the recoverable amount of Teck Coal exceeding its carrying value by approximately \$4.9 billion. The recoverable amount of Teck Coal is most sensitive to the long-term Canadian dollar steelmaking coal price assumption. In isolation, an 11% decrease in the long-term Canadian dollar steelmaking coal price would result in the recoverable amount of Teck Coal being equal to the carrying value.

The recoverable amount of Quebrada Blanca exceeded the carrying amount at the date of our annual goodwill impairment test and significant changes to key inputs would be required to result in the recoverable amount being equal to the carrying value.

15. Trade Accounts Payable and Other Liabilities

(CAD\$ in millions)	December 31, 2016	December 31, 2015
Trade accounts payable and accruals	\$ 986	\$ 810
Capital project accruals	142	222
Payroll-related liabilities	252	206
Accrued interest	148	179
Commercial and government royalties	246	129
Customer deposits	18	31
Current portion of provisions (Note 20(a))	71	58
Current portion of deferred consideration (Note 18)	32	31
Other	7	7
	\$ 1,902	\$ 1,673

16. Debt

(CAD\$ in millions)	December 31, 2016		December 31, 2015	
	Carrying Value	Fair Value	Carrying Value	Fair Value
3.15% notes due January 2017 (US\$34 million) (b)	\$ 45	\$ 45	\$ 415	\$ 380
3.85% notes due August 2017 (US\$16 million) (b)	21	21	413	354
2.5% notes due February 2018 (US\$22 million) (b)	30	30	689	534
3.0% notes due March 2019 (US\$278 million) (b)	372	375	689	431
4.5% notes due January 2021 (US\$500 million)	668	685	688	364
8.0% notes due June 2021 (US\$650 million) (b)	866	963	–	–
4.75% notes due January 2022 (US\$700 million)	936	951	964	474
3.75% notes due February 2023 (US\$670 million) (a)	891	858	1,026	496
8.5% notes due June 2024 (US\$600 million) (b)	806	935	–	–
6.125% notes due October 2035 (US\$609 million) (a)	804	801	952	440
6.0% notes due August 2040 (US\$491 million) (a)	658	623	895	386
6.25% notes due July 2041 (US\$795 million) (a)	1,055	1,043	1,368	623
5.2% notes due March 2042 (US\$399 million) (a)	528	477	682	300
5.4% notes due February 2043 (US\$377 million) (a)	500	450	684	340
Antamina term loan due April 2020 (c)	30	30	31	31
Other	133	133	138	138
	8,343	8,420	9,634	5,291
Less current portion of debt	(99)	(99)	(28)	(28)
	\$ 8,244	\$ 8,321	\$ 9,606	\$ 5,263

The fair values of debt are determined using market values, if available, and using discounted cash flows based on our cost of borrowing where market values are not available. The latter are considered Level 2 fair value measurements with significant other observable inputs on the fair value hierarchy (Note 27).

a) Note Purchases

In September and October 2016, we purchased US\$759 million aggregate principal amount of our outstanding notes through private and open market purchases. The principal amount of notes purchased was US\$80 million of 3.75% notes due 2023, US\$91 million of 6.125% notes due 2035, US\$159 million of 6.00% notes due 2040, US\$205 million of 6.25% notes due 2041, US\$101 million of 5.20% notes due 2042 and US\$123 million of 5.40% notes due 2043. The total cost of the purchases was US\$693 million. We recorded a pre-tax accounting gain of \$76 million (after-tax \$67 million) in non-operating income (expense) (Note 8) in connection with these purchases for the year ended December 31, 2016. All private and open market purchases of our outstanding notes during 2016 were funded from cash on hand.

16. Debt (continued)

b) Notes Issued and Cash Tender Offers

In June 2016, we issued US\$650 million of senior unsecured notes due June 2021 (June 2021 notes) and US\$600 million of senior unsecured notes due June 2024 (2024 notes). The June 2021 notes have a coupon of 8.00% per annum and an effective interest rate, after taking into account issuance costs and the prepayment option value, of 8.22%. These notes were issued at par value and are callable on or after June 1, 2018 at predefined prices based on the date of redemption. Prior to June 1, 2018, the June 2021 notes can be redeemed, in whole or in part, at a redemption price equal to the principal amount plus accrued interest to, but not including, the date of redemption and a make-whole call premium. The 2024 notes have a coupon of 8.50% per annum and an effective interest rate, after taking into account issuance costs and the prepayment option value, of 8.49%. These notes were issued at par value and are callable on or after June 1, 2019 at predefined prices based on the date of redemption. Prior to June 1, 2019, the 2024 notes can be redeemed, in whole or in part, at a redemption price equal to the principal amount plus accrued interest to, but not including, the date of redemption and a make-whole call premium. Our obligations under these notes are guaranteed on a senior unsecured basis by TML, Teck Coal, Teck South American Holdings Ltd. (formerly Teck Financial Corporation Ltd.), TCL U.S. Holdings Ltd., TAK and Highland Valley Copper, each a wholly owned subsidiary of Teck. The 2016 indenture limits the aggregate amount of additional indebtedness for borrowed money that the subsidiary guarantors may guarantee or otherwise incur to 10% of consolidated net tangible assets, subject to certain specified exceptions.

Net proceeds from these issuances, after underwriting and issuance costs, were US\$1.227 billion. We used these proceeds and cash on hand to purchase US\$1.25 billion aggregate principal amount of our outstanding notes pursuant to cash tender offers. The principal amount of notes purchased pursuant to the tender offers was US\$266 million of 3.15% notes due 2017, US\$284 million of 3.85% notes due 2017, US\$478 million of 2.50% notes due 2018 and US\$222 million of 3.00% notes due 2019. The total cost of the purchases, including the premium for the purchase, was US\$1.267 billion. We recorded a pre-tax accounting charge of \$27 million (after-tax \$23 million) in non-operating income (expense) on these transactions (Note 8) during the year ended December 31, 2016.

The June 2021 notes and 2024 notes include prepayment options that are considered to be embedded derivatives (Note 26(c)).

c) Antamina Term Loan

The Antamina term loan is our proportionate share of Antamina's U.S. dollar denominated term loan, with full repayment due at maturity in April 2020. The Antamina term loan is the obligation of Antamina and is non-recourse to us and the other Antamina project sponsors. The term loan bears interest with reference to the London Interbank Offered Rate (LIBOR) plus an applicable margin.

d) Optional Redemptions

All of our outstanding notes, except the June 2021 notes and 2024 notes, are redeemable at any time by repaying the greater of the principal amount and the present value of the sum of the remaining scheduled principal and interest amounts discounted at a comparable treasury yield plus a stipulated spread, plus, in each case, accrued interest to, but not including, the date of redemption. In addition, the 2023, 2042 and 2043 notes issued in 2012 are callable at 100% (plus accrued interest to, but not including, the date of redemption) at any time on or after November 1, 2022, September 1, 2041, and August 1, 2042, respectively. The 2022 and 2041 notes issued in 2011 are callable at 100% at any time on or after October 15, 2021, and January 15, 2041, respectively. The January 2021 notes are callable at 100% on or after October 15, 2020, and the 2040 notes are callable at 100% on or after February 15, 2040. The June 2021 notes and 2024 notes issued during the year ended December 31, 2016 can be redeemed as described in (b).

e) Revolving Facilities

At December 31, 2016, we had two committed revolving credit facilities in the amounts of US\$3.0 billion and US\$1.2 billion, respectively. The US\$3.0 billion facility is available until July 2020, includes a letter of credit sub-limit of US\$1.0 billion and is undrawn at December 31, 2016. The US\$1.2 billion facility can be fully drawn for cash or letters of credit, and has an aggregate of US\$981 million in outstanding letters of credit at December 31, 2016.

16. Debt (continued)

In June 2016, we made certain amendments to the terms of our US\$1.2 billion credit facility, including an extension of the maturity date from June 2017 to June 2019. Lenders holding aggregate commitments of US\$200 million declined to extend at that time. In connection with the extension, Teck agreed to provide subsidiary guarantees for the benefit of the credit facility and as a result our obligations under this agreement are guaranteed on a senior unsecured basis by TML, Teck Coal, Teck South American Holdings Ltd. (formerly Teck Financial Corporation Ltd.), TCL U.S. Holdings Ltd., TAK and Highland Valley Copper, each a wholly owned subsidiary of Teck. The amended credit facility contains covenants in addition to those contained in the original facility, including restrictions on new liens and guaranteed indebtedness. In December 2016, an aggregate of US\$140 million of the US\$200 million non-extending commitments were assigned to new lenders who agreed to extend the maturity of the assigned commitments to June 2019. As a result, the size of the facility will reduce to US\$1.14 billion in June 2017.

The amended US\$1.2 billion facility includes restrictions regarding the amount of secured debt and guaranteed debt that Teck may issue. The maximum amount of secured debt that Teck and the guarantor subsidiaries may incur without securing the credit facility is equal to 4% of Teck's consolidated net tangible assets, or US\$1 billion, whichever is greater. The maximum amount of debt (including secured debt) permitted to be guaranteed or incurred by the guarantor subsidiaries and other material subsidiaries (not including subsidiaries organized in Chile) is equal to 9% of Teck's consolidated net tangible assets, or US\$2.25 billion, whichever is greater. There are specific exemptions to each of the restrictions. Teck is also subject to covenants regarding asset sales and future subsidiary guarantors.

Teck has provided the same subsidiary guarantees noted above to our obligations under the US\$3.0 billion credit facility maturing July 2020, our uncommitted credit facilities and certain hedging lines. At December 31, 2016, Teck's consolidated net tangible assets were \$32 billion (US\$24 billion).

Any amounts drawn under the committed revolving credit facilities can be repaid at any time and are due in full at maturity. Amounts outstanding under the US\$3.0 billion facility bear interest at LIBOR plus an applicable margin based on our credit ratings, which is 225 basis points when our credit ratings are below investment grade. Amounts outstanding under the US\$1.2 billion facility bear interest at LIBOR plus an applicable margin based on our leverage ratio. Based on our December 31, 2016 leverage ratio, the applicable margin is 275 basis points. Both facilities require that our total debt-to-capitalization ratio, which was 0.32 to 1.0 at December 31, 2016, not exceed 0.5 to 1.0.

As a result of the loss of our investment grade ratings, we have been required to deliver letters of credit to satisfy financial security requirements under power purchase contracts at Quebrada Blanca and transportation, tank storage and pipeline capacity agreements for our interest in Fort Hills. At December 31, 2016, we had an aggregate of US\$869 million in outstanding letters of credit for these contracts, of which US\$672 relates to the Quebrada Blanca power purchase contracts. These letters of credit will be terminated if and when we regain investment grade ratings or reduced if and when certain project milestones are reached.

We also maintain uncommitted bilateral credit facilities primarily for the issuance of letters of credit to support our future reclamation obligations. As at December 31, 2016, we were party to various uncommitted credit facilities providing for a total of \$1.4 billion of capacity and the aggregate outstanding letters of credit issued thereunder were \$1.1 billion. In addition to the letters of credit outstanding under these uncommitted credit facilities, we also had stand-alone letters of credit of \$261 million outstanding at December 31, 2016, which were not issued under a credit facility. These uncommitted credit facilities and stand-alone letters of credit are typically renewed on an annual basis. From time to time, at our election, we may reduce the fees paid to banks issuing letters of credit by making short-term deposits of excess cash with those banks. The deposits earn a market rate of interest and are generally refundable on demand. At December 31, 2016, we had \$555 million (2015 — \$732 million) of such deposits.

In November 2016, we established \$250 million in surety bond capacity to support current and future reclamation obligations. At December 31, 2016, an aggregate of \$214 million in surety bonds were outstanding thereunder.

16. Debt (continued)

f) Scheduled Principal Payments

At December 31, 2016, the scheduled principal payments during the next five years and thereafter are as follows:

(\$ in millions)	US\$	CAD\$ Equivalent
2017	\$ 49	\$ 66
2018	22	30
2019	278	374
2020	23	30
2021	1,150	1,544
Thereafter	4,654	6,249
	\$ 6,176	\$ 8,293

g) Debt Continuity

(\$ in millions)	US\$		CAD\$ Equivalent	
	2016	2015	2016	2015
As at January 1	\$ 6,961	\$ 7,276	\$ 9,634	\$ 8,441
Cash flows				
Issuance of debt	1,227	23	1,567	28
Scheduled debt repayments	(22)	(363)	(29)	(476)
Debt repurchases	(1,960)	–	(2,531)	–
Non-cash changes				
Changes in foreign exchange rates	–	–	(308)	1,609
Other	7	25	10	32
As at December 31	\$ 6,213	\$ 6,961	\$ 8,343	\$ 9,634

17. Income Taxes

a) Provision for Income Taxes

(CAD\$ in millions)	2016	2015
Current		
Current taxes on profits for the year	\$ 551	\$ 161
Adjustments for current taxes of prior periods	(14)	(5)
Total current taxes	\$ 537	\$ 156
Deferred		
Origination and reversal of temporary differences	\$ 42	\$ (1,103)
Adjustments to deferred taxes of prior periods	(2)	23
Tax losses not recognized (recognition of previously unrecognized losses)	(10)	76
Effect of newly enacted change in tax rates	20	12
Total deferred taxes	\$ 50	\$ (992)
	\$ 587	\$ (836)

17. Income Taxes (continued)

- b) Reconciliation of income taxes calculated at the Canadian statutory income tax rate to the actual provision for income taxes is as follows:

(CAD\$ in millions)	2016	2015
Tax (recovery) expense at the Canadian statutory income tax rate of 26.10% (2015 — 26.04%)	\$ 425	\$ (865)
Tax effect of:		
Resource taxes	170	55
Resource and depletion allowances	(110)	(76)
Non-temporary differences including one-half of capital gains and losses	(15)	42
Tax pools not recognized (recognition of previously unrecognized tax pools)	(10)	76
Effect of newly enacted change in tax rates	20	12
Withholding taxes	40	(76)
Difference in tax rates in foreign jurisdictions	90	46
Tax settlements	–	10
Revisions to prior year estimates	(5)	(15)
Other	(18)	(45)
	\$ 587	\$ (836)

The Canadian statutory tax rate increased to 26.10% due to an updated provincial allocation.

- c) The analysis of deferred tax assets and deferred tax liabilities is as follows:

(CAD\$ in millions)	December 31, 2016	December 31, 2015
Deferred tax assets		
Expected to be reversed after more than a year	\$ 106	\$ 90
Expected to be reversed within a year	6	–
	\$ 112	\$ 90
Deferred tax liabilities		
Expected to be reversed after more than a year	\$ 5,318	\$ 4,727
Expected to be reversed within a year	(422)	101
	\$ 4,896	\$ 4,828
Net deferred tax liabilities	\$ 4,784	\$ 4,738

- d) The amount of deferred tax expense charged (credited) to the income statement is as follows:

(CAD\$ in millions)	2016	2015
Net operating loss carryforwards	\$ (154)	\$ 289
Capital allowances in excess of depreciation	311	(868)
Decommissioning and restoration provisions	(212)	88
Amounts relating to phase-out of partnership deferrals	–	(288)
Unrealized foreign exchange losses	113	(203)
Withholding taxes	4	(76)
Retirement benefit plans	2	17
Other temporary differences	(14)	49
	\$ 50	\$ (992)

17. Income Taxes (continued)

e) Temporary differences giving rise to deferred income tax assets and liabilities are as follows:

(CAD\$ in millions)	December 31, 2016	December 31, 2015
Net operating loss carryforwards	\$ 32	\$ 17
Property, plant and equipment	35	29
Other temporary differences	45	44
Deferred income tax assets	\$ 112	\$ 90
Net operating loss carryforwards	\$ (1,218)	\$ (1,085)
Property, plant and equipment	6,881	6,583
Decommissioning and restoration provisions	(439)	(227)
Unrealized foreign exchange	(224)	(337)
Withholding taxes	89	86
Retirement benefit plans	(92)	(94)
Other temporary differences	(101)	(98)
Deferred income tax liabilities	\$ 4,896	\$ 4,828

f) The general movement in the net deferred income taxes account is as follows:

(CAD\$ in millions)	2016	2015
As at January 1	\$ 4,738	\$ 5,730
Income statement change	50	(992)
Amounts recognized in equity	6	(124)
Tax charge relating to components of other comprehensive income	37	(145)
Foreign exchange and other differences	(47)	269
As at December 31	\$ 4,784	\$ 4,738

g) Deferred Tax Liabilities Not Recognized

Deferred tax liabilities of \$604 million (2015 — \$610 million) have not been recognized on the unremitted earnings associated with investments in subsidiaries and interests in joint arrangements where we are in a position to control the timing of the reversal of the temporary differences and it is probable that such differences will not reverse in the foreseeable future.

h) Loss Carryforwards and Canadian Development Expenses

At December 31, 2016, we had \$4.57 billion of Canadian federal net operating loss carryforwards (2015 — \$4.32 billion). These loss carryforwards expire at various dates between 2027 and 2036. We have \$1.33 billion of cumulative Canadian development expenses at December 31, 2016 (2015 — \$1.77 billion), which are deductible for income tax purposes on a declining balance basis at a maximum rate of 30% per year. The deferred tax benefits of these pools have been recognized. In addition, we have \$99 million of Canadian federal investment tax credits that expire at various dates between 2020 and 2036.

17. Income Taxes (continued)

i) Deferred Tax Assets Not Recognized

We have not recognized \$270 million (2015 — \$283 million) of deferred tax assets associated with unused tax credits and tax pools in entities and jurisdictions that do not have established sources of taxable income.

18. Deferred Consideration

In 2015, we entered into a long-term streaming agreement with a subsidiary of Franco-Nevada Corporation (Franco-Nevada) linked to our share of silver production at the Antamina mine.

We received a payment of \$789 million (US\$610 million) from Franco-Nevada on closing of the transaction and we receive 5% of the spot price at the time of delivery for each ounce of silver delivered under the agreement. We deliver silver to Franco-Nevada equivalent to 22.5% of payable silver sold by Antamina, which represents our proportionate share of silver produced by Antamina. In the event that 86 million ounces of silver has been delivered under the agreement, the stream will be reduced by one-third to 15% of payable silver sold by Antamina.

Antamina is not a party to the agreement with Franco-Nevada and our rights as a shareholder of Antamina are unaffected by the agreement.

The following table summarizes the movements in deferred consideration for the years ended December 31, 2016 and 2015:

(CAD\$ in millions)	2016	2015
As at January 1	\$ 816	\$ —
Additions	—	789
Recognized in profit (loss)	(36)	(22)
Changes in foreign exchange rates	(25)	49
As at December 31	\$ 755	\$ 816
Less current portion of deferred consideration (Note 15)	(32)	(31)
Long-term deferred consideration	\$ 723	\$ 785

19. Retirement Benefit Plans

We have defined contribution pension plans for certain groups of employees. Our share of contributions to these plans is expensed in the year earned by employees.

We have multiple defined benefit pension plans registered in various jurisdictions that provide benefits based principally on employees' years of service and average annual remuneration. These plans are only available to certain qualifying employees and some are now closed to additional employees. The plans are "flat-benefit" or "final-pay" plans and may provide for inflationary increases in accordance with certain plan provisions. All of our registered defined benefit pension plans are governed and administered in accordance with applicable pension legislation in either Canada or the United States. Actuarial valuations are performed at least every three years to determine minimum annual contribution requirements as prescribed by applicable legislation. For the majority of our plans, current service costs are funded based on a percentage of pensionable earnings or as a flat dollar amount per active member depending on the provisions of the pension plans. For these plans, solvency deficits that are determined on an actuarial basis are funded over a period not to exceed five years. All of our defined benefit pension plans were actuarially valued within the past three years. While the majority of benefit payments are made from held-in-trust funds, there are also several unfunded plans where benefit payment obligations are met as they fall due.

19. Retirement Benefit Plans (continued)

We also have several post-retirement benefit plans that provide post-retirement medical, dental and life insurance benefits to certain qualifying employees and surviving spouses. These plans are unfunded and we meet benefit obligations as they come due.

a) Actuarial Valuation of Plans

(CAD\$ in millions)	2016		2015	
	Defined Benefit Pension Plans	Non-Pension Post-Retirement Benefit Plans	Defined Benefit Pension Plans	Non-Pension Post-Retirement Benefit Plans
Defined benefit obligation				
Balance at beginning of year	\$ 2,112	\$ 518	\$ 2,089	\$ 494
Current service cost	46	21	47	22
Past service costs arising from plan improvements	7	1	–	–
Benefits paid	(151)	(19)	(131)	(23)
Interest expense	79	21	80	19
Obligation experience adjustments	(8)	2	–	(11)
Effect from change in financial assumptions	33	8	(3)	1
Effect from change in demographic assumptions	(6)	(13)	–	–
Changes in foreign exchange rates	(6)	(1)	30	16
Balance at end of year	2,106	538	2,112	518
Fair value of plan assets				
Fair value at beginning of year	2,312	–	2,228	–
Interest income	87	–	85	–
Return on plan assets, excluding amounts included in interest income	63	–	71	–
Benefits paid	(151)	(19)	(131)	(23)
Contributions by the employer	36	19	33	23
Changes in foreign exchange rates	(5)	–	26	–
Fair value at end of year	2,342	–	2,312	–
Funding surplus (deficit)	236	(538)	200	(518)
Less effect of the asset ceiling				
Balance at beginning of year	36	–	10	–
Interest on asset ceiling	1	–	–	–
Change in asset ceiling	21	–	26	–
Balance at end of year	58	–	36	–
Net accrued retirement benefit asset (liability)	\$ 178	\$ (538)	\$ 164	\$ (518)
Represented by:				
Pension assets (Note 11)	\$ 283	\$ –	\$ 272	\$ –
Accrued retirement benefit liability	(105)	(538)	(108)	(518)
Net accrued retirement benefit asset (liability)	\$ 178	\$ (538)	\$ 164	\$ (518)

A number of the plans have a surplus totalling \$58 million at December 31, 2016 (December 31, 2015 — \$36 million), which is not recognized on the basis that future economic benefits are not available to us in the form of a reduction in future contributions or a cash refund.

19. Retirement Benefit Plans (continued)

We expect to contribute \$38 million to our defined benefit pension plans in 2017 based on minimum funding requirements. The weighted average duration of the defined benefit pension obligation is 12 years and the weighted average duration of the non-pension post-retirement benefit obligation is 14 years.

Defined contribution expense for 2016 was \$44 million (2015 — \$46 million).

b) Significant Assumptions

The discount rate used to determine the defined benefit obligations and the net interest cost was determined by reference to the market yields on high-quality debt instruments at the measurement date with durations similar to the duration of the expected cash flows of the plans.

Weighted average assumptions used to calculate the defined benefit obligation at the end of each year are as follows:

	2016		2015	
	Defined Benefit Pension Plans	Non-Pension Post-Retirement Benefit Plans	Defined Benefit Pension Plans	Non-Pension Post-Retirement Benefit Plans
Discount rate	3.74%	3.79%	3.84%	3.94%
Rate of increase in future compensation	3.25%	3.25%	3.25%	3.25%
Initial medical trend rate	—	5.50%	—	6.00%
Ultimate medical trend rate	—	5.00%	—	5.00%
Years to reach ultimate medical trend rate	—	2	—	3

c) Sensitivity of the defined benefit obligation to changes in the weighted average assumptions:

	2016		
	Effect on Defined Benefit Obligation		
	Change in Assumption	Increase in Assumption	Decrease in Assumption
Discount rate	1.0%	Decrease by 13%	Increase by 15%
Rate of increase in future compensation	1.0%	Increase by 1%	Decrease by 1%
Medical cost claim trend rate	1.0%	Increase by 2%	Decrease by 2%

	2015		
	Effect on Defined Benefit Obligation		
	Change in Assumption	Increase in Assumption	Decrease in Assumption
Discount rate	1.0%	Decrease by 12%	Increase by 14%
Rate of increase in future compensation	1.0%	Increase by 1%	Decrease by 1%
Medical cost claim trend rate	1.0%	Increase by 2%	Decrease by 2%

The above sensitivity analyses are based on a change in each actuarial assumption while holding all other assumptions constant. The sensitivity analyses on our defined benefit obligation are calculated using the same methods as those used for calculating the defined benefit obligation recognized on our balance sheet. The methods and types of assumptions used in preparing the sensitivity analyses did not change from the prior period.

19. Retirement Benefit Plans (continued)

d) Mortality Assumptions

Assumptions regarding future mortality are set based on management's best estimate in accordance with published mortality tables and expected experience. These assumptions translate into the following average life expectancies for an employee retiring at age 65:

	2016		2015	
	Male	Female	Male	Female
Retiring at the end of the reporting period	85.1 years	87.6 years	85.1 years	87.5 years
Retiring 20 years after the end of the reporting period	86.3 years	88.6 years	86.2 years	88.5 years

e) Significant Risks

The defined benefit pension plans and post-retirement benefit plans expose us to a number of risks, the most significant of which include asset volatility risk, changes in bond yields, and an increase in life expectancy.

Asset volatility risk

The discount rate used to determine the defined benefit obligations is based on AA-rated corporate bond yields. If our plan assets underperform this yield, the deficit will increase. Our strategic asset allocation includes a significant proportion of equities that increases volatility in the value of our assets, particularly in the short term. We expect equities to outperform corporate bonds in the long-term.

Changes in bond yields

A decrease in bond yields increases plan liabilities, which are partially offset by an increase in the value of the plans' bond holdings.

Life expectancy

The majority of the plans' obligations are to provide benefits for the life of the member. Increases in life expectancy will result in an increase in the plans' liabilities.

f) Investment of Plan Assets

The assets of our defined benefit pension plans are managed by external asset managers under the oversight of the Teck Resources Limited Executive Pension Committee.

Our pension plan investment strategies support the objectives of each defined benefit plan and are related to each plan's demographics and timing of expected benefit payments to plan members. The objective for the plan asset portfolios is to achieve annualized portfolio returns over five-year periods in excess of the annualized percentage change in the Consumer Price Index plus a certain premium.

Strategic asset allocation policies have been developed for each defined benefit plan to achieve this objective. The policies also reflect an asset/liability matching framework that seeks to reduce the effect of interest rate changes on each plan's funded status by matching the duration of the bond investments with the duration of the pension liabilities. We do not use derivatives to manage interest risk. Asset allocation is monitored at least quarterly and rebalanced if the allocation to any asset class exceeds its allowable allocation range. Portfolio and investment manager performance is monitored quarterly and the investment guidelines for each plan are reviewed at least annually.

19. Retirement Benefit Plans (continued)

The defined benefit pension plan assets at December 31, 2016 and 2015 are as follows:

(CAD\$ in millions)	2016			2015		
	Quoted	Unquoted	Total %	Quoted	Unquoted	Total %
Equity securities	\$ 1,124	\$ –	48%	\$ 1,085	\$ –	47%
Debt securities	\$ 850	\$ –	36%	\$ 848	\$ –	37%
Real estate and other	\$ 49	\$ 319	16%	\$ 62	\$ 317	16%

20. Other Liabilities and Provisions

(CAD\$ in millions)	December 31, 2016	December 31, 2015
Provisions (a)	\$ 1,236	\$ 438
Derivative liabilities (net of current portion of \$5 million (2015 — \$1 million))	21	12
Other	65	30
	\$ 1,322	\$ 480

a) Provisions

The following table summarizes the movements in provisions for the year ended December 31, 2016:

(CAD\$ in millions)	Decommissioning and Restoration Provisions	Other	Total
As at January 1, 2016	\$ 415	\$ 81	\$ 496
Settled during the year	(17)	(19)	(36)
Change in discount rate	601	–	601
Change in amount and timing of cash flows	164	25	189
Accretion	55	–	55
Changes in foreign exchange rates	2	–	2
As at December 31, 2016	1,220	87	1,307
Less current provisions (Note 15)	(55)	(16)	(71)
Long-term provisions	\$ 1,165	\$ 71	\$ 1,236

Decommissioning and Restoration Provisions

The decommissioning and restoration provisions represent the present value of estimated costs for required future decommissioning and other site restoration activities. The majority of the decommissioning and site restoration expenditures occur at the end of the life of the related operation. Our provision for these expenditures was \$725 million as at December 31, 2016. After the end of the life of certain operations, water management costs may extend for periods in excess of 100 years. Our provision for these expenditures was \$495 million as at December 31, 2016. In 2016, the decommissioning and restoration provision was calculated using nominal discount rates between 6.33% and 7.33%. We also used an inflation rate of 2.00% in our cash flow estimates. The decommissioning and restoration provision includes \$194 million (2015 — \$92 million) in respect of closed operations.

During the fourth quarter of 2016, we updated the discount rate and cash flow estimates for our decommissioning and restoration provisions. As a result of the change in estimate and decrease in discount rate, the provision increased by \$224 million compared to the third quarter. Of the \$224 million increase in the provision in the fourth quarter, \$211 million was related to changes in estimated cash flows and \$13 million was related to a change in the discount rate.

21. Equity

a) Authorized Share Capital

Our authorized share capital consists of an unlimited number of Class A common shares without par value, an unlimited number of Class B subordinate voting shares (Class B shares) without par value and an unlimited number of preferred shares without par value issuable in series.

Class A common shares carry the right to 100 votes per share. Class B shares carry the right to one vote per share. Each Class A common share is convertible, at the option of the holder, into one Class B share. In all other respects, the Class A common shares and Class B shares rank equally.

The attributes of the Class B subordinate voting shares contain so called “coattail provisions” which provide that, in the event that an offer (an “Exclusionary Offer”) to purchase Class A common shares, which is required to be made to all or substantially all holders thereof, is not made concurrently with an offer to purchase Class B subordinate voting shares on identical terms, then each Class B subordinate voting share will be convertible into one Class A common share at the option of the holder during a certain period provided that any Class A common shares received upon such conversion are deposited to the Exclusionary Offer. Any Class B subordinate voting shares converted into Class A common shares pursuant to such conversion right will automatically convert back to Class B subordinate voting shares in the event that any such shares are withdrawn from the Exclusionary Offer or not otherwise ultimately taken up and paid for under the Exclusionary Offer.

The Class B subordinate voting shares will not be convertible in the event that holders of a majority of the Class A common shares (excluding those shares held by the offeror making the Exclusionary Offer) certify to Teck that they will not, among other things, tender their Class A common shares to the Exclusionary Offer.

If an offer to purchase Class A common shares does not, under applicable securities legislation or the requirements of any stock exchange having jurisdiction, constitute a “take-over bid” or is otherwise exempt from any requirement that such offer be made to all or substantially all holders of Class A common shares, the coattail provisions will not apply.

b) Class A Common Shares and Class B Subordinate Voting Shares Issued and Outstanding

Shares (in 000's)	Class A Common Shares	Class B Subordinate Voting Shares
As at January 1, 2015	9,353	566,795
Options exercised (c)	–	104
As at December 31, 2015	9,353	566,899
Options exercised (c)	–	647
As at December 31, 2016	9,353	567,546

c) Share Options

Under our current share option plan, at December 31, 2016, 28 million Class B shares have been set aside for the grant of share options to full-time employees, of which 6 million remain available for grant. The exercise price for each option is the closing price for our Class B shares on the last trading day before the date of grant. Our share options are settled through the issuance of Class B shares.

During the year ended December 31, 2016, we granted 8,945,695 Class B share options to employees. These share options have a weighted average exercise price of \$5.48, vest in equal amounts over three years and have a term of 10 years.

21. Equity (continued)

The weighted average fair value of Class B share options granted in the year was estimated at \$1.81 per option (2015 — \$4.66) at the grant date based on the Black-Scholes option-pricing model using the following assumptions:

	2016	2015
Weighted average exercise price	\$ 5.48	\$ 19.12
Dividend yield	1.85%	4.63%
Risk-free interest rate	0.72%	0.71%
Expected option life	4.2 years	4.2 years
Expected volatility	46%	40%
Forfeiture rate	0.96%	1.36%

The expected volatility is based on a statistical analysis of historical daily share prices over a period equal to the expected option life.

Outstanding share options are as follows:

	2016		2015	
	Share Options (in 000's)	Weighted Average Exercise Price	Share Options (in 000's)	Weighted Average Exercise Price
Outstanding at beginning of year	15,929	\$ 26.53	10,632	\$ 31.29
Granted	8,946	5.48	6,134	19.12
Exercised	(647)	12.15	(104)	4.16
Forfeited	(219)	10.74	(217)	22.65
Expired	(1,155)	35.73	(516)	42.55
Outstanding at end of year	22,854	18.38	15,929	\$ 26.53
Vested and exercisable at end of year	9,090	29.70	7,285	\$ 32.18

The average share price during the year was \$17.59 (2015 — \$12.28), with the highest Class B share price at \$35.02 (2015 — \$20.08) and the lowest Class B share price at \$3.80 (2015 — \$4.33).

Information relating to share options outstanding at December 31, 2016 is as follows:

Outstanding Share Options (in 000's)	Exercise Price Range	Weighted Average Remaining Life of Outstanding Options (months)
9,406	\$ 4.15—\$ 12.35	102
5,803	\$ 12.36—\$ 20.14	98
2,958	\$ 20.15—\$ 26.79	86
2,778	\$ 26.80—\$ 36.85	62
1,909	\$ 36.86—\$ 58.80	57
22,854	\$ 4.15—\$ 58.80	90

Total share option compensation expense recognized for the year was \$22 million (2015 — \$24 million).

21. Equity (continued)

d) Deferred Share Units, Restricted Share Units and Performance Share Units

We have issued and outstanding deferred share units, restricted share units and performance share units (collectively referred to as Units).

Deferred Share Units (DSUs) and Restricted Share Units (RSUs) are granted to both employees and directors. Preferred Share Units (PSUs) are granted to employees only. The DSUs and RSUs entitle the holder to a cash payment equal to the market value of one Class B share at the time they are redeemed. The PSUs entitle the holder to a cash payment equal to a percentage of the weighted average trading price of one Class B share over 10 consecutive trading days prior to the time they are redeemed. The percentage varies from 0% to 200% and is based on our total shareholder return ranking compared to a group of specified companies.

RSUs and PSUs vest in three years. DSUs vest immediately for directors and in three years for employees. On retirement, the units are pro-rated to reflect the period of vesting completed. Units vest on a pro rata basis, should employees be terminated without cause, and are forfeited if employees resign or are terminated with cause.

DSUs may only be redeemed within 12 months from the date a holder ceases to be an employee or director, while RSUs and PSUs vest and are redeemed no later than three years measured from the date of the grant.

Additional units are issued to unit holders to reflect dividends paid and other adjustments to Class B shares.

In 2016, we recognized compensation expense of \$149 million for our Units (2015 — \$11 million recovery). The total liability and intrinsic value for vested Units as at December 31, 2016 was \$128 million (2015 — \$11 million).

At December 31, 2016, 2,597,360 DSUs (2015 — 1,519,569), 3,315,781 RSUs (2015 — 1,497,869) and 1,553,654 PSUs (2015 — 664,454) were outstanding, of which 2,118,892 DSUs (2015 — 1,403,980), 1,327,369 RSUs (2015 — 646,159) and 615,833 PSUs (2015 — 291,794) have vested.

e) Accumulated Other Comprehensive Income (Loss)

(CAD\$ in millions)	2016	2015
Accumulated other comprehensive income — beginning of year	\$ 426	\$ 225
Currency translation differences:		
Unrealized gains (losses) on translation of foreign subsidiaries	(201)	1,375
Foreign exchange differences on debt designated as a hedge of our investment in foreign subsidiaries (net of taxes of \$(27) and \$163)	180	(1,188)
	(21)	187
Available-for-sale financial assets:		
Unrealized gains (net of taxes of \$(6) and \$(1))	45	13
Gains reclassified to profit (loss) (net of taxes of \$4 and \$(1))	(29)	(6)
	16	7
Derivatives designated as cash flow hedges:		
Unrealized losses (net of taxes of \$nil and \$8)	—	(22)
Losses reclassified to profit (loss) on realization (net of taxes of \$nil and \$(9))	—	26
	—	4
Share of other comprehensive income of associates and joint ventures	1	3
Remeasurements of retirement benefit plans (net of taxes of \$(7) and \$(18))	19	40
Total other comprehensive income	15	241
Less remeasurements of retirement benefit plans recorded in retained earnings	(19)	(40)
Accumulated other comprehensive income — end of year	\$ 422	\$ 426

21. Equity (continued)

f) Earnings (Loss) Per Share

The following table reconciles our basic and diluted earnings per share:

(CAD\$ in millions, except per share data)	2016	2015
Net basic and diluted profit (loss) attributable to shareholders of the company	\$ 1,040	\$ (2,474)
Weighted average shares outstanding (000's)	576,391	576,224
Dilutive effect of share options	6,496	–
Weighted average diluted shares outstanding (000's)	582,887	576,224
Basic earnings (loss) per share	\$ 1.80	\$ (4.29)
Diluted earnings (loss) per share	\$ 1.78	\$ (4.29)

At December 31, 2016, 13,333,164 potentially dilutive shares were not included in the diluted earnings per share calculation because their effect was anti-dilutive. At December 31, 2015, there was a net loss attributable to shareholders of the company and, accordingly, all share options would be considered anti-dilutive and have been excluded from the calculation of diluted earnings (loss) per share.

g) Dividends

We declared and paid dividends of \$0.05 per share in the second and fourth quarters of 2016 and \$0.15 and \$0.05 per share in the second and fourth quarters of 2015, respectively.

22. Non-Controlling Interests

Set out below is information about our subsidiaries with non-controlling interests and the non-controlling interest balances included in equity for all comparative periods presented:

(CAD\$ in millions)	Principal Place of Business	Percentage of Ownership Interest and Voting Rights Held by Non-Controlling Interest	December 31, 2016	December 31, 2015
Highland Valley Copper (a)	British Columbia, Canada	–	\$ –	\$ 43
Carmen de Andacollo	Region IV, Chile	10%	45	45
Quebrada Blanca	Region I, Chile	23.5%	64	98
Elkview Mine Limited Partnership	British Columbia, Canada	5%	50	44
			\$ 159	\$ 230

a) During the year ended December 31, 2016, we acquired the 2.5% non-controlling interest stake in Highland Valley Copper for \$33 million. We recorded this transaction as a reduction in our non-controlling interests of \$46 million and an increase to our deferred income tax liabilities of \$5 million with the difference of \$8 million recorded directly in retained earnings.

23. Contingencies

We consider provisions for all our outstanding and pending legal claims to be adequate. The final outcome with respect to actions outstanding or pending as at December 31, 2016, or with respect to future claims, cannot be predicted with certainty. Significant contingencies not disclosed elsewhere in the notes to our financial statements are as follows:

Upper Columbia River Basin

Teck American Inc. (TAI) continues studies under the 2006 settlement agreement with the U.S. Environmental Protection Agency (EPA) to conduct a remedial investigation on the Upper Columbia River in Washington state. Residential soil testing within the study site has identified certain properties where remediation is required. TAI and EPA reached an agreement regarding the remediation to be undertaken in 2015, which has been completed, and additional sampling has been conducted which suggests that limited additional time-critical remediation will be required.

The Lake Roosevelt litigation involving TML in the Federal District Court for the Eastern District of Washington continues. In September 2012, TML entered into an agreement with the plaintiffs, agreeing that certain facts were established for purposes of the litigation. The agreement stipulated that some portion of the slag discharged from TML's Trail Operations into the Columbia River between 1896 and 1995, and some portion of the effluent discharged from Trail Operations, have been transported to and are present in the Upper Columbia River in the United States, and that some hazardous substances from the slag and effluent have been released into the environment within the United States. In December 2012, the Court found in favour of the plaintiffs in phase one of the case, issuing a declaratory judgment that TML is liable under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) for response costs, the amount of which will be determined in later phases of the case. A hearing with respect to the claims of the Tribal plaintiffs in respect of approximately \$9 million of past response costs was held in December. In August the trial court judge ruled in favour of the plaintiffs and the decision is under appeal.

In October 2013, the Confederated Tribes of the Colville Reservation filed an omnibus motion with the District Court seeking an order stating that they are permitted to seek recovery from TML for environmental response costs, and in a subsequent proceeding, natural resource damages and assessment costs, arising from the alleged deposition of hazardous substances in the United States from aerial emissions from TML's Trail Operations. Prior allegations by the Tribes related solely to solid and liquid materials discharged to the Columbia River. The motion did not state the amount of response costs allegedly attributable to aerial emissions, nor did it attempt to define the extent of natural resource damages, if any, attributable to past smelter operations. In December 2013, the District Court ruled in favour of the plaintiffs, who subsequently filed amended pleadings in relation to air emissions. The Court dismissed a motion to strike the air claims on the basis that CERCLA does not apply to air emissions in the manner proposed by the plaintiffs, and a subsequent TML motion seeking reconsideration of the dismissal. On July 27, 2016 the Ninth Circuit unanimously ruled in favour of TML on its appeal of the District Court decision. Plaintiffs sought *en banc* review of the decision in the Ninth Circuit, which was denied in October.

A hearing with respect to natural resource damages and assessment costs is expected to follow after resolution of appeals with respect to issues raised in the first phase of the litigation and completion of the remedial investigation and feasibility study being undertaken by TAI.

There is no assurance that we will ultimately be successful in our defence of the litigation or that we or our affiliates will not be faced with further liability in relation to this matter. Until the studies contemplated by the EPA settlement agreement and additional damage assessments are completed, it is not possible to estimate the extent and cost, if any, of any additional remediation or restoration that may be required or to assess our potential liability for damages. The studies may conclude, on the basis of risk, cost, technical feasibility or other grounds, that no remediation other than some residential soil removal should be undertaken. If other remediation is required and damage to resources found, the cost of that remediation may be material.

24. Commitments

a) Capital Commitments

As at December 31, 2016, we had contracted for \$473 million of capital expenditures that have not yet been incurred for the purchase of property, plant and equipment. This amount includes \$206 million for Quebrada Blanca Phase 2, \$127 million for our share of Fort Hills, \$84 million for our share of Antamina and \$56 million for our steelmaking coal operations. The amount includes \$222 million that is expected to be incurred within one year and \$251 million within two to five years.

b) Operating Lease Commitments

We lease office premises, mobile equipment and railcars under operating leases. The lease terms are between one year and 12 years.

The future aggregate minimum lease payments under non-cancellable operating leases are as follows:

(CAD\$ in millions)	2016	2015
Less than one year	\$ 56	\$ 65
One to five years	66	84
Thereafter	6	10
	\$ 128	\$ 159

Lease rentals amounting to \$10 million (2015 — \$11 million) for office premises, \$36 million (2015 — \$43 million) for mobile equipment and \$10 million (2015 — \$11 million) for railcars are included in the statement of income (loss).

c) Red Dog Commitments

In accordance with the operating agreement governing the Red Dog mine, TAK pays a royalty to NANA Regional Corporation, Inc. (NANA) on the net proceeds of production. A 25% royalty became payable in the third quarter of 2007 after we had recovered cumulative advance royalties previously paid to NANA. The net proceeds of production royalty rate will increase by 5% every fifth year to a maximum of 50%. The increase to 30% of net proceeds of production occurred in 2012. An expense of US\$213 million was recorded in 2016 (2015 — US\$137 million) in respect of this royalty.

TAK leases road and port facilities from the Alaska Industrial Development and Export Authority, through which it ships all concentrates produced at the Red Dog Operations. The lease requires TAK to pay a minimum annual user fee of US\$18 million for the next 14 years and US\$6 million for the following nine years.

d) Antamina Royalty

Our interest in the Antamina mine is subject to a net profits royalty equivalent to 7.4% of our share of the mine's free cash flow. An expense of \$17 million was recorded in 2016 (2015 — \$11 million) in respect of this royalty.

e) Purchase Commitments

We have a number of forward purchase commitments for the purchase of concentrates and other process inputs, and for shipping and distribution of products, which are incurred in the normal course of business. In addition, we have contractual arrangements for the purchase of 240 megawatts of power for the expansion of our Quebrada Blanca Operations. These contracts contain monthly fixed prices and variable prices per hour and are effective from dates between November 2016 and January 2018, extending for 21 years. The majority of these contracts are subject to *force majeure* provisions.

25. Segmented Information

Based on the primary products we produce and our development projects, we have five reportable segments — steelmaking coal, copper, zinc, energy and corporate — which is the way we report information to our Chief Executive Officer. The corporate segment includes all of our initiatives in other commodities, our corporate growth activities and groups that provide administrative, technical, financial and other support to all of our business units. Other operating expenses include general and administration costs, exploration, research and development, and other operating income (expense). Sales between segments are carried out on terms that arm's-length parties would use. Total assets does not include intra-group receivables between segments. Deferred tax assets and liabilities have been allocated amongst segments.

(CAD\$ in millions)	December 31, 2016					
	Steelmaking Coal	Copper	Zinc	Energy	Corporate	Total
Segment revenues	\$ 4,144	\$ 2,007	\$ 3,577	\$ 2	\$ –	\$ 9,730
Less: Inter-segment revenues	–	–	(430)	–	–	(430)
Revenues	4,144	2,007	3,147	2	–	9,300
Cost of sales	(2,765)	(1,817)	(2,317)	(5)	–	(6,904)
Gross profit (loss)	1,379	190	830	(3)	–	2,396
Asset impairments	–	–	(46)	(248)	–	(294)
Other operating income (expenses)	(74)	35	30	(30)	(338)	(377)
Profit (loss) from operations	1,305	225	814	(281)	(338)	1,725
Net finance expense	(21)	(42)	(27)	(6)	(242)	(338)
Non-operating income (expenses)	6	(5)	(5)	–	243	239
Share of income (losses) of associates and joint ventures	–	2	–	–	–	2
Profit (loss) before taxes	1,290	180	782	(287)	(337)	1,628
Capital expenditures	348	339	190	1,010	6	1,893
Goodwill	702	412	–	–	–	1,114
Total assets	14,894	9,673	3,742	4,129	3,191	35,629
Net assets	\$ 10,071	\$ 6,029	\$ 2,464	\$ 3,648	\$ (4,611)	\$ 17,601

25. Segmented Information (continued)

(CAD\$ in millions)	December 31, 2015					
	Steelmaking Coal	Copper	Zinc	Energy	Corporate	Total
Segment revenues	\$ 3,049	\$ 2,422	\$ 3,121	\$ 4	\$ –	\$ 8,596
Less: Inter-segment revenues	–	–	(337)	–	–	(337)
Revenues	3,049	2,422	2,784	4	–	8,259
Cost of sales	(2,849)	(1,996)	(2,129)	(6)	–	(6,980)
Gross profit (loss)	200	426	655	(2)	–	1,279
Asset impairments	(2,032)	(506)	(31)	(1,062)	–	(3,631)
Other operating income (expenses)	(56)	(230)	(42)	(14)	(224)	(566)
Profit (loss) from operations	(1,888)	(310)	582	(1,078)	(224)	(2,918)
Net finance expense	(26)	(15)	(32)	–	(238)	(311)
Non-operating income (expenses)	39	(13)	34	–	(149)	(89)
Share of losses of associates and joint ventures	–	–	–	–	(2)	(2)
Profit (loss) before taxes	(1,875)	(338)	584	(1,078)	(613)	(3,320)
Capital expenditures	493	539	211	997	4	2,244
Goodwill	702	425	–	–	–	1,127
Total assets	14,531	9,886	3,406	3,269	3,596	34,688
Net assets	\$ 10,201	\$ 6,335	\$ 2,590	\$ 2,846	\$ (5,335)	\$ 16,637

The geographical distribution of our non-current assets is as follows:

(CAD\$ in millions)	December 31, 2016	December 31, 2015
Canada	\$ 20,853	\$ 20,112
Chile	6,332	6,465
Peru	1,286	1,301
United States	1,180	983
Other	70	74
	\$ 29,721	\$ 28,935

Non-current assets attributed to geographical locations exclude deferred income tax assets and financial and other assets.

25. Segmented Information (continued)

Revenue is attributed to regions based on the location of the port of delivery as designated by the customer and is as follows:

(CAD\$ in millions)	2016	2015
Asia		
China	\$ 1,773	\$ 1,786
Japan	1,319	1,343
South Korea	1,181	966
India	553	341
Other	825	614
Americas		
United States	1,314	1,291
Canada	770	581
Latin America	294	197
Europe		
Germany	354	394
Finland	178	213
Spain	186	9
Other	553	524
	\$ 9,300	\$ 8,259

26. Accounting for Financial Instruments

a) Financial Risk Management

Our activities expose us to a variety of financial risks, which include liquidity risk, foreign exchange risk, interest rate risk, commodity price risk, credit risk and other risks associated with capital markets. From time to time, we may use foreign exchange, commodity price and interest rate contracts to manage exposure to fluctuations in these variables. We do not have a practice of trading derivatives. Our use of derivatives is based on established practices and parameters to mitigate risk and is subject to the oversight of our Hedging Committee and our Board of Directors.

Foreign Exchange Risk

We operate on an international basis and therefore, foreign exchange risk exposures arise from transactions denominated in a foreign currency. Our foreign exchange risk arises primarily with respect to the U.S. dollar and to a lesser extent, the Chilean peso and Peruvian sol. Our cash flows from Canadian, Chilean and Peruvian operations are exposed to foreign exchange risk, as commodity sales are denominated in U.S. dollars and a substantial portion of operating expenses are denominated in local currencies.

In the first half of 2015 and in prior years, we hedged a portion of our quarterly U.S. dollar denominated future cash flows with U.S. dollar forward sales contracts. This hedge was discontinued in the second quarter of 2015.

We also have various investments in U.S. dollar foreign operations, whose net assets are exposed to foreign currency translation risk. This currency exposure is managed in part through our U.S. dollar denominated debt as a hedge against net investments in foreign operations. As at December 31, 2016, \$5.4 billion of U.S. dollar debt was designated in this manner.

26. Accounting for Financial Instruments (continued)

U.S. dollar financial instruments subject to foreign exchange risk are comprised of U.S. dollar denominated items held in Canada and is summarized below. This risk is reduced by our policy to apply a hedge against our U.S. dollar net investments using our U.S. dollar debt.

(US\$ in millions)	2016	2015
Cash and cash equivalents	\$ 521	\$ 911
Trade accounts receivable and other assets	867	445
Trade accounts payable and other liabilities	(572)	(380)
Debt	(6,141)	(6,900)
	(5,325)	(5,924)
Net investment in foreign operations hedged	5,424	5,552
Net U.S. dollar exposure	\$ 99	\$ (372)

As at December 31, 2016, with other variables unchanged, a \$0.10 strengthening of the Canadian dollar against the U.S. dollar would result in a \$10 million pre-tax loss (2015 — \$37 million pre-tax gain) from our financial instruments. There would also be an \$11 million pre-tax loss (2015 — \$nil) in other comprehensive income (loss) from the translation of our foreign operations. The inverse effect would result if the Canadian dollar weakened by \$0.10 against the U.S. dollar.

Liquidity Risk

Liquidity risk arises from our general and capital financing needs. We have planning, budgeting and forecasting processes to help determine our funding requirements to meet various contractual and other obligations. Note 16 details our available credit facilities as at December 31, 2016.

Contractual undiscounted cash flow requirements for financial liabilities as at December 31, 2016 are as follows:

(CAD\$ in millions)	Less Than 1 Year	2—3 Years	4—5 Years	More Than 5 Years	Total
Trade accounts payable and other liabilities	\$ 1,902	\$ —	\$ —	\$ —	\$ 1,902
Debt (Note 16(f))	66	404	1,574	6,249	8,293
Estimated interest payments on debt	\$ 472	\$ 933	\$ 849	\$ 4,079	\$ 6,333

Interest Rate Risk

Our interest rate risk arises mainly in respect of our holdings of cash and cash equivalents. Our interest rate management policy is generally to borrow at fixed rates. However, floating rate funding may be used to fund short-term operating cash flow requirements or, in conjunction with fixed to floating interest rate swaps, be used to offset interest rate risk from our cash. The fair value of fixed-rate debt fluctuates with changes in market interest rates, but the cash flows, denominated in U.S. dollars, do not.

Cash and cash equivalents have short terms to maturity and receive interest based on market interest rates.

As at December 31, 2016 and 2015, with other variables unchanged, a 1% change in the LIBOR rate would not have a significant effect on profit (loss). There would be no effect on other comprehensive income (loss).

Commodity Price Risk

We are subject to price risk from fluctuations in market prices of the commodities that we produce. From time to time, we may use commodity price contracts to manage our exposure to fluctuations in commodity prices. At the balance sheet date, we had zinc and lead derivative contracts outstanding as described in (b) below.

26. Accounting for Financial Instruments (continued)

Our commodity price risk associated with financial instruments primarily relates to changes in fair value caused by final settlement pricing adjustments to receivables and payables, derivative contracts for zinc and lead, embedded derivatives in one of our road and port contracts and in the ongoing payments under our silver stream and gold stream arrangements.

The following represents the effect on profit (loss) attributable to shareholders from a 10% change in commodity prices, based on outstanding receivables and payables subject to final pricing adjustments at December 31, 2016. There is no effect on other comprehensive income.

(CAD\$ in millions, except for US\$/lb. data)	Price on December 31,		Change in Profit (Loss) Attributable to Shareholders	
	2016	2015	2016	2015
Copper	US\$2.50/lb.	US\$2.13/lb.	\$ 24	\$ 46
Zinc	US\$1.17/lb.	US\$0.73/lb.	\$ 5	\$ 2
Lead	US\$0.90/lb.	US\$0.82/lb.	\$ -	\$ (1)

A 10% change in the price of zinc, lead, silver and gold, respectively, would change our net liability relating to derivatives and embedded derivatives, excluding receivables and payables subject to final pricing adjustments, and change our pre-tax profit (loss) attributable to shareholders by \$45 million (2015 — \$32 million). There would be no effect on other comprehensive income.

Credit Risk

Credit risk arises from the non-performance by counterparties of contractual financial obligations. Our primary counterparties related to our cash, money market investments and derivative contracts carry investment grade ratings as assessed by external rating agencies. There is ongoing review to evaluate the creditworthiness of these counterparties. We manage credit risk for trade and other receivables through established credit monitoring activities. Our maximum exposure to credit risk at the reporting date is the carrying value of our cash and cash equivalents, trade accounts receivable and derivative assets. While we are exposed to credit losses due to the non-performance of our counterparties, we do not consider this to be a material risk.

b) Derivative Financial Instruments and Hedges

Sale and Purchase Contracts

We record adjustments to our receivable and payable balances for provisionally priced sales and purchases, respectively, in periods up to the date of final pricing based on movements in quoted market prices. These arrangements have the characteristics of a derivative instrument, as the value of our receivables and payables will vary as prices for the underlying commodities vary in the metal markets. These final pricing adjustments result in gains (losses from purchases) in a rising price environment and losses (gains from purchases) in a declining price environment and are recorded in other operating income (expense). It should be noted that while these effects arise on the sale of concentrates, we also purchase concentrates at our Trail Operations where the opposite effects occur. The effect of gains and losses on these contracts on profit (loss) is mitigated by smelter price participation, royalty interests, taxes and non-controlling interests.

26. Accounting for Financial Instruments (continued)

The table below outlines our outstanding receivable and payable positions, which were provisionally valued at December 31, 2016 and December 31, 2015.

(Pounds in millions)	Outstanding at December 31, 2016		Outstanding at December 31, 2015	
	Pounds	US\$/lb.	Pounds	US\$/lb.
Receivable positions				
Copper	114	\$ 2.50	257	\$ 2.13
Zinc	231	\$ 1.17	162	\$ 0.73
Lead	26	\$ 0.90	20	\$ 0.82
Payable positions				
Zinc payable	114	\$ 1.17	83	\$ 0.73
Lead payable	20	\$ 0.90	35	\$ 0.82

At December 31, 2016, total outstanding settlements receivable were \$795 million (2015 — \$684 million) and total outstanding settlements payable were \$43 million (2015 — \$25 million). These amounts are included in trade accounts receivable and trade accounts payable, respectively, on the consolidated balance sheet.

Zinc and Lead Swaps

Due to ice conditions, the port serving our Red Dog mine is normally only able to ship concentrates from July to October each year. As a result, zinc and lead concentrate sales volumes are generally higher in the third and fourth quarter of each year than in the first and second quarter. During 2016 and 2015, we purchased and sold zinc and lead swaps to match our economic exposure to the average zinc and lead prices over our shipping year, which is from July of one year to June of the following year. We do not apply hedge accounting to the zinc or lead swaps.

The fair value of our commodity swaps is calculated using a discounted cash flow method based on forward metal prices. A summary of these derivative contracts and related fair values as at December 31, 2016 is as follows:

	Quantity	Average Price of Purchase Commitments	Average Price of Sale Commitments	Fair Value Asset (Liability) (CAD\$ in millions)
Derivatives not designated as hedging instruments				
Zinc swaps	181 million lbs.	US\$1.14/lb.	US\$1.16/lb.	\$ 4
Lead swaps	95 million lbs.	US\$0.96/lb.	US\$0.91/lb.	(5)
				\$ (1)

All free-standing derivative contracts mature in 2017.

Free-standing derivatives, not designated as hedging instruments, are recorded in trade accounts receivable and in trade accounts payable and other liabilities in the amount of \$4 million and \$5 million, respectively, on the consolidated balance sheet.

26. Accounting for Financial Instruments (continued)

Derivatives Not Designated as Hedging Instruments and Embedded Derivatives

(CAD\$ in millions)	Amount of Gain (Loss) Recognized in Other Operating Income (Expense)	
	2016	2015
Zinc derivatives	\$ 45	\$ (2)
Lead derivatives	(5)	(3)
Settlements receivable and payable	153	(280)
Contingent zinc escalation payment embedded derivative (c)	(18)	4
Gold stream embedded derivative (c)	6	(8)
Silver stream embedded derivative (c)	4	(3)
	\$ 185	\$ (292)

We also recorded a \$113 million gain in non-operating income (expense) (Note 8) related to an increase in the value of debt prepayment options since issuance in June 2016 (c).

Hedges

Cash flow hedges

At December 31, 2016, we did not have derivative instruments designated as cash flow hedges.

The following table provides information regarding the effect of U.S. dollar forward sales contracts that were derivative instruments designated as cash flow hedges on our consolidated statements of income and comprehensive income in 2015:

(CAD\$ in millions)	2016	2015
Losses reclassified from accumulated other comprehensive income into profit (loss) (effective portion)	\$ –	\$ (34)
Location of losses reclassified from accumulated other comprehensive income (loss) into profit	–	Revenues

Net investment hedge

Our hedges of net investments in foreign operations were effective and no ineffectiveness was recognized in profit (loss) for the period.

c) Embedded Derivatives

One of our road and port contracts contains a contingent zinc escalation payment that is considered to be an embedded derivative. The fair value of this embedded derivative was \$20 million at December 31, 2016 (2015 — \$2 million), and is included in other liabilities and provisions on the consolidated balance sheet.

The gold stream and silver stream agreements entered into in 2015 (Note 13(b) and Note 18) each contain an embedded derivative in the ongoing future payments due to Teck from Royal Gold and Franco-Nevada, respectively. The gold stream's 15% ongoing payment contains an embedded derivative relating to the gold price. The fair value of this embedded derivative was \$2 million at December 31, 2016 (2015 — \$8 million) and is included in other liabilities and provisions on the consolidated balance sheet. The silver stream's 5% ongoing payment contains an embedded derivative relating to the silver price. The fair value of this embedded derivative was \$1 million at December 31, 2016 (2015 — \$3 million) and is included in other assets (2015 — other liabilities and provisions) on the consolidated balance sheet.

26. Accounting for Financial Instruments (continued)

Our June 2021 and 2024 notes issued in 2016 (Note 16(b)) include prepayment options that are considered to be embedded derivatives. At December 31, 2016, these prepayment options are recorded as other assets (Note 11) on the balance sheet at fair values of \$61 million and \$78 million for the June 2021 and 2024 notes, respectively, based on current market interest rates for similar instruments and our credit spread. Since the notes were issued in June 2016, the value of the prepayment options increased by \$113 million, which has been recorded as a gain in non-operating income (expense) (Note 8).

27. Fair Value Measurements

Certain of our financial assets and liabilities are measured at fair value on a recurring basis and classified in their entirety based on the lowest level of input that is significant to the fair value measurement. Certain non-financial assets and liabilities may also be measured at fair value on a non-recurring basis. There are three levels of the fair value hierarchy that prioritize the inputs to valuation techniques used to measure fair value, with Level 1 inputs having the highest priority. The levels and the valuation techniques used to value our financial assets and liabilities are described below:

Level 1 — Quoted Prices in Active Markets for Identical Assets

Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.

Cash equivalents and marketable equity securities are valued using quoted market prices in active markets. Accordingly, these items are included in Level 1 of the fair value hierarchy.

Level 2 — Significant Other Observable Inputs

Quoted prices in markets that are not active, quoted prices for similar assets or liabilities in active markets, or inputs that are observable, either directly or indirectly, for substantially the full term of the asset or liability.

Derivative instruments and embedded derivatives are included in Level 2 of the fair value hierarchy as they are valued using pricing models or discounted cash flow models. These models require a variety of inputs, including, but not limited to, market prices, forward price curves, yield curves, and credit spreads. These inputs are obtained from or corroborated with the market. Also included in Level 2 are settlements receivable and settlements payable from provisional pricing on concentrate sales and purchases because they are valued using quoted market prices for forward curves for copper, zinc and lead.

Level 3 — Significant Unobservable Inputs

Unobservable (supported by little or no market activity) prices.

We include investments in certain debt securities in Level 3 of the fair value hierarchy because they trade infrequently and have little price transparency. We review the fair value of these instruments periodically and estimate an impairment charge based on management's best estimates, which are unobservable inputs.

27. Fair Value Measurements (continued)

The fair values of our financial assets and liabilities measured at fair value on a recurring basis at December 31, 2016 and 2015 are summarized in the following table:

(CAD\$ in millions)	2016				2015			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Financial assets								
Cash equivalents	\$ 1,153	\$ –	\$ –	\$ 1,153	\$ 1,640	\$ –	\$ –	\$ 1,640
Marketable equity securities	95	–	–	95	101	–	–	101
Debt securities	68	–	11	79	97	–	12	109
Settlements receivable	–	795	–	795	–	684	–	684
Derivative instruments and embedded derivatives	–	142	–	142	–	9	–	9
	\$ 1,316	\$ 937	\$ 11	\$ 2,264	\$ 1,838	\$ 693	\$ 12	\$ 2,543
Financial liabilities								
Derivative instruments and embedded derivatives	\$ –	\$ 27	\$ –	\$ 27	\$ –	\$ 16	\$ –	\$ 16
Settlements payable	–	43	–	43	–	25	–	25
	\$ –	\$ 70	\$ –	\$ 70	\$ –	\$ 41	\$ –	\$ 41

As at December 31, 2016 and 2015, we measured certain non-financial assets at their recoverable amounts using a FVLCD basis, which is classified as a Level 3 measurement. Refer to Note 13(a) for information about these fair value measurements.

28. Capital Management

The capital we manage is the total of equity and debt on our balance sheet. Our capital management objectives are to maintain access to the capital we require to operate and grow our business while minimizing the cost of such capital and providing for returns to our shareholders. Our financial policies have been to maintain, on average over time, a target debt to debt-plus-equity ratio of approximately 30% and a target ratio of debt-to-EBITDA of approximately 2.5. These ratios are expected to vary from their target levels from time to time, reflecting commodity price cycles and corporate activity, including the development of major projects. We may also review and amend such policy targets from time to time. We maintain two committed revolving credit facilities consisting of a core liquidity facility of US\$3 billion and a US\$1.2 billion facility which is used for financial letters of credit required while our credit rating is non-investment grade. These credit facilities include a financial covenant that requires us to maintain a debt-to-capitalization ratio that does not exceed 50%.

As at December 31, 2016, our debt to debt-plus-equity ratio was 32% (2015 — 37%), our debt-to-EBITDA ratio was 2.5 (2015 — (5.9)) and our debt-to-adjusted-EBITDA ratio, before asset impairments, was 2.3 (2015 — 4.8). We manage the risk of not meeting our financial targets through the issuance and repayment of debt, our dividend policy, the issuance of equity capital, assets sales, as well as through the ongoing management of operations, investments and capital expenditures.

29. Key Management Compensation

The compensation for key management recognized in total comprehensive income (loss) in respect of employee services is summarized in the table below. Key management includes our directors and senior vice presidents.

(CAD\$ in millions)	2016	2015
Salaries, bonuses, director fees and other short-term benefits	\$ 14	\$ 14
Post-employment benefits	6	2
Share option compensation expense	8	9
Compensation expense (recovery) related to Units (Note 21(d))	85	(11)
	\$ 113	\$ 14

30. Subsequent Event

On February 21, 2017, we commenced cash tender offers to purchase up to US\$650 million aggregate principal amount of the following series of notes; 3.000% notes due 2019, 8.000% notes due 2021, 4.500% notes due 2021, 4.750% notes due 2022, and 8.500% notes due 2024. In conjunction with the tender offers, we are soliciting consents from holders of certain of the notes to amend the indentures governing those notes to shorten the minimum notice period for optional redemption. The tender offers and consent solicitations are currently scheduled to expire on March 20, 2017, and may expire earlier in certain circumstances. We have reserved the right to amend, extend, terminate and otherwise modify the tender offers and consent solicitations