TransAlta Renewables Inc.

Consolidated Financial Statements

December 31, 2020

Consolidated Financial Statements

Management's Report

To the Shareholders of TransAlta Renewables Inc.

The Consolidated Financial Statements and other financial information included in this annual report have been prepared by management. It is management's responsibility to ensure that sound judgment, appropriate accounting principles and methods, and reasonable estimates have been used to prepare this information. They also ensure that all information presented is consistent.

Management is also responsible for establishing and maintaining internal controls and procedures over the financial reporting process. The internal control system includes an internal audit function and an established business conduct policy. TransAlta Corporation provides general administrative services to TransAlta Renewables Inc. under a Management, Administrative and Operational Services Agreement. Employees of TransAlta Corporation providing such services are required to adhere to TransAlta Corporation's business conduct policy. In addition, TransAlta Renewables Inc. has a code of conduct that can be viewed on TransAlta Renewables Inc.'s website (www.transaltarenewables.com). Management believes the system of internal controls, review procedures and established policies provides reasonable assurance as to the reliability and relevance of financial reports. Management also believes that TransAlta Renewables Inc.'s operations are conducted in conformity with the law and with a high standard of business conduct.

The Board of Directors (the "Board") is responsible for ensuring that management fulfils its responsibilities for financial reporting and internal control. The Board carries out its responsibilities principally through its Audit and Nominating Committee (the "Committee"). The Committee, which consists solely of independent directors, reviews the financial statements and annual report and recommends them to the Board for approval. The Committee meets with management, internal auditors and external auditors to discuss internal controls, auditing matters and financial reporting issues. Internal and external auditors have full and unrestricted access to the Committee. The Committee also recommends the firm of external auditors to be appointed by the shareholders.

Todd Stack

Todd Stack
President

Brent Ward

Brent Ward
Chief Financial Officer

March 2, 2021

Management's Annual Report on Internal Control Over Financial Reporting

To the Shareholders of TransAlta Renewables Inc.

The following report is provided by management in respect of TransAlta Renewables Inc.'s internal control over financial reporting as defined in the Canadian Securities Administrators' National Instrument 52-109.

TransAlta Renewables Inc.'s management is responsible for establishing and maintaining adequate internal control over financial reporting for TransAlta Renewables Inc.

Management has used the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") 2013 framework to evaluate the effectiveness of TransAlta Renewables Inc.'s internal control over financial reporting. Management believes that the COSO 2013 framework is a suitable framework for its evaluation of TransAlta Renewables Inc.'s internal control over financial reporting because it is free from bias, permits reasonably consistent qualitative and quantitative measurements of TransAlta Renewables Inc.'s internal controls, is sufficiently complete so that those relevant factors that would alter a conclusion about the effectiveness of TransAlta Renewables Inc.'s internal controls are not omitted, and is relevant to an evaluation of internal control over financial reporting. Management has reviewed the changes as a result of changes implemented in response to COVID-19 and is reasonably assured that adjustments to process have not materially affected, or are reasonably likely to materially affect, our internal control over financial reporting and disclosure controls and procedures

Internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives because of its inherent limitations. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting also can be circumvented by collusion or improper overrides. Because of such limitations, there is a risk that material misstatements may not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process, and it is possible to design safeguards into the process to reduce, though not eliminate, this risk.

Management has assessed the effectiveness of TransAlta Renewables Inc.'s internal control over financial reporting as at Dec. 31, 2020, and has concluded that such internal control over financial reporting is effective.

Todd Stack

Todd Stack
President

Brent Ward

Brent Ward
Chief Financial Officer

March 2, 2021

Independent Auditor's Report

To the Shareholders of TransAlta Renewables Inc.

Opinion

We have audited the consolidated financial statements of TransAlta Renewables Inc. and its subsidiaries (the Corporation), which comprise the consolidated statements of financial position as at December 31, 2020 and 2019, and the consolidated statements of earnings, comprehensive income, changes in equity and cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects the consolidated financial position of the Corporation as at December 31, 2020 and 2019, and its consolidated financial performance and consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards (IFRSs).

Basis for opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report. We are independent of the Corporation in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For the matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report, including in relation to this matter. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matter below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

Key audit matter	How our audit addressed the key audit matter
Level III Fair Value of Investments in Subsidiaries of TransAlta Corporation As discussed in notes 2(Q)(III), 8 and 12 in the consolidated financial statements, the Corporation holds an economic interest in certain gas and renewable facilities. These include interests that are held through investments in tracking preferred shares recognized at fair value through other comprehensive income. The valuation of these instruments, classified as Level III of the fair value hierarchy, are determined using inputs that are not readily observable. The valuation of these tracking preferred shares is a key audit matter given the subjective nature of significant unobservable inputs that require judgments and estimates concerning sales prices, anticipated production, and the determination of the discount rate. These judgments also include the impact of the Fortescue Metals Group power purchase arrangement for the South Hedland gas facility under dispute (the "FMG Dispute") on the fair value of the TEA ("TransAlta Energy Australia") tracking preferred shares.	We involved our internal valuation specialists to assess the methodology applied, and the various inputs utilized by management in developing the discount rate by referencing current industry, economic, and comparable company information, as well as company and cash-flow specific risk premiums. In addition, to test other key assumptions, we performed, amongst others, the following procedures: • Inspected supporting evidence for cash flow forecasts by comparing volumes, prices and timing to executed commodity contracts and third party data • Assessed the accuracy of management's estimation process, by comparing actual results to previous estimates and forecasts • Understood the status of the FMG Dispute and obtained a letter from internal counsel to evaluate management's assumptions included in the fair value model

Other information
Management is responsible for the other information. The other information comprises:

- Management's Discussion and Analysis
- The information, other than the consolidated financial statements and our auditor's report thereon, in the Annual Report

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information, and in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

We obtained Management's Discussion and Analysis and the Annual Report prior to the date of this auditor's report. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact in this auditor's report. We have nothing to report in this regard.

Responsibilities of management and those charged with governance for the consolidated financial statements
Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs, 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.

In preparing the consolidated financial statements, management is responsible for assessing the Corporation's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Corporation or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Corporation's financial reporting process.

Auditor's responsibilities for the audit of the consolidated financial statements
Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Corporation's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Corporation's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Corporation to cease to continue as a going concern.
- Evaluate the overall presentation, structure, and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is Valerie Bertram.

Ernst & Young LLP

Chartered Professional Accountants
Calgary, Canada

March 2, 2021

Consolidated Statements of Earnings

Year ended Dec. 31 *(in millions of Canadian dollars, except as otherwise noted)*	2020	2019
Revenues (Note 5)	**431**	438
Government incentives (Note 6)	**5**	8
Total revenue	**436**	446
Fuel, royalties and other costs (Note 7)	**77**	83
Gross margin	**359**	363
Operations, maintenance and administration (Note 7)	**89**	87
Depreciation and amortization	**135**	136
Asset impairment (Note 13)	**2**	2
Taxes, other than income taxes	**8**	8
Insurance recovery (Note 13)	**—**	(4)
Operating income	**125**	134
Finance income related to subsidiaries of TransAlta (Note 8)	**69**	76
Interest income (Note 9)	**6**	8
Interest expense (Note 9)	**(46)**	(45)
Change in fair value of financial assets (Note 8)	**(59)**	49
Foreign exchange gain (loss)	**27**	(31)
Earnings before income taxes	**122**	191
Income tax expense (Note 10)	**25**	8
Net earnings	**97**	183
Net earnings attributable to:		
Common shareholders	**92**	179
Non-controlling interest (Note 11)	**5**	4
	97	183
Weighted average number of common shares outstanding in the year *(millions)* (Note 20)	**266**	264
Net earnings per share attributable to common shareholders, basic and diluted	**0.35**	0.68

See accompanying notes.

Consolidated Statements of Comprehensive Income

Year ended Dec. 31 *(in millions of Canadian dollars)*	2020	2019
Net earnings	**97**	183
Other comprehensive income (loss)		
Net change in fair value of investments in subsidiaries of TransAlta (Note 8)[(1)]	**126**	(45)
Total items that will not be reclassified subsequently to net earnings	**126**	(45)
Other comprehensive income (loss)	**126**	(45)
Total comprehensive income	**223**	138
Total comprehensive income attributable to:		
Common shareholders	**218**	134
Non-controlling interest (Note 11)	**5**	4
	223	138

(1) Net of income tax expense of nil for the year ended Dec. 31, 2020 (2019 – $1 million).

See accompanying notes.

Consolidated Statements of Financial Position

As at Dec. 31 *(in millions of Canadian dollars)*	2020	2019
Cash and cash equivalents (Note 12)	**582**	63
Accounts receivable (Note 12)	**134**	90
Prepaid expenses	**2**	2
Inventory	**7**	7
Current portion of other assets (Notes 12 and 17)	**18**	113
Current portion of investments in subsidiaries of TransAlta (Note 8)	**—**	18
	743	293
Property, plant and equipment (Note 13)		
Cost	**2,856**	2,850
Accumulated depreciation	**(1,239)**	(1,122)
	1,617	1,728
Finance lease receivable (Notes 12 and 14)	**7**	—
Right-of-use assets (Note 15)	**27**	28
Intangible assets (Note 16)	**103**	114
Other assets (Notes 12 and 17)	**54**	49
Investments in subsidiaries of TransAlta (Notes 8 and 12)	**1,087**	1,474
Deferred income tax assets (Note 10)	**18**	16
Total assets	**3,656**	3,702
Accounts payable and accrued liabilities (Note 12)	**50**	37
Income tax payable	**1**	—
Dividends payable (Notes 12 and 20)	**63**	62
Provisions (Note 24)	**1**	—
Risk management liabilities (Note 12)	**1**	1
TEA demand loan (Notes 12 and 18)	**195**	—
Current portion of long-term debt and lease obligations (Notes 12 and 18)	**53**	52
	364	152
Long-term debt and lease obligations (Notes 12 and 18)	**639**	909
Decommissioning provisions (Note 19)	**51**	56
Contract liabilities (Note 5)	**6**	6
Deferred revenues	**—**	1
Risk management liabilities (Note 12)	**1**	1
Deferred income tax liabilities (Note 10)	**290**	264
Total liabilities	**1,351**	1,389
Equity		
Common shares (Note 20)	**3,059**	3,039
Deficit	**(796)**	(637)
Accumulated other comprehensive loss	**(8)**	(134)
Equity attributable to shareholders	**2,255**	2,268
Non-controlling interest (Note 11)	**50**	45
Total equity	**2,305**	2,313
Total liabilities and equity	**3,656**	3,702

Commitments and contingencies (Note 24)
Subsequent events (Note 28)

On behalf of the Board:

David Drinkwater
Chair

Kathryn B. McQuade
Director

See accompanying notes.

Consolidated Statements of Changes in Equity

(in millions of Canadian dollars)

	Common shares	**Deficit**	**Accumulated other comprehensive income (loss)**	**Attributable to shareholders**	**Attributable to non-controlling interest**	**Total**
Balance, Dec. 31, 2019	3,039	(637)	(134)	2,268	45	2,313
Net earnings	—	92	—	92	5	97
Other comprehensive income:						
Net change in fair value of investments of subsidiaries of TransAlta (Note 8)[(1)]	—	—	126	126	—	126
Total comprehensive income	—	92	126	218	5	223
Common share dividends (Note 20)	—	(251)	—	(251)	—	(251)
Dividend reinvestment plan (Note 20)	20	—	—	20	—	20
Balance, Dec. 31, 2020	**3,059**	**(796)**	**(8)**	**2,255**	**50**	**2,305**

(in millions of Canadian dollars)

	Common shares	Deficit	Accumulated other comprehensive loss	Attributable to shareholders	Attributable to non-controlling interest	Total
Balance, Dec. 31, 2018	3,011	(567)	(89)	2,355	41	2,396
Net earnings	—	179	—	179	4	183
Other comprehensive income:						
Net change in fair value of investments of subsidiaries of TransAlta (Note 8)[(1)]	—	—	(45)	(45)	—	(45)
Total comprehensive income (loss)	—	179	(45)	134	4	138
Common share dividends (Note 20)	—	(249)	—	(249)	—	(249)
Dividend reinvestment plan (Note 20)	28	—	—	28	—	28
Balance, Dec. 31, 2019	3,039	(637)	(134)	2,268	45	2,313

(1) Net of income tax expense of nil for the year ended Dec. 31, 2020 (2019 – $1 million).

See accompanying notes.

Consolidated Statements of Cash Flows

Year ended Dec. 31 *(in millions of Canadian dollars)*	2020	2019
Operating activities		
Net earnings	**97**	183
Depreciation and amortization	**135**	136
Accretion of provisions (Notes 9 and 19)	**3**	4
Deferred income tax expense (Note 10)	**24**	6
Change in fair value of financial assets	**59**	(49)
Unrealized foreign exchange (gain) loss (Note 8)	**(31)**	30
Unrealized loss from risk management activities	**—**	1
Provisions	**7**	—
Asset impairment (Note 13)	**2**	2
Other non-cash items	**2**	(5)
Cash flow from operations before changes in working capital	**298**	308
Change in non-cash operating working capital balances (Note 21)	**(31)**	23
Cash flow from operating activities	**267**	331
Investing activities		
Additions to property, plant and equipment (Notes 4 and 13)	**(27)**	(31)
Additions to intangibles (Note 16)	**(1)**	—
Net repayments (advances) on promissory notes from a subsidiary of TransAlta (Note 17)	**98**	(90)
Proceeds on redemptions of investments in subsidiaries of TransAlta (Note 8)	**537**	549
Investments in subsidiaries of TransAlta (Note 8)	**(72)**	(607)
Recovery of property insurance settlements	**—**	4
Realized gain on financial instruments	**—**	2
Return of capital on investments in subsidiaries of TransAlta (Note 8)	**30**	40
Restricted cash (Note 18)	**—**	31
Advances on Kent Hills Wind LP loan receivable (Note 17)	**(5)**	(10)
Change in non-cash investing working capital balances	**(5)**	(14)
Cash flow from (used in) investing activities	**555**	(126)
Financing activities		
Net (decrease) increase in borrowings under credit facilities (Note 18)	**(220)**	55
Long-term debt repayments (Note 18)	**(50)**	(49)
Dividends paid on common shares (Note 21)	**(231)**	(221)
Realized foreign exchange gain	**11**	—
Net proceeds on issuance of TEA demand loan (Note 18)	**188**	—
Lease obligations – principal repayment	**(1)**	(1)
Other	**—**	1
Cash flow used in financing activities	**(303)**	(215)
Increase (decrease) in cash and cash equivalents	**519**	(10)
Cash and cash equivalents, beginning of year	**63**	73
Cash and cash equivalents, end of year	**582**	63
Cash income taxes paid	**1**	2
Cash interest paid	**38**	41

See accompanying notes.

Notes to Consolidated Financial Statements

(Tabular amounts in millions of Canadian dollars, except as otherwise noted)

1. Corporate Information

A. Formation of the Corporation

TransAlta Renewables Inc. ("TransAlta Renewables" or the "Corporation") was incorporated on May 28, 2013, under the *Canada Business Corporations Act* and has been formed to own a portfolio of renewable and natural gas power generation facilities and other infrastructure assets. The Corporation is a majority-owned subsidiary of TransAlta Corporation ("TransAlta"). The Corporation's head office is located in Calgary, Alberta.

B. Basis of Preparation

These Consolidated Financial Statements have been prepared by management in compliance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

The Consolidated Financial Statements include the accounts of the Corporation and the subsidiaries that it controls. Control exists when the Corporation is exposed, or has rights, to variable returns from its involvement with the subsidiary and has the ability to affect those returns through its power over the subsidiary.

The Consolidated Financial Statements have been prepared on a historical cost basis, except for certain financial instruments, which are stated at fair value.

The Consolidated Financial Statements reflect all adjustments that consist of normal recurring adjustments and accruals that are, in the opinion of management, necessary for a fair presentation of results. The Corporation's results are partly seasonal due to the nature of electricity, which is generally consumed as it is generated; and the nature of wind and run-of-river hydro resources, which fluctuate based on both seasonal patterns and annual weather variation. Typically, run-of-river hydro facilities generate most of their electricity and revenues during the spring and summer months when melting snow starts feeding watersheds and rivers. Inversely, wind speeds are historically greater during the cold winter months and lower in the warm summer months.

The Consolidated Financial Statements are presented in Canadian dollars, which is the Corporation's functional and presentation currency. All financial information presented in the tables is in Canadian dollars and has been rounded to the nearest million dollars unless otherwise noted.

These consolidated financial statements were authorized for issue by the Board of Directors (the "Board") on March 2, 2021.

2. Significant Accounting Policies

A. Revenue Recognition

I. Contracts with Customers

The Corporation evaluates whether the contracts it enters into meet the definition of a contract with a customer at the inception of the contract and on an ongoing basis if there is an indication of significant changes in facts and circumstances. Each promise to provide a good or service within a contract is accounted for separately as a performance obligation if it is distinct. The Corporation's contracts may contain more than one performance obligation. The transaction price, which is the amount of consideration to which the Corporation expects to be entitled to within each contract, is determined and is allocated to the performance obligation in the contract. The transaction price may include variable consideration based on for example, future production volumes, variable costs, market prices or indices and escalators. Variable consideration is only included in the transaction price for each performance obligation when it is highly probable that a significant reversal of the cumulative variable revenue will not occur. Variable consideration is assessed at each reporting period to determine whether the constraint is lifted. Revenue is recognized when, or as, the Corporation satisfies the performance obligations by transferring control of the good or service to the customer.

For certain contracts, revenue may be recognized at the invoiced amount, as permitted using the invoice practical expedient, if such amount corresponds directly with the Corporation's performance to date.

The majority of the Corporation's revenues from contracts with customers are derived from the sale of electricity, capacity and environmental attributes. Obligations to deliver electricity are satisfied over time and revenue is recognized using a units-based output measure (i.e., megawatt hours). Obligations to deliver capacity are satisfied over time and revenue is recognized using a time-based measure. Environmental attributes that are sold together with electricity are satisfied on the same basis as the electricity. Obligations to deliver environmental attributes are satisfied at a point in time, generally upon delivery.

The Corporation recognizes unconditional rights to consideration separately as a receivable. Receivables are evaluated at each reporting period to determine whether there is any objective evidence that they are impaired. A contract liability is recognized when the Corporation receives consideration from the customer before the performance obligations have been satisfied.

II. Other Revenues

Dividend income from investments is recognized when the right to receive payment has been established, usually on declaration of dividends by the paying entity's Board of Directors. Dividends characterized as a return of capital are recognized as a reduction in the cost of the related investment.

Interest income on financial assets classified as amortized cost is accrued on a passage-of-time basis based on the principal outstanding and the applicable stated interest rates. Guarantee fee income is accrued on the basis of the period and amounts over which the guarantee is provided.

B. Foreign Currency Translation

The Corporation's functional currency is the Canadian dollar. Foreign-currency-denominated monetary assets and liabilities are translated at exchange rates in effect at the end of the reporting period. Transactions denominated in a currency other than the functional currency are translated at the exchange rate in effect on the transaction date. The resulting exchange gains or losses are included in net earnings in the period in which they arise. The foreign exchange gains or losses arising from the Preferred Shares Tracking Australia Cash Flows and the preferred shares tracking earnings and distributions of Wyoming Wind, Big Level and Antrim, Lakeswind and Mass Solar are recognized in other comprehensive income.

C. Financial Instruments

I. Financial Instruments, Impairment and Hedging

a. Classification and Measurement

Financial assets are classified and measured based on their contractual cash flow characteristics and the business model under which the Corporation holds the financial asset. All financial assets and financial liabilities, including derivatives, are recognized at fair value on the Consolidated Statements of Financial Position when the Corporation becomes party to the contractual provisions of a financial instrument or non-financial derivative contract. Financial assets must be classified and measured at either amortized cost, fair value through profit or loss ("FVTPL"), or fair value through other comprehensive income ("FVTOCI"). Financial liabilities are classified as FVTPL when the financial liability is held for trading. All other financial liabilities are subsequently measured at amortized cost.

Financial assets whose contractual cash flows arise on specified dates, consist solely of principal and interest, and are held within a business model whose objective is to collect the contractual cash flows are subsequently measured at amortized cost. Financial assets measured at FVTOCI are those that have contractual cash flows arising on specific dates, consisting solely of principal and interest, and that are held within a business model whose objective is to collect the contractual cash flows and to sell the financial asset. All other financial assets and equity investments are subsequently measured at FVTPL.

At initial recognition, the Corporation may irrevocably elect to measure particular investments in equity instruments at FVTOCI that would otherwise be measured at FVTPL. When an equity investment is designated as measured at FVTOCI, the cumulative gain or loss previously recognized in other comprehensive income ("OCI") is not subsequently reclassified to profit or loss.

Refer to section Q(II) below for policy on return of capital for investments in equity instruments.

Financial assets are derecognized when the contractual rights to receive cash flows expire. Financial liabilities are derecognized when the obligation is discharged, cancelled or expired.

Transaction costs are expensed as incurred for financial instruments classified or designated as at fair value through profit or loss. For other financial instruments, transaction costs are recognized as part of the initial carrying amount of the financial instrument. The Corporation uses the effective interest method of amortization for any transaction costs or fees, premiums or discounts earned or incurred for financial instruments measured at amortized cost.

The Corporation may enter into a variety of derivative financial instruments to manage its exposure to commodity price risk, interest rate risk and foreign currency exchange risk, including fixed price financial swaps, long-term physical power sale contracts and foreign exchange forward contracts. Derivatives are initially recognized at fair value at the date the derivative contracts are entered into and are subsequently measured at their fair value at the end of each reporting period. The resulting gain or loss is recognized in net earnings immediately unless the derivative is designated and effective as a hedging instrument, in which case the timing of the recognition in net earnings is dependent on the nature of the hedging relationship.

Derivatives embedded in non-derivative host contracts that are not financial assets are recognized as separate derivatives when they meet the definition of a derivative, their risks and economic characteristics are not closely related to those of the host contracts, and the host contracts are not measured at FVTPL. Derivatives embedded in hybrid contracts that contain financial asset hosts are not separated and the entire contract is measured at FVTOCI, FVTPL or amortized cost, as appropriate.

b. Impairment of Financial Assets
The Corporation recognizes an allowance for expected credit losses for financial assets measured at amortized cost as well as certain other instruments. The loss allowance for a financial asset is measured at an amount equal to the lifetime expected credit loss if its credit risk has increased significantly since initial recognition, or if the financial asset is a purchased or originated credit-impaired financial asset. If the credit risk on a financial asset has not increased significantly since initial recognition, its loss allowance is measured at an amount equal to the 12-month expected credit loss.

For trade receivables, the Corporation applies a simplified approach for measuring the loss allowance. Therefore, the Corporation does not track changes in credit risk but instead recognizes a loss allowance at an amount equal to the lifetime expected credit losses at each reporting date.

The assessment of the expected credit loss is based on historical data and adjusted by forward-looking information. Forward-looking information utilized includes third-party default rates over time, dependent on credit ratings.

c. Hedge Accounting
Where hedge accounting can be applied and the Corporation chooses to apply hedge accounting, a hedge relationship is designated as a cash flow or fair value hedge. A relationship qualifies for hedge accounting if, at inception, it is formally designated and documented as a hedge, and the hedging instrument and the hedged item have values that generally move in opposite directions because of the hedged risk. The documentation includes identification of the hedging instrument and hedged item or transaction, the nature of the risk being hedged, the Corporation’s risk management objectives and strategy for undertaking the hedge, and how hedge effectiveness will be assessed. The process of hedge accounting includes linking derivatives to specific recognized assets and liabilities or to specific firm commitments or highly probable anticipated transactions.

The Corporation formally assesses, both at the hedge’s inception and on an ongoing basis, whether the derivatives used are highly effective in offsetting changes in fair values or cash flows of hedged items. If hedge criteria are not met or the Corporation does not apply hedge accounting, the derivative is recognized at fair value on the Consolidated Statements of Financial Position, with subsequent changes in fair value recorded in net earnings in the period of change.

In a cash flow hedging relationship, the effective portion of the change in the fair value of the hedging derivative is recognized in OCI while any ineffective portion is recognized in net earnings. The cash flow hedge reserve is adjusted to the lower of the cumulative gain or loss on the hedging instrument and the cumulative change in fair value of the hedged item. If cash flow hedge accounting is discontinued, the amounts previously recognized in accumulated other comprehensive income ("AOCI") must remain in AOCI if the hedged future cash flows are still expected to occur. Otherwise, the amount will be immediately reclassified to net earnings as a reclassification adjustment. After discontinuation, once the hedged cash flow occurs, any amount remaining in AOCI must be accounted for depending on the nature of the underlying transaction.

In certain cases, the Corporation purchases non-financial items in a foreign currency, for which it enters into foreign exchange contracts to hedge foreign currency risk on the anticipated payments. Hedging gains and losses are basis adjusted to the initial carrying amount of non-financial hedged items once recognized. These adjustments are not considered reclassification adjustments and do not affect OCI, but are directly transferred to the asset and are reflected in the statement of changes in equity as a reclassification from AOCI.

D. Cash and Cash Equivalents
Cash and cash equivalents are comprised of cash and highly liquid investments with original maturities of three months or less.

E. Inventory
I. Emission Credits
Purchased emission credits and allowances are recorded as inventory at cost and are carried at the lower of weighted average cost and net realizable value. Credits granted to, or internally generated by, the Corporation are recorded at nil.

II. Parts, Materials and Supplies
Parts, materials and supplies are recorded at the lower of cost, measured at moving average cost, and net realizable value.

F. Property, Plant and Equipment
The Corporation's investment in property, plant and equipment ("PP&E") is initially measured at the original cost of each component at the time of construction, purchase or acquisition. A component is a tangible portion of an asset that can be separately identified and depreciated over its own expected useful life, and is expected to provide a benefit for a period in excess of one year. Original cost includes items such as materials, labour, borrowing costs and other directly attributable costs, including the initial estimate of the cost of decommissioning and restoration. Costs are recognized as PP&E assets if it is probable that future economic benefits will be realized and the cost of the item can be measured reliably.

The cost of capital spares is capitalized and classified as PP&E, as these items can only be used in connection with an item of PP&E.

Planned life-cycle maintenance for gas and hydro facilities is performed at regular intervals and includes inspection, repair and maintenance of existing components. Costs incurred are capitalized in the period in which maintenance activities occur and are amortized on a straight-line basis over the term until the next maintenance event. Expenditures incurred for the replacement of components are capitalized and amortized over the estimated useful life of such components.

The cost of routine repairs and maintenance and the replacement of minor parts is charged to net earnings as incurred.

Subsequent to initial recognition and measurement at cost, all classes of PP&E continue to be measured using the cost model and are reported at cost less accumulated depreciation and impairment losses, if any.

An item of PP&E or a component is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition is included in net earnings when the asset is derecognized.

The estimate of the useful lives of each component of PP&E is based on current facts and past experience, and takes into consideration existing long-term sales agreements and contracts, current and forecasted demand, and the potential for technological obsolescence. The useful life is used to estimate the rate at which the component of PP&E is depreciated. PP&E assets are subject to depreciation when the asset is considered to be available for use, which is typically upon commencement of commercial operations. Each significant component of an item of PP&E is depreciated to its residual value over its estimated useful life, using the straight-line method. Estimated useful lives, residual values and depreciation methods are reviewed at least annually and are subject to revision based on new or additional information. The effect of a change in useful life, residual value or depreciation method is accounted for prospectively.

Estimated remaining useful lives of the components of depreciable assets, categorized by asset class, are as follows:

Hydro generation	1-40 years
Wind generation	1-23 years
Gas generation	1-13 years
Capital spares and other	2-19 years

The Corporation capitalizes borrowing costs on capital invested in projects under construction (see Note 2(K)). Upon commencement of commercial operations, capitalized borrowing costs, as a portion of the total cost of the asset, are depreciated over the estimated useful life of the related asset.

G. Intangible Assets

Intangible assets acquired in a business combination are recognized at their fair value at the date of acquisition. Intangible assets acquired separately are recognized at cost. Internally generated intangible assets arising from development projects are recognized when certain criteria related to the feasibility of internal use or sale, and probable future economic benefits, of the intangible asset are demonstrated. Intangible assets are initially recognized at cost, which is comprised of all directly attributable costs necessary to create, produce and prepare the intangible asset to be capable of operating in the manner intended by management.

Subsequent to initial recognition, intangible assets continue to be measured using the cost model, and are reported at cost less accumulated amortization and impairment losses, if any. Amortization is included in depreciation and amortization in the Consolidated Statements of Earnings.

Amortization commences when the intangible asset is available for use and is computed on a straight-line basis over the intangible asset's estimated useful life. Estimated useful lives of intangible assets may be determined, for example, with reference to the term of the related contract or licence agreement. The estimated useful lives and amortization methods are reviewed annually, with the effect of any changes being accounted for prospectively.

Intangible assets include power sale contracts with fixed prices higher than market prices at the date of acquisition, software and intangibles under development. Estimated remaining useful lives of intangible assets are as follows:

Software	1-7 years
Power sale contracts	5-13 years

H. Impairment of Tangible and Intangible Assets

At the end of each reporting period, the Corporation assesses whether there is any indication that PP&E and finite life intangible assets are impaired.

Factors that could indicate that an impairment exists include: significant underperformance relative to historical or projected operating results; significant changes in the manner in which an asset is used, or in the Corporation's overall business strategy; or significant negative industry or economic trends. In some cases, these events are clear. However, in many cases, a clearly identifiable event indicating possible impairment does not occur. Instead, a series of individually insignificant events occurs over a period of time leading to an indication that an asset may be impaired.

The Corporation's operations, the market and business environment are routinely monitored, and judgments and assessments are made to determine whether an event has occurred that indicates a possible impairment. If such an event has occurred, an estimate is made of the recoverable amount of the asset. Recoverable amount is the higher of an asset's fair value less costs of disposal and its value in use. Fair value is the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date. In determining fair value, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model, such as discounted cash flows, is used. Value in use is the present value of the estimated future cash flows expected to be derived from the asset from its continued use and ultimate disposal by the Corporation. If the recoverable amount is less than the carrying amount of the asset, an asset impairment loss is recognized in net earnings and the asset's carrying amount is reduced to its recoverable amount.

At each reporting date, an assessment is made to determine if there is any indication that an impairment loss previously recognized no longer exists or has decreased. If such indication exists, the recoverable amount of the asset is estimated and the impairment loss previously recognized is reversed if there has been an increase in the asset's recoverable amount. Where an impairment loss is subsequently reversed, the carrying amount of the asset is increased to the lesser of the revised estimate of its recoverable amount or the carrying amount that would have been determined (net of depreciation) had no impairment loss been recognized previously. A reversal of an impairment loss is recognized in net earnings.

I. Income Taxes

Income tax expense comprises current and deferred income tax. Current income tax is the expected income tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to income taxes in respect of previous years.

Deferred income tax is recognized in respect of differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes (temporary differences). Deferred income tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, based on the tax laws that have been enacted or substantively enacted at the reporting date.

A deferred income tax asset is recognized for unused tax losses and tax credits to the extent that it is probable that future taxable profits will be available against which such losses can be utilized. Deferred income tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related income tax benefit will be realized.

J. Provisions

Provisions are recognized when the Corporation has a present obligation (legal or constructive) as a result of a past event, it is probable that the Corporation will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation. A legal obligation can arise through a contract, legislation or other operation of law. A constructive obligation arises from an entity's actions, whereby through an established pattern of past practice, published policies or a sufficiently specific current statement, the entity has indicated it will accept certain responsibilities and has thus created a valid expectation that it will discharge those responsibilities. The amount recognized as a provision is the best estimate, remeasured at each period-end, of the expenditures required to settle the present obligation considering the risks and uncertainties associated with the obligation. Where expenditures are expected to be incurred in the future, the obligation is measured at its present value using a current market-based, risk-adjusted interest rate.

The Corporation records a decommissioning and restoration provision for all generating facilities for which it is legally or constructively required to remove the facilities at the end of their useful lives and restore the site. For some hydro facilities, the Corporation is required to remove the generating equipment, but is not required to remove the structures. Initial decommissioning provisions are recognized at their present value when incurred. Each reporting date, the Corporation determines the present value of the provision using the current discount rates that reflect the time value of money and associated risks. The Corporation recognizes the initial decommissioning and restoration provisions, as well as changes resulting from revisions to cost estimates and period-end revisions to the market-based, risk-adjusted discount rate, as a cost of the related PP&E (see Note 2(F)). The accretion of the net present value discount is charged to net earnings each period and is included in net interest expense.

Changes in other provisions resulting from revisions to estimates of expenditures required to settle the obligation or period-end revisions to the market-based, risk-adjusted discount rate are recognized in net earnings. The accretion of the net present value discount is charged to net earnings each period and is included in net interest expense.

K. Borrowing Costs

The Corporation capitalizes borrowing costs that are directly attributable to, or relate to general borrowings used for, the construction of qualifying assets. Qualifying assets are assets that take a substantial period of time to prepare for their intended use and typically include generating facilities or other assets that are constructed over periods of time exceeding 12 months. Borrowing costs are considered to be directly attributable if they could have been avoided if the expenditure on the qualifying asset had not been made. Borrowing costs that are capitalized are included in the cost of the related PP&E component. Capitalization of borrowing costs ceases when substantially all the activities necessary to prepare the asset for its intended use are complete.

All other borrowing costs are expensed in the period in which they are incurred.

L. Non-Controlling Interest

A non-controlling interest arises from contractual arrangements between the Corporation and other parties, whereby the other party has acquired an interest in a specified asset or operation, and the Corporation retains control.

Subsequent to acquisition, the carrying amount of the non-controlling interest is increased or decreased by the non-controlling interest's share of subsequent changes in equity and payments to the non-controlling interest. Total comprehensive income is attributed to the non-controlling interest even if this results in the non-controlling interest having a negative balance.

M. Joint Arrangements

A joint arrangement is a contractual arrangement that establishes the terms by which two or more parties agree to undertake and jointly control an economic activity. The Corporation's joint arrangements are generally classified as joint operations.

A joint operation arises when two or more parties that have joint control have rights to the assets and obligations for the liabilities relating to the arrangement. Generally, each party takes a share of the output from the asset and each bears an agreed-upon share of the costs incurred in respect of the joint operation. The Corporation reports its interests in joint operations in its consolidated financial statements using the proportionate consolidation method by recognizing its share of the assets, liabilities, revenues and expenses in respect of its interest in the joint operation.

N. Government Incentives

Government incentives are recognized when the Corporation has reasonable assurance that it will comply with the conditions associated with the incentive and that the incentive will be received. When the incentive relates to an expense or revenue item, it is recognized in net earnings over the same period in which the related costs or revenues are recognized. When the incentive relates to an asset, it is recognized as a reduction of the carrying amount of PP&E and released to earnings as a reduction in depreciation expense over the expected useful life of the related asset.

O. Leases

A contract is a lease when the contract conveys to the customer the right to control the use of an identified asset for a period of time in exchange for consideration. The right to control the use of the asset exists when the customer has the right to obtain substantially all of the economic benefits from the use of the asset and the right to direct the use of the asset.

I. Corporation as Lessee

For all contracts that meet the definition of a lease, in which the Corporation is the lessee (customer), and do not meet the exemption for short-term or low-value leases, the Corporation:

- Recognizes right-of-use assets and lease liabilities in the Consolidated Statements of Financial Position, initially measured at the present value of the remaining lease payments discounted using the Corporation's incremental borrowing rate or the rate implicit in the lease;
- Recognizes depreciation of the right-of-use assets and interest expense on lease obligations in the Consolidated Statements of Earnings; and
- Recognizes the principal repayments on lease obligations as financing activities and interest payments on lease obligations as operating activities in the Consolidated Statements of Cash Flows.

For short-term and low-value leases, the Corporation recognizes the lease payments as an operating expense.

Variable lease payments that do not depend on an index or a rate are not included in the measurement of the lease liability and the right-of-use asset, and are recognized as an expense in the period in which the event or condition that triggers the payments occurs.

The right-of-use asset is adjusted for: payments made at or before the commencement date of the lease; initial direct cost incurred; lease incentives; and an estimate of costs to dismantle and remove the underlying asset, or to restore the underlying asset or the site on which it is located.

The lease liability is re-measured when there is a change in future lease payments arising from a change in an index or rate, or if there is a change in the Corporation's estimate or assessment of whether it will exercise an extension, termination, or purchase option. A corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

The lease term includes periods covered by an option to extend if the Corporation is reasonably certain to exercise that option and periods covered by an option to terminate if the Corporation is reasonably certain not to exercise that option.

Right-of-use assets are depreciated over the shorter period of either the lease term or the useful life of the underlying asset. If a lease transfers ownership of the underlying asset or the cost of the right-of-use asset reflects that the Corporation expects to exercise the purchase option, the related right-of-use asset is depreciated over the useful life of the underlying asset.

II. Corporation as Lessor

Where the Corporation determines that the contractual provisions of a power purchase agreement ("PPA") or other long-term contract for the sale of power generated meet the definition of a lease and result in the customer assuming the principal risks and rewards of ownership of the asset, the arrangement is a finance lease. Assets subject to finance leases are not reflected as PP&E and the net investment in the lease, represented by the present value of the amounts due from the lessee, is recorded in the Consolidated Statements of Financial Position as a financial asset, classified as a finance lease receivable. The payments considered to be part of the leasing arrangement are apportioned between a reduction in the lease receivable and finance lease income. The finance lease income element of the payments is recognized using a method that results in a constant rate of return on the net investment in each period and is reflected in finance lease income on the Consolidated Statements of Earnings.

Where the Corporation determines that the contractual provisions of a contract meet the definition of a lease and result in the Corporation retaining the principal risks and rewards of ownership of the asset, the arrangement is an operating lease. For operating leases, the asset is, or continues to be, capitalized as PP&E and depreciated over its useful life.

When the Corporation has subleased all or a portion of an asset it is leasing and for which it remains the primary obligor under the lease, it accounts for the head lease and the sublease as two separate contracts. The sublease is classified as a finance lease by reference to the right-of-use asset arising from the head lease.

P. Earnings per Share

Basic earnings per share is calculated by dividing earnings attributable to common shareholders by the weighted average number of common shares outstanding in the year.

Diluted earnings per share is calculated by dividing net earnings attributable to common shareholders, adjusted for the after-tax effects of dividends, interest or other changes in net earnings that would result from potential dilutive instruments, by the weighted average number of common shares outstanding in the year, adjusted for additional common shares that would have been issued on the conversion of all potential dilutive instruments.

Q. Significant Accounting Judgments and Key Sources of Estimation Uncertainty

The preparation of financial statements requires management to make judgments, estimates and assumptions that could affect the reported amounts of assets, liabilities, revenues, expenses and disclosures of contingent assets and liabilities during the period. These estimates are subject to uncertainty. Actual results could differ from those estimates due to factors such as fluctuations in interest rates, foreign exchange rates, inflation and commodity prices, and changes in economic conditions, legislation and regulations, and such differences could be material.

In the process of applying the Corporation's accounting policies, management has to make judgments and estimates about matters that are highly uncertain at the time the estimate is made and that could significantly affect the amounts recognized in the Consolidated Financial Statements. Different estimates with respect to key variables used in the calculations, or changes to estimates, could potentially have a material impact on the Corporation's financial position or performance.

The key judgments and sources of estimation uncertainty are described below:

I. COVID-19

The outbreak of the novel strain of coronavirus ("COVID-19") has resulted in governments worldwide enacting emergency measures to constrain the spread of the virus. These measures, which include the implementation of travel bans, self-imposed quarantine periods, self-isolation, physical and social distancing and the closure of non-essential businesses, have caused significant disruption to businesses globally, which has resulted in an uncertain and challenging economic environment. The duration and impact of the COVID-19 pandemic are unknown at this time. Estimates to the extent to which the COVID-19 pandemic may, directly or indirectly, impact the Corporation's operations, financial results and conditions in future periods are also subject to significant uncertainty. For a description of additional risks identified as a result of the pandemic, refer to Note 4. Actual results could differ from these estimates due to factors such as fluctuations in interest rates, foreign exchange rates, inflation and commodity prices, and changes in economic conditions, legislation and regulations.

II. Significant Influence through Tracking Preferred Shares

The Corporation has invested in preferred shares of subsidiaries of TransAlta that pay dividends based on certain financial results of other subsidiaries of TransAlta. Under IFRS, a 20 per cent voting interest is presumed to provide the holder with significant influence over the investee. Significant influence is the power to participate in the financial and operating policy decisions of an investee.

The rights associated with the Corporation's investments in the preferred shares of a subsidiary of TransAlta tracking the financial results of certain US Wind and Solar assets (see Note 8) provide the Corporation individually with a five per cent (cumulatively 20 per cent) voting interest in that subsidiary. In the event that any dividends on these shares have not been paid within six months of the date at which the payout formula would have them paid, and while such amounts remain unpaid, the Corporation will have the right to appoint individually 15 per cent (cumulatively 60 per cent) of the directors of that subsidiary.

The investment in the preferred shares of a subsidiary of TransAlta tracking the financial results of TransAlta Energy (Australia) Pty Ltd. ("TEA") does not provide the Corporation with any voting rights, unless and until the subsidiary fails to pay four quarterly dividends on the dates when due in accordance with the payout formula, whether or not consecutive, and whether or not such dividends have been declared. Thereafter, but only for so long as any such dividend remains in arrears, the Corporation is entitled to elect 30 per cent of the directors of the subsidiary. The investment agreement provides the Corporation with rights to financial information and further protections against adverse changes in the operation and financial structure of TEA through post-closing covenants.

The Corporation determined that it does not have significant influence over the TransAlta subsidiaries, in consideration of TransAlta's block ownership of the voting shares, and accordingly, the investments were determined to constitute financial assets.

III. Dividends as Income or Return of Capital

The Corporation receives dividends from its investments in the Preferred Shares Tracking Australia Cash Flows, TEA preferred shares, preferred shares tracking earnings and distributions of Wyoming Wind, Big Level and Antrim, Lakeswind and Mass Solar. Determining whether a dividend represents in substance a return of capital requires significant judgment. The Corporation determines the amount of dividends that represents a return of capital based on the lower of: (i) the difference, if positive, between the cost base of the shares and their fair value, at the end of the reporting period and (ii) the actual dividend declared on the shares during the reporting period. When it is determined that a dividend represents a return of capital, the carrying amount of the related investment is reduced. The TEA preferred shares were redeemed on Oct. 23, 2020.

IV. Financial Instrument Fair Values

The Corporation has entered into financial instruments and derivatives that are accounted for at fair value, with the initial and subsequent changes in fair value affecting earnings and OCI in the period the change occurs. The fair values of financial instruments and derivatives are classified within three levels.

Level III fair values are determined using inputs for the asset or liability that are not readily observable. These fair value levels are outlined and discussed in more detail in Note 12. Some of the Corporation's fair values are included in Level III because they require the use of significant unobservable assumptions in the internal valuation techniques or models to determine fair value. The determination of the fair value of these contracts can be complex and relies on judgments and estimates concerning operating revenue, costs, discount rates and business alternatives, among other factors. These fair value estimates may not necessarily be indicative of the amounts that could be realized or settled, and changes in these assumptions could affect the reported fair value of the financial instruments. Fair values can fluctuate significantly and can be favourable or unfavourable depending on current market conditions.

V. Consolidation of Kent Hills 1, 2 and 3 ("Kent Hills") Wind Facilities

Under IFRS, the Corporation is required to consolidate all entities that it controls. The Corporation consolidates Kent Hills Wind LP as a subsidiary. Kent Hills Wind LP is owned 83 per cent by the Corporation and 17 per cent by an external third party. The Corporation controls the Kent Hills Wind LP through its 83 per cent ownership, and accordingly, consolidation is required.

VI. Impairment of PP&E

Impairment exists when the carrying amount of an asset exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. An assessment is made at each reporting date as to whether there is any indication that an impairment loss may exist or that a previously recognized impairment loss may no longer exist or may have decreased. In determining fair value less costs of disposal, information about third-party transactions for similar assets is used and if none is available, other valuation techniques, such as discounted cash flows, are used. Value in use is computed using the present value of management's best estimates of future cash flows based on the current use and present condition of the asset. In estimating either fair value less costs of disposal or value in use using discounted cash flow methods, estimates and assumptions must be made about sales prices, production, capital expenditures, asset retirement costs and other related cash inflows and outflows over the life of the facilities, which can range from 25 to 50 years. In developing these assumptions, management uses estimates of contracted prices, anticipated production levels, planned and unplanned outages, changes to regulations, and transmission capacity or constraints for the remaining life of the facilities. Appropriate discount rates reflecting the risks specific to the asset under review are used in the assessments. These estimates and assumptions are susceptible to change from period to period and actual results can, and often do, differ from the estimates, and can have either a positive or negative impact on the estimate of the impairment charge, and may be material. All of the Corporation's generating assets are contracted under the TransAlta PPAs or other PPAs with various third parties.

VII. Income Taxes

Preparation of the Consolidated Financial Statements involves determining an estimate of, or provision for, income taxes in each of the jurisdictions in which the Corporation operates. The process also involves making an estimate of income taxes currently payable and income taxes expected to be payable or recoverable in future periods, referred to as deferred income taxes. Deferred income taxes result from the effects of temporary differences due to items that are treated differently for tax and accounting purposes. The tax effects of these differences are reflected in the Consolidated Statements of Financial Position as deferred income tax assets and liabilities. An assessment must also be made to determine the likelihood that the Corporation's future taxable income will be sufficient to permit the recovery of deferred income tax assets. To the extent that such recovery is not probable, deferred income tax assets must be reduced. Management must exercise judgment in its assessment of continually changing tax interpretations, regulations and legislation to ensure deferred income tax assets and liabilities are complete and fairly presented. Differing assessments and applications than the Corporation's estimates could materially impact the amounts recognized for deferred income tax assets and liabilities.

VIII. Provisions for Decommissioning and Restoration Activities

The Corporation recognizes provisions for decommissioning and restoration obligations as outlined in Note 2(J) and Note 19. Initial decommissioning provisions, and subsequent changes thereto, are determined using the Corporation's best estimate of the required cash expenditures, adjusted to reflect the risks and uncertainties inherent in the timing and amount of settlement. The estimated cash expenditures are present valued using a current, risk-adjusted, market-based, pre-tax discount rate. A change in estimated cash flows, market interest rates or timing could have a material impact on the carrying amount of the provision.

In the fourth quarter of 2020, the Corporation adjusted the Sarnia decommissioning and restoration provision to reflect an updated engineering study. The Corporation's current best estimate of the decommissioning and restoration provision decreased by $15 million. This resulted in a decrease in the related assets in PP&E.

IX. Useful Life of PP&E

Each significant component of an item of PP&E is depreciated over its estimated useful life. Estimated useful lives are determined based on current facts and past experience, and take into consideration the anticipated physical life of the asset, existing long-term sales agreements and contracts, current and forecasted demand, the potential for technological obsolescence and regulations. The useful lives of PP&E are reviewed at least annually to ensure they continue to be appropriate.

During the third quarter of 2019, the allocation of the costs recognized for the components of the Corporation's wind assets and the useful lives of the identified components were reviewed. During the review, additional components were identified for parts where the useful lives are shorter than the original estimate. The useful life of each of these components was reduced from 30 years to either 15 years or 10 years. As a result, depreciation expense increased by approximately $10 million for the twelve months ended Dec. 31, 2019.

X. Revenue from Contracts with Customers

Where contracts contain multiple promises for goods or services, management exercises judgment in determining whether goods or services constitute distinct goods or services or a series of distinct goods that are substantially the same and that have the same pattern of transfer to the customer. The determination of a performance obligation affects whether the transaction price is recognized at a point in time or over time. Management considers both the mechanics of the contract and the economic and operating environment of the contract in determining whether the goods or services in a contract are distinct.

In determining the transaction price and estimates of variable consideration, management considers past history of customer usage in estimating the goods and services to be provided to the customer. The Corporation also considers the historical production levels and operating conditions for its variable generating assets.

The satisfaction of performance obligations requires management to make judgments as to when control of the underlying good or service transfers to the customer. Determining when a performance obligation is satisfied affects the timing of revenue recognition. Management considers both customer acceptance of the good or service, and the impact of laws and regulations such as certification requirements, in determining when this transfer occurs.

Management also applies judgment in determining whether the invoice practical expedient permits recognition of revenue at the invoiced amount, if that invoiced amount corresponds directly with the entity's performance to date.

XI. Leases

In determining whether a contract is a lease, the Corporation applies judgment in determining whether an identified asset exists, whether the customer or supplier obtains substantially all of the economic benefits from use of the identified asset, and who has the right to control the use of the identified asset during the term of the contract.

For contracts that are considered to be leases, judgment is applied in making the following determinations at the lease commencement date, all of which affect the amount recognized for the right-of-use asset and lease liability:

- Lease term; whether the Corporation is reasonably certain to exercise renewal or, not to exercise, termination options;
- Lease payments; identifying in-substance fixed payments (included) and variable payments that are based on usage or performance factors (excluded);
- Components of a contract; identifying lease and non-lease components (services that the supplier performs) and allocating contract payments to lease and non-lease components.

3. Accounting Changes

A. Current Accounting Changes

IFRS 3 *Business Combinations*

The Corporation has adopted the amendments to IFRS 3 *Business Combinations* as of Jan. 1, 2020. The amendments assist entities in determining whether a transaction should be accounted for as a business combination or as an asset acquisition. Specifically, these amendments:

- Clarify the minimum requirements for a business, whereby at minimum, an input and a substantive process that together significantly contribute to the ability to create output must be present;
- Remove the assessment of whether market participants are capable of replacing any missing elements so that the assessment is based on what has been acquired in its current state and condition, rather than on whether market participants are capable of replacing any missing elements, for example, by integrating the acquired activities and assets;
- Add guidance to help entities assess whether an acquired process is substantive, which requires more persuasive evidence when there are no outputs, because the existence of outputs provides some evidence that the acquired set of activities and assets is a business;
- Narrow the definition of outputs to focus on goods or services provided to customers, investment income or other income from ordinary activities; and
- Introduce an optional fair value concentration test that can be applied on a transaction-by-transaction basis to permit a simplified assessment of whether an acquired set of activities and assets are not a business. The concentration test is met if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets.

During the third quarter of 2020, the Corporation acquired the WindCharger battery storage project. The project was assessed under the optional fair value concentration test and was not identified as a business, and therefore has been accounted for as an asset acquisition.

Amendments to IAS 1 and 8 - Definition of Materiality

The Corporation adopted the amendments to IAS 1 and 8 on Jan. 1, 2020. The amendments provide a new definition of material that states "information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity."

The amendments clarify that materiality will depend on the nature or magnitude of information, either individually or in combination with other information, in the context of the financial statements. A misstatement of information is material if it could reasonably be expected to influence decisions made by the primary users. These amendments had no impact on the financial statements.

B. Future Accounting Changes

Amendments to IAS 16 *Property, Plant and Equipment: Proceeds before Intended Use*

The Corporation plans to early adopt the Amendments to IAS 16 *Property, Plant and Equipment: Proceeds before Intended Use* on Jan. 1, 2021. The amendment has a mandatory effective date of Jan. 1, 2022. The amendments prohibit deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while bringing the asset to the location and condition necessary for it to be capable of operating. No adjustments are expected from early adopting the amendments.

IFRS 7 *Financial Instruments: Disclosures* — Interest Rate Benchmark Reform

London Interbank Offered Rate ("LIBOR") is scheduled to be phased out as an interest rate index readily used by corporations for financial instruments by the end of 2021. The IASB issued *Interest Rate Benchmark Reform — Phase 2* in August 2020, which amends IFRS 9 *Financial Instruments*, IAS 39 *Financial instruments: Recognition and Measurement*, IFRS 7 *Financial Instruments: Disclosures* and IFRS 16 *Leases*. The amendments are effective Jan. 1, 2021, and will be adopted by the Corporation in 2021. No financial impact is expected upon adoption.

C. Comparative Figures

Certain comparative figures have been reclassified to conform to the current period's presentation. These reclassifications did not impact previously reported net earnings.

4. Significant Events

2020

Acquisition from TransAlta of 303 MW Generation Portfolio, including 274 MW of Wind Generation

On Dec. 23, 2020, the Corporation announced it had entered into definitive agreements for the acquisition of three assets from TransAlta consisting of:

- A 100 per cent direct interest in the 207 MW Windrise wind project located in the Municipal District of Willow Creek, Alberta;
- A 49 per cent economic interest in the 137 MW Skookumchuck wind facility in operation across Thurston and Lewis counties in Washington State; and
- A 100 per cent economic interest in the 29 MW Ada cogeneration facility in operation in Ada, Michigan.

The total acquisition price for the portfolio of assets is estimated to be $439 million, which includes the remaining construction costs for the Windrise wind project. The Corporation intends to fund the cash consideration for the acquisition and remaining construction costs with the proceeds received in October 2020 from the redemptions of the Preferred Shares Tracking the Amortizing Term loan and the preferred shares of TEA. The redemption of these instruments was funded with the proceeds from the South Hedland Power Station debt financing. The acquisition of the Windrise wind project closed on Feb. 26, 2021, and the acquisition of the economic interest in the Ada cogeneration facility and the Skookumchuck wind facility are expected to close in the second quarter of 2021; however, the economic benefit of each transaction will be effective as at Jan. 1, 2021.

Dividend Reinvestment Plan ("DRIP") Suspended

On May 31, 2018, the Corporation implemented a DRIP for Canadian holders of common shares of the Corporation. Commencing with the dividend payable on July 31, 2018, eligible shareholders could elect to automatically reinvest monthly dividends into additional common shares of the Corporation. The price per common share under the DRIP was 98 per cent of the average market price of the common shares for the five trading days on which not less than 500 common shares of the Corporation were traded immediately prior to the dividend payment date. Eligible shareholders were not required to participate in the DRIP.

In the fourth quarter of 2020, the Corporation suspended its DRIP in respect of any future declared dividends until further notice. Accordingly, the dividend payable on Oct. 30, 2020, to shareholders of record on Oct. 15, 2020, was the last dividend payment eligible for reinvestment by participating shareholders under the DRIP. Subsequent dividends will be paid only in cash. Upon any reinstatement of the DRIP, plan participants enrolled in the DRIP at the time of its suspension who remain enrolled at the time of its reinstatement will automatically resume participation in the DRIP.

BHP Nickel West Contract Extension

On Oct. 22, 2020, Southern Cross Energy ("SCE"), replaced and extended its current PPA with BHP Billiton Nickel West Pty Ltd. ("BHP"). SCE is composed of four generation facilities with a combined capacity of 245 MW in the Goldfields region of Western Australia. The Corporation owns an indirect economic interest in SCE, that forms part of the Australian cash flows.

The new agreement became effective Dec. 1, 2020, and replaced the previous contract that was scheduled to expire Dec. 31, 2023. The amendment to the PPA extends the term to Dec. 31, 2038, and provides SCE with the exclusive right to supply thermal and electrical energy from the Southern Cross Facilities for BHP's mining operations located in the Goldfields region of Western Australia. The amendment preserves the PPA's current economic benefit to 2023, while also providing SCE a return on new capital investments that will be required to support BHP's future power requirements and recently announced emission reduction targets. The amendments within the PPA also provide BHP participation rights in integrating renewable electricity generation, including solar and wind, with energy storage technologies, subject to the satisfaction of certain conditions. Evaluation of the renewable energy supply and carbon emissions reduction initiative under the extended PPA with SCE are underway, including an 18.5 MW solar photovoltaic project supported by a battery energy storage system and a waste heat steam turbine system.

The fair value of the Preferred Shares Tracking Australia Cash Flows has been updated to reflect the expected change in future cash flows related to the updated contract, including the 15-year extension and related capital investment to support the extended contract term. This resulted in an increase in fair value recognized in other comprehensive income.

South Hedland Power Station Debt Financing

On Oct. 22, 2020, TEC Hedland Pty Ltd. ("TEC"), a subsidiary of TEA that owns the South Hedland Power Station, closed an AU$800 million senior secured note offering ("TEC Notes") by way of a private placement that is secured by, among other things, a first-ranking charge over all assets of TEC. The Corporation owns an indirect economic interest in TEC, that forms part of the Australian cash flows. The notes bear interest at 4.07 per cent per annum, payable quarterly, and maturing on June 30, 2042, with principal payments starting on March 31, 2022.

On Oct. 23, 2020, the Corporation received $480 million (AU$515 million) of proceeds directly through the redemption of the Preferred Shares Tracking the Amortizing Term Loan and the redemption of preferred shares of TEA. The proceeds from the redemption of the shares were used to repay existing indebtedness on the credit facility and shall fund the 303 MW portfolio acquisition from TransAlta.

The proceeds of the TEC Notes were also used to issue AU$200 million of intercompany loans to the Corporation by TEA, a subsidiary of TransAlta ("TEA demand loan"). The remainder of the TEC Notes proceeds remain in TEA to fund required reserves and transaction costs. The TEA demand loan is unsecured, due on demand and bears interest at 4.32 per cent, with interest payable quarterly until maturity on Oct. 26, 2022.

The fair value of the Preferred Shares Tracking Australia Cash Flows has been updated to reflect the fair value attributed to the expected change in future cash flows relating to the updated financing structure, including the receipt of the TEC Notes proceeds and the use of proceeds to redeem and settle certain financial instruments noted above.

Acquisition of WindCharger Battery Storage Project from TransAlta Corporation

On Aug. 1, 2020, the Corporation acquired the 10 MW/20 MWh WindCharger battery storage project that is connected to the Alberta transmission system through the Summerview 2 wind facility substation from a subsidiary of TransAlta for $12 million. The Corporation funded the remaining construction cost and the project commenced commercial operation on Oct. 15, 2020. TransAlta is expected to receive co-funding of almost 50 per cent of the $14 million construction cost from Emissions Reduction Alberta. The Corporation also executed a 20-year battery storage usage contract with TransAlta in which TransAlta will pay a fixed monthly capacity charge for the exclusive right to operate and dispatch the battery in the Alberta market.

Global Pandemic

The World Health Organization declared a Public Health Emergency of International Concern relating to COVID-19 on Jan. 30, 2020, which they subsequently declared, on March 11, 2020, as a global pandemic. The outbreak of COVID-19 has resulted in governments worldwide enacting emergency measures to constrain the spread of the virus. These measures, which include the implementation of travel bans, self-imposed quarantine periods, self-isolation, physical and social distancing and the closure of non-essential businesses, have caused significant disruption to businesses globally, which has resulted in an uncertain and challenging economic environment.

TransAlta, as the manager and operator of the Corporation's business and assets, continues to operate under its business continuity plan, which focused on ensuring that: (i) TransAlta employees who could work remotely did so and (ii) TransAlta employees who operate and maintain our facilities, and who were not able to work remotely, were able to work safely and in a manner that ensured they remained healthy. During the second and third quarters of 2020, TransAlta successfully brought employees who were working remotely back to the office without compromising health and safety standards. In November 2020, as a result of the rising COVID-19 case counts in the Province of Alberta and in light of office attendance restrictions eventually imposed by the Government of Alberta, staff at TransAlta's head office returned to remote work protocols. All of TransAlta's offices and sites follow strict health screening and physical distancing protocols with personal protective equipment readily available. Further, TransAlta maintains travel bans aligned to local jurisdictional guidance, enhanced cleaning procedures, revised work schedules, contingent work teams and the reorganization of processes and procedures to limit contact with other employees and contractors on-site.

While our results have been impacted by price and demand as a result of COVID-19, all of our facilities, including those in which we have economic interests through TransAlta, continue to remain fully operational and capable of meeting our customers' needs. The Corporation continues to work and serve all of our customers and counterparties under the terms of their contracts. We have not experienced interruptions to service requirements. Electricity and steam supply continue to remain a critical service requirement to all of our customers and have been deemed an essential service in our jurisdictions.

2019

US Wind Projects

On Feb. 20, 2018, the Corporation announced it had entered into an arrangement to acquire economic interests in two construction-ready wind projects in the Northeastern United States (collectively "US Wind Projects"). The Big Level wind development project ("Big Level") consists of a 90 MW wind project located in Pennsylvania that has a 15-year PPA with Microsoft Corp. The Antrim wind development project ("Antrim") consists of a 29 MW wind project located in New Hampshire with 20-year PPAs with Partners Healthcare and New Hampshire Electric Co-op. The Big Level and Antrim counterparties each have Standard & Poor's credit ratings of A+ or better. Big Level and Antrim were acquired by a subsidiary of TransAlta on March 1, 2018, and March 28, 2019, respectively, and began commercial operations on Dec. 19, 2019, and Dec. 24, 2019, respectively. The US Wind Projects have brought an additional 119 MW of generating capacity to the Corporation's Wind and Solar portfolio.

Pursuant to the arrangement, the Corporation agreed to fund the total estimated construction and acquisition costs for the US Wind Projects through the subscription of tracking preferred shares issued from TransAlta Power Ltd. ("TA Power") or interest-bearing promissory notes issued from the project entity, a wholly owned subsidiary of TransAlta. The Corporation funded the acquisition of Antrim and the subsequent construction costs of the US Wind Projects by subscribing for $164 million (US$122 million) of interest-bearing promissory notes issued by the project entity, and by subscribing for tracking preferred shares of TA Power in the amount of $117 million (US$90 million).

The tracking preferred shares issued by TA Power pay quarterly dividends based on the pre-tax net earnings of the US Wind Projects. The tracking preferred shares have preference over the common shares of TA Power held by TransAlta, in respect of the dividends and the distribution of assets in the event of the liquidation, dissolution or winding-up of TA Power.

See Notes 8 and 17 for more details on the terms of the tracking preferred shares and promissory notes.

Mandatory Redeemable Preferred Shares ("MRPS") Redemption and Investment in Tracking Preferred Shares

In late December 2018 and early January 2019, the Corporation and TransAlta executed a series of transactions in response to the enactment of anti-hybrid tax rules within Australia. In December 2018, TEA, an Australian subsidiary of TransAlta redeemed AU$111 million of the MRPS for cash consideration. Just prior to this redemption, the Corporation repaid to TEA the remaining balance due on the TEA loan. In January 2019, TEA redeemed the remaining outstanding balance of the MRPS of AU$509 million and approximately AU$41 million of the preferred shares of TEA for cash consideration. Immediately following the redemptions, the Corporation subscribed for AU$550 million of Class E Preferred Shares of a subsidiary of TransAlta that track the underlying economics of an amortizing term loan payable held by TEA with another subsidiary of TransAlta. The Preferred Shares Tracking the Amortizing Term Loan paid dividends, as declared, broadly equal to the interest payments on the underlying loan. On Oct. 23, 2020, the Preferred Shares Tracking the Amortizing Term Loan and the Class E Preferred Shares were redeemed. See Note 8 for additional information.

5. Revenue from Contracts with Customers

A. Disaggregation of Revenue from Contracts with Customers

The majority of the Corporation's revenues are derived from the sale of electricity, capacity and environmental attributes, which the Corporation disaggregates into the following groupings for the purpose of determining how economic factors affect the recognition of revenue.

Year ended Dec. 31, 2020	**Canadian Wind**	**Canadian Hydro**	**Canadian Gas**(1)	**Total**
Revenue from contracts with customers	**237**	**29**	**155**	**421**
Other revenue(2)	**2**	**—**	**8**	**10**
Revenues	**239**	**29**	**163**	**431**
Timing of revenue recognition:				
At a point in time	**8**	**—**	**—**	**8**
Over time	**229**	**29**	**155**	**413**
Revenue from contracts with customers	**237**	**29**	**155**	**421**

(1) During the third quarter of 2020, merchant revenue within this segment was reclassified from revenue from contracts with customers to other revenue and prior periods were adjusted.
(2) Includes merchant revenue and other miscellaneous.

Year ended Dec. 31, 2019	Canadian Wind	Canadian Hydro	Canadian Gas[1]	Total
Revenue from contracts with customers	231	26	164	421
Other revenue[2]	—	—	17	17
Revenues	**231**	**26**	**181**	**438**
Timing of revenue recognition:				
At a point in time	15	—	—	15
Over time	216	26	164	406
Revenue from contracts with customers	231	26	164	421

(1) During the third quarter of 2020, merchant revenue within this segment was reclassified from revenue from contracts with customers to other revenue and prior periods were adjusted.
(2) Includes merchant revenue and other miscellaneous.

B. Remaining Performance Obligations

The following disclosures about the aggregate amounts of transaction prices allocated to remaining performance obligations (contract revenues that have not been recognized) for contracts in place at the end of the year, exclude revenues related to contracts that qualify for the following practical expedients:

- The Corporation recognizes revenue from the contract in an amount that is equal to the amount invoiced where the amount invoiced represents the value to the customer of the service performed to date. Certain of the Corporation's contracts at most of its wind and hydro facilities qualify for this practical expedient. For these contracts, the Corporation is not required to disclose information about the remaining unsatisfied performance obligations.
- Contracts with an original expected duration of less than 12 months.

Additionally, in some of the Corporation's contracts, elements of the transaction price are considered constrained, such as for variable revenues dependent upon future production volumes that are driven by customer or market demand or market prices that are subject to factors outside the Corporation's influence. Future revenues that are related to constrained variable consideration are not included in the disclosure of remaining performance obligations until the constraints are resolved.

As a result, the amounts of future revenues disclosed below represent only a portion of future revenues that are expected to be realized by the Corporation from its contractual portfolio.

Canadian Wind

At Dec. 31, 2020, the Corporation has two long-term contracts with customers to deliver electricity and the associated renewable energy credits from two wind facilities, for which the invoice practical expedient is not applied. The PPAs generally require all available generation to be provided to the customers at fixed prices, with certain pricing subject to annual escalations for inflation. The Corporation expects to recognize such amounts as revenue as it delivers electricity over the remaining terms of the contracts, to 2024 and 2033, respectively. Electricity delivered is ultimately dependent upon wind resource, which is outside of the Corporation's control. Amounts delivered, and therefore revenue recognized, in the future will vary. These variable revenues for electricity delivered are considered to be fully constrained, and will be recognized over time as the performance obligation, the delivery of electricity, is satisfied. Accordingly, these revenues are excluded from these disclosures.

The Corporation has contracts to sell renewable energy credits generated at certain wind facilities and expects to recognize revenues as it delivers the renewable energy credits to the purchasers over the remaining terms of the contracts, from 2020 through 2024. Estimated future revenues related to the remaining performance obligations for these contracts as of Dec. 31, 2020, are approximately $13 million, of which the Corporation expects to recognize between approximately $2 million to $5 million annually through to contract expiry.

The practical expedient allowing the recognition of revenue from the contract in an amount that is equal to the amount invoiced is applied to wind energy contracts in Ontario, New Brunswick and Quebec; accordingly, disclosures related to remaining performance obligations are not provided for these contracts.

Canadian Hydro

The practical expedient allowing the recognition of revenue from the contract in an amount that is equal to the amount invoiced is applied to all hydro energy contracts in Ontario and British Columbia; accordingly, disclosures related to remaining performance obligations are not provided for these contracts.

Canadian Gas

The Corporation has contracts with customers to deliver energy services from its gas facility in Ontario. The contracts all consist of a single performance obligation requiring the Corporation to stand ready to deliver electricity and steam. The following is a summary of the key terms:

The energy supply agreements require specified amounts of steam to be delivered to each customer, and have pricing terms that include fixed and variable charges for electricity, capacity and steam, as well as a true-up based on contractual minimum volumes of steam. The steam reconciliation is based on an estimate of the customer's steam volume taken and the contractual minimum volume, and various factors including the annual average market price of electricity and the average locally posted and index prices of natural gas, including transportation. For steam volumes not taken by the customer, a revenue-sharing mechanism provides for sharing of revenues earned by the Corporation using that steam to generate and sell electricity. Capacity and electricity pricing vary from contract to contract and are subject to annual indexation at varying rates. Electricity and steam delivered is ultimately dependent upon customer requirements, which are outside of the Corporation's control. These variable revenues under the contracts are considered to be fully constrained. Accordingly, these revenues are excluded from these disclosures. The Corporation expects to recognize revenue as it delivers electricity and steam until the completion of the contracts in late 2022.

At the same gas facility, the Corporation has a contract with the local power authority with fixed capacity charges that are adjusted for seasonal fluctuations, steam demand from the facilities other customers and for deemed net revenue related to production of electricity into the market. As a result, revenues recognized in the future will vary as they are dependent upon factors outside of the Corporation's control and are considered to be fully constrained. Accordingly, these revenues are excluded from these disclosures. The Corporation expects to recognize such revenue as it stands ready to deliver electricity until the completion of the contract term at Dec. 31, 2025.

C. Contract Balances

The Corporation has recognized the following revenue-related contract liabilities:

Contract liabilities	
Balance, Dec. 31, 2018	–
Transfer from deferred revenue(1)	6
Balance, Dec. 31, 2019	6
Balance, Dec. 31, 2020	**6**

(1) Transferred from deferred revenues on Jan. 1, 2019, on adoption of IFRS 16 Leases as the contract to which customer payment relates to is not a lease arrangement under IFRS 16, and is accounted for under IFRS 15.

Contract liabilities consist primarily of a payment received under a PPA for the option, by the customer, to extend the term of the contract. This amount is amortized on a straight-line basis into revenue over the term of the contract.

6. Government Incentives

Certain of the Corporation's wind and hydro facilities are eligible to receive incentives under the Wind Power Production Incentive or the ecoENERGY for Renewable Power incentive programs sponsored by the Canadian federal government to encourage the development of clean power generation projects in Canada. Qualifying facilities receive specified incentive payments for every kilowatt hour of energy production for a period of up to 10 years from the date of commissioning. The incentives received by some of the Corporation's facilities expired at the end of 2019 and the incentives for the balance of eligible facilities expired in 2020.

7. Expenses by Nature

Expenses classified by nature are as follows:

Year ended Dec. 31	**2020**		2019	
	Fuel, royalties and other costs	**Operations, maintenance and administration**	Fuel, royalties and other costs	Operations, maintenance and administration
Fuel	**52**	**—**	67	—
Royalties, land lease costs and other direct costs	**14**	**—**	13	—
Transmission tariffs	**11**	**—**	3	—
Contracted operating expenses	**—**	**44**	—	42
Other operating expenses	**—**	**45**	—	45
Total	**77**	**89**	**83**	**87**

In the current year, the Corporation has recorded $8 million for net settlement costs on the AESO transmission line loss settlement, representing its allocation of the transmission line losses. For additional information, see Note 24, Commitments and Contingencies.

8. Finance Income Related to Subsidiaries of TransAlta

Finance income related to subsidiaries of TransAlta includes income from various interests that in aggregate and over time indirectly provide the Corporation with cash flows based on the cash flows of the subsidiaries. This includes TEA, TransAlta Wyoming Wind LLC, Lakeswind, Mass Solar and the Big Level and Antrim wind facilities.

Year ended Dec. 31	2020	2019
Dividend income from investment in preferred shares of TEA(1)	**3**	3
Fee income from indirect guarantee of TEA obligations	**11**	12
Dividend income from investment in Preferred Shares Tracking Australia Cash Flows	**26**	26
Dividend income from investment in Preferred Shares Tracking the Amortizing Term Loan(1)	**17**	28
Finance income related to TEA	**57**	69
Dividend income from investment in preferred shares tracking earnings and distributions of Mass Solar	**5**	3
Dividend income from investment in preferred shares tracking earnings and distributions of Lakeswind	**—**	3
Dividend income from investment in preferred shares tracking earnings and distributions of Wyoming Wind	**7**	1
Total finance income	**69**	76

(1) The preferred shares of TEA and Preferred Shares Tracking the Amortizing Term Loan were redeemed on Oct. 23, 2020.

Finance income is recognized in cash flows from operating activities in the Consolidated Statements of Cash Flows. Foreign exchange gains and losses related to monetary investments in subsidiaries of TransAlta are recognized within foreign exchange gain (loss) in the Consolidated Statements of Earnings.

A summary of investments in subsidiaries of TransAlta is as follows:

As at	Dec. 31, 2020	Dec. 31, 2019
Investment in Preferred Shares Tracking Australia Cash Flows	**771**	598
Investment in preferred shares of TEA	**—**	42
Investment in Preferred Shares Tracking the Amortizing Term Loan	**—**	532
Total investments in subsidiaries related to TEA	**771**	1,172
Investment in preferred shares tracking earnings and distributions of Big Level and Antrim	**139**	118
Investment in preferred shares tracking earnings and distributions of Mass Solar	**48**	53
Investment in preferred shares tracking earnings and distributions of Lakeswind	**19**	30
Investment in preferred shares tracking earnings and distributions of Wyoming Wind	**110**	119
Total investments in subsidiaries of TransAlta	**1,087**	1,492
Less: current portion of investments in subsidiaries of TransAlta (1)	**—**	18
Total long-term investments in subsidiaries of TransAlta	**1,087**	1,474

(1) Current portion was due to quarterly redemptions of the investment in Preferred Shares Tracking the Amortizing Term Loan. The Preferred Shares Tracking the Amortizing Term Loan were redeemed on Oct. 23, 2020.

Investment in Subsidiaries of TransAlta Related to TEA

Changes in the investments in subsidiaries of TransAlta that relate to TEA are detailed as follows:

	MRPS(1)	Preferred Shares Tracking Australia Cash Flows	Preferred shares of TEA(2)	Preferred Shares Tracking the Amortizing Term Loan(3)	Total
Investment balance at Dec. 31, 2018	489	637	88	—	1,214
Investment	—	—	—	529	529
Redemption(4)	(490)	—	(40)	(19)	(549)
Unrealized foreign exchange gain (loss) recognized in earnings	1	—	—	(27)	(26)
Return of capital(5)	—	(23)	—	—	(23)
Net change in fair value recognized in earnings	—	—	—	49	49
Net change in fair value and foreign exchange recognized in OCI	—	(16)	(6)	—	(22)
Investment balance at Dec. 31, 2019	—	598	42	532	1,172
Redemption	**—**	**—**	**(42)**	**(495)**	**(537)**
Realized and unrealized foreign exchange gain recognized in earnings	**—**	**—**	**—**	**22**	**22**
Net change in fair value recognized in earnings	**—**	**—**	**—**	**(59)**	**(59)**
Net change in fair value and foreign exchange recognized in OCI	**—**	**173**	**—**	**—**	**173**
Investment balance at Dec. 31, 2020	**—**	**771**	**—**	**—**	**771**

(1) Principal amount as at Dec. 31, 2020, and Dec. 31, 2019, was nil, respectively. The MRPS were classified as and carried at amortized cost and denominated in Australian dollars. The Corporation was entitled to receive cash dividends on the MRPS.
(2) Principal amount as at Dec. 31, 2020, and Dec. 31, 2019, was nil and AU$45 million, respectively. The preferred shares of TEA were classified as at FVTOCI and were redeemed on Oct. 23, 2020.
(3) Principal amount as at Dec. 31, 2020, and Dec. 31, 2019, was nil and AU$530 million, respectively. The Preferred Shares Tracking the Amortizing Term Loan were classified as at FVTPL and were redeemed on Oct. 23, 2020.
(4) See Note 4.
(5) See Note 2 (Q).

The Corporation and TransAlta executed a series of transactions in response to the enactment of anti-hybrid tax rules within Australia. In January 2019, TEA redeemed the remaining outstanding balance of the MRPS of AU$509 million and approximately AU$41 million of the preferred shares of TEA for cash consideration. Immediately following those redemptions, the Corporation subscribed for AU$550 million of preferred shares of a subsidiary of TransAlta that track the underlying economics of an amortizing term loan payable owed by TEA to another subsidiary of TransAlta.

On Jan. 24, 2020, TEA repaid AU$45 million of principal on the amortizing term loan owing to another subsidiary of TransAlta. As a result, pursuant to the terms of the tracking preferred shares that track this amortizing term loan a redemption was triggered that resulted in AU$45 million of the tracking preferred shares being redeemed, which was paid to the Corporation in Canadian dollars at spot rates. The redemption had the effect of creating a deficit balance related to the Preferred Shares Tracking Australia Cash Flows, thereby reducing the ability to declare and pay dividends on the Preferred Shares Tracking Australia Cash Flows in the first, second and third quarters of 2020. The deficiency has been recouped in the fourth quarter of 2020.

On Oct. 22, 2020, TEC closed an AU$800 million TEC Notes, by way of a private placement, which is secured by, among other things, a first ranking charge over all assets of TEC. The Corporation owns an indirect economic interest in TEC that forms part of the Australian cash flow. The notes bear interest at 4.07 per cent per annum, payable quarterly, and maturing on June 30, 2042, with principal payments starting on March 31, 2022. The notes have a rating of BBB.

On Oct. 23, 2020, the Corporation received $480 million (AU$515 million) of proceeds directly through the redemption of the Preferred Shares Tracking the Amortizing Term Loan and the redemption of preferred shares of TEA. The proceeds from the redemption of the shares were used to repay the existing indebtedness on the credit facility and will be used to fund the 303 MW portfolio acquisition from TransAlta. In addition, AU$200 million of the proceeds were used to issue the TEA demand loan. The remainder of the TEC Notes proceeds remain in TEA to fund required reserves and transaction costs.

The Canadian-dollar-denominated Preferred Shares Tracking Australia Cash Flows are issued by another subsidiary of TransAlta that provide cumulative variable cash dividends, when declared, that are broadly equal to the underlying net distributable profits of TEA. The Corporation has measured the tracking preferred shares at FVTOCI.

The change in fair value and foreign exchange recognized in OCI related to the Preferred Shares Tracking Australia Cash Flows as at Dec. 31, 2020, has increased to reflect a change in cash flow assumptions, including extension of the BHP contract from 2023 to 2038 and required capital investment and the impacts of the TEC Notes that replaced more expensive financing with lower-cost financing, partially offset by the impact from an increase in the discount rate on the Preferred Shares Tracking Australia Cash Flows.

The Corporation estimated the fair value of the Preferred Shares Tracking Australia Cash Flows utilizing significant unobservable inputs such as TEA's long-range forecast as part of a discounted cash flow model, as outlined in Note 12(B)(I)(c). Key assumptions in respect of significant unobservable inputs used in the Level III fair value measurement include the discount rate and the quarterly cash flows from the instrument and guarantee fees. The forecast extends over 27 years, which is consistent with the expected cash flow periods. The table below summarizes quantitative data regarding the unobservable inputs related to the Preferred Shares Tracking Australia Cash Flows utilized in the discounted cash flow models:

Unobservable input	**Dec. 31, 2020**	Dec. 31, 2019
Discount rate	**5.8 %**	5.5 %
Quarterly cash flows (millions)	Average of $13	Average of $10

The following table summarizes the impact on the fair value measurement of a change in the above unobservable inputs to reflect reasonably possible alternative assumptions:

Unobservable input	**Alternative assumption**	**Change in fair value as at Dec. 31, 2020**	Change in fair value as at Dec. 31, 2019
Basis point change in discount rates	-10 basis points decrease	**6**	6
	+10 basis points increase	**(6)**	(6)
Quarterly cash flows	+1% increase[(1)]	**8**	6
	- 1% decrease[(1)]	**(8)**	(6)

(1) Quarterly cash flows could vary by a higher rate than the assumed one percent factor.

Investments in a Subsidiary of TransAlta Related to Wyoming Wind, Lakeswind, Mass Solar and Big Level and Antrim

Changes in the investment balances are detailed as follows:

	Preferred shares tracking earnings and distributions of Wyoming Wind(1)	Preferred shares tracking earnings and distributions of Lakeswind(2)	Preferred shares tracking earnings and distributions of Mass Solar(3)	Preferred shares tracking earnings and distributions of Big Level and Antrim(4)	Total
Investment balance at Dec. 31, 2018	137	33	69	42	281
Investment	—	—	—	78	**78**
Return of capital	(10)	(1)	(6)	—	**(17)**
Unrealized foreign exchange loss recognized in OCI	(6)	(1)	(4)	(2)	**(13)**
Net change in fair value recognized in OCI	(2)	(1)	(6)	—	**(9)**
Investment balance at Dec. 31, 2019	119	30	53	118	320
Investment	**—**	**—**	**—**	**72**	**72**
Return of capital	**(9)**	**(3)**	**(11)**	**(7)**	**(30)**
Unrealized foreign exchange loss recognized in OCI	**(2)**	**(1)**	**—**	**(6)**	**(9)**
Net change in fair value recognized in OCI	**2**	**(7)**	**6**	**(38)**	**(37)**
Investment balance at Dec. 31, 2020	**110**	**19**	**48**	**139**	**316**

(1) Principal amounts as at Dec. 31, 2020, and Dec. 31, 2019, were US$85 million and US$92 million for Wyoming Wind.
(2) Principal amounts as at Dec. 31, 2020, and Dec. 31, 2019, were US$21 million and US$23 million for Lakeswind.
(3) Principal amounts as at Dec. 31, 2020, and Dec. 31, 2019, were US$38 million and US$46 million for Mass Solar.
(4) Principal amounts as at Dec. 31, 2020, and Dec. 31, 2019, were US$137 million and US$90 million for Big Level and Antrim.

During 2019, the Corporation acquired an economic interest in the Antrim wind project and funded construction costs of the US Wind Projects by subscribing for additional preferred shares of a subsidiary of TransAlta.

During 2020, the Corporation subscribed for additional tracking preferred shares in a subsidiary of TransAlta tracking earnings and distributions of Big Level and Antrim for $72 million (US$52 million). In 2020, a subsidiary of TransAlta repaid a portion of the total outstanding promissory notes to the Corporation related to the Big Level and Antrim wind projects in the amount of $98 million (US$72 million). See Note 17 for further details.

The Corporation estimated the fair values of the preferred shares tracking earnings and distributions of Wyoming Wind, Big Level and Antrim, Lakeswind and Mass Solar utilizing significant unobservable inputs such as long-range forecasts as part of a discounted cash flow model, as outlined in Note 12(B)(I)(c). The forecasts extend over the expected operating lives of the underlying facilities, which range from 14 years to 31 years. Key assumptions in respect of significant unobservable inputs used in these Level III fair value measurements include the discount rate and the quarterly cash flows from the instruments.

The tables below summarize quantitative data regarding these unobservable inputs:

Unobservable input as at Dec. 31, 2020	Wyoming Wind	Big Level and Antrim	Lakeswind	Mass Solar
Discount rate	**6.8 %**	**9.7 %**	**10.3 %**	**6.8 %**
Quarterly cash flows (millions)	Average of $3	Average of $4	Average of $1	Average of $1

Unobservable input as at Dec. 31, 2019	Wyoming Wind	Big Level and Antrim(1)	Lakeswind	Mass Solar
Discount rate	5.6 %	7.8 %	8.4 %	6.3 %
Quarterly cash flows (millions)	Average of $3	Average of $4	Average of $1	Average of $1

(1) Projects achieved commercial operations in December 2019.

The following table summarizes the impact on the fair value measurements of a change in the above unobservable inputs to reflect reasonably possible alternative assumptions:

Unobservable input	Alternative assumption	Change in total fair values as at Dec. 31, 2020	Change in fair value as at Dec. 31, 2019
Basis point change in discount rates	-10 basis points decrease	2	3
	+10 basis points increase	(2)	(3)
Quarterly cash flows	+1% increase	3	3
	- 1% decrease	(3)	(3)

9. Interest Income and Interest Expense

The components of interest income are as follows:

Year ended Dec. 31	2020	2019
Interest income on promissory notes due from subsidiaries of TransAlta (Note 17)	3	5
Other interest income	3	3
Interest income	**6**	**8**

The components of interest expense are as follows:

Year ended Dec. 31	2020	2019
Interest on long-term debt	34	37
Interest on lease obligations	1	1
Interest on TEA demand loan	1	—
Other net interest[1]	5	3
Interest on line loss rule proceeding (Note 24)	2	—
Accretion of provisions (Note 19)	3	4
Interest expense	**46**	**45**

(1) Consists of letters of credit and guarantees, credit facility commitments, other interest and banking fees (net of capitalized interest). For the year ended Dec. 31, 2020, interest on guarantees pledged by TransAlta on behalf of the Corporation was $2 million (2019 – $1 million).

10. Income Taxes

A. Consolidated Statements of Earnings

I. Rate Reconciliation

Year ended Dec. 31	2020	2019
Earnings before income taxes	**122**	191
Net earnings attributable to non-controlling interests	(5)	(4)
Adjusted earnings before income taxes	**117**	187
Statutory Canadian federal and provincial income tax rate (%)[1]	25.38%	25.96%
Expected income tax expense	30	49
Increase (decrease) in income taxes resulting from:		
Non-taxable (deductible) capital (gain) loss	(6)	7
Adjustments in respect of deferred income tax of previous years	(2)	2
Statutory and other rate differences	2	(20)
Investment in subsidiary	16	(13)
Finance and interest income not subject to tax	(15)	(17)
Income tax expense	**25**	**8**

(1) In 2020, the Corporation recognized a deferred income tax expense of $2 million (2019 – $18 million recovery) related to changes in future tax rates. In 2019, the Alberta government approved a phase-in of the tax decrease. On June 29, 2020, the Alberta government announced that it was accelerating the reduction in the general corporate income tax rate by reducing the rate to 8 per cent effective July 1, 2020. The statutory blended tax rate for 2020 was 25.38 per cent (2019 - 25.96 per cent).

II. Components of Income Tax Expense

The components of income tax expense are as follows:

Year ended Dec. 31	2020	2019
Current income tax expense	**1**	2
Adjustments in respect of deferred income tax of previous years	**(2)**	2
Deferred income tax expense resulting from changes in tax rates or laws[1]	**2**	(18)
Deferred income tax expense related to the origination and reversal of temporary differences	**24**	22
Income tax expense	**25**	8

(1) In 2020, the Corporation recognized a deferred income tax expense of $2 million (2019 – $18 million recovery) related to changes in future tax rates. In 2019, the Alberta government approved a phase-in of the tax decrease. On June 29, 2020, the Alberta government announced that it was accelerating the reduction in the general corporate income tax rate by reducing the rate to 8 per cent effective July 1, 2020. The statutory blended tax rate for 2020 was 25.38 per cent (2019 – 25.96 per cent).

Year ended Dec. 31	2020	2019
Current income tax expense	**1**	2
Deferred income tax expense	**24**	6
Income tax expense	**25**	8

B. Consolidated Statements of Changes in Equity

The aggregate current and deferred income tax related to items charged or credited to equity is as follows:

Year ended Dec. 31	2020	2019	Component of equity
Income tax expense related to:			
Investments in subsidiaries of TransAlta	**–**	1	OCI
Income tax expense reported in equity	**–**	1	

C. Components of Net Deferred Income Tax Liability

Significant components of the Corporation's net deferred income tax liability are as follows:

As at Dec. 31	2020	2019
Net operating and capital loss carryforwards[1]	**(24)**	(58)
Property, plant and equipment	**296**	305
Right-of-use assets and lease liabilities (net)[2]	**1**	1
Foreign exchange differences on AUD-denominated debt	**(1)**	–
Net deferred income tax liability	**272**	248

(1) Net operating losses expire between 2029 and 2038.
(2) Net effect of recognizing right-of-use assets and lease liabilities under IFRS 16.

As at Dec. 31	2020	2019
Deferred income tax assets[1]	**(18)**	(16)
Deferred income tax liabilities	**290**	264
Net deferred income tax liability	**272**	248

(1) The deferred income tax assets presented on the Consolidated Statements of Financial Position are recoverable based on estimated future earnings and tax-planning strategies. The assumptions used in the estimate of future earnings are based on the Corporation's long-range forecasts.

11. Non-Controlling Interest

The Corporation's non-controlling interest is comprised of Natural Forces Technologies Inc.'s 17 per cent interest in Kent Hills Wind LP, which owns the Kent Hills (1, 2 and 3) wind facilities. Summarized financial information relating to Kent Hills Wind LP is as follows:

Year ended Dec. 31	2020	2019
Results of operations		
Revenues	**45**	44
Net earnings and total comprehensive income	**28**	25

As at Dec. 31	2020	2019
Financial position		
Current assets	**88**	66
Long-term assets	**442**	447
Current liabilities	**(14)**	(13)
Long-term liabilities	**(225)**	(237)
Total equity	**(291)**	(263)

12. Financial Instruments and Risk Management

A. Financial Assets and Liabilities – Classification and Measurement

Financial assets and financial liabilities are measured on an ongoing basis at fair value or amortized cost.

The following table outlines the carrying amounts and classifications of financial assets and liabilities:

Carrying value as at Dec. 31, 2020

	Derivatives - fair value through earnings	Amortized cost	Fair value through OCI	Total
Financial assets				
Cash and cash equivalents	**—**	**582**	**—**	**582**
Accounts receivable	**—**	**134**	**—**	**134**
Investments in subsidiaries of TransAlta	**—**	**—**	**1,087**	**1,087**
Other assets (loans receivable)[(1)]	**—**	**70**	**—**	**70**
Finance lease receivable	**—**	**7**	**—**	**7**
Financial liabilities				
Accounts payable and accrued liabilities	**—**	**50**	**—**	**50**
Dividends payable	**—**	**63**	**—**	**63**
Risk management liabilities[(1)]	**2**	**—**	**—**	**2**
TEA demand loan	**—**	**195**	**—**	**195**
Debt and lease obligations[(1)]	**—**	**692**	**—**	**692**

(1) Includes current portion and long-term portion.

Carrying value as at Dec. 31, 2019	Derivatives - fair value through earnings	Amortized cost	Fair value through OCI	Fair value through earnings	Total
Financial assets					
Cash and cash equivalents	—	63	—	—	63
Accounts receivable	—	90	—	—	90
Investments in subsidiaries of TransAlta[1]	—	—	960	532	1,492
Other assets (loans receivable)[1]	—	160	—	—	160
Financial liabilities					
Accounts payable and accrued liabilities	—	37	—	—	37
Dividends payable	—	62	—	—	62
Risk management liabilities[1]	2	—	—	—	2
Debt and lease obligations[1]	—	961	—	—	961

(1) Includes current portion and long-term portion.

B. Fair Value of Financial Instruments

The fair value of a financial instrument is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair values can be determined by reference to prices for that instrument in active markets to which the Corporation has access. In the absence of an active market, the Corporation determines fair values based on valuation models or by reference to other similar products in active markets.

Fair values determined using valuation models require the use of assumptions. In determining those assumptions, the Corporation looks primarily to external readily observable market inputs. In limited circumstances, the Corporation uses inputs that are not based on observable market data.

The Corporation's financial instruments measured at fair value are as follows:

As at	**Dec. 31, 2020**		Dec. 31, 2019	
	Fair value Level II	**Fair value Level III**	Fair value Level II	Fair value Level III
Preferred Shares Tracking Australia Cash Flows	**—**	**771**	—	598
Preferred shares tracking earnings and distributions of Wyoming Wind	**—**	**110**	—	119
Preferred shares tracking earnings and distributions of Big Level and Antrim	**—**	**139**	—	118
Preferred shares tracking earnings and distributions of Mass Solar	**—**	**48**	—	53
Preferred shares tracking earnings and distributions of Lakeswind	**—**	**19**	—	30
Preferred Shares Tracking the Amortizing Term Loan	**—**	**—**	532	—
Preferred shares of TEA	**—**	**—**	42	—
Net risk management liabilities	**(2)**	**—**	(2)	—

I. Level Determinations and Classifications

The Level I, II and III classifications in the fair value hierarchy utilized by the Corporation are defined below. The fair value measurement of a financial instrument is included in only one of the three levels, the determination of which is based on the lowest level input that is significant to the derivation of the fair value.

a. Level I

Fair values are determined using inputs that are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Corporation has the ability to access at the measurement date.

b. Level II

Fair values are determined, directly or indirectly, using inputs that are observable for the asset or liability, either directly or indirectly.

Fair values within the Level II category are determined through the use of quoted prices in active markets, which in some cases are adjusted for factors specific to the asset or liability, such as basis, credit valuation and location differentials.

The Corporation's commodity risk management Level II financial instruments include over-the-counter derivatives with values based on observable commodity futures curves and derivatives with inputs validated by broker quotes or other publicly available market data providers. Level II fair values are also determined using valuation techniques, such as option pricing models and interpolation formulas, where the inputs are readily observable.

In determining Level II fair values of other net risk management assets and liabilities, the Corporation uses observable inputs other than unadjusted quoted prices that are observable for the asset or liability, such as interest rate yield curves and currency rates. For certain financial instruments where insufficient trading volume or lack of recent trades exists, the Corporation relies on similar interest or currency rate inputs and other third-party information such as credit spreads. The fair value of the preferred shares of TEA and the Preferred Shares Tracking the Amortizing Term Loan were determined by calculating an implied price based on an assessment of the yield to maturity. The preferred shares of TEA and the Preferred Shares Tracking the Amortizing Term Loan were redeemed on Oct. 23, 2020.

c. Level III
Fair values are determined using inputs for the asset or liability that are not readily observable.

In estimating the fair value of the Preferred Shares Tracking Australia Cash Flows and the preferred shares tracking earnings and distributions of Wyoming Wind, Big Level and Antrim, Lakeswind and Mass Solar, the Corporation uses a discounted cash flow method, and makes estimates and assumptions about sales prices, production, capital expenditures, asset retirement costs and other related cash inflows and outflows over the life of the facilities, as well as the remaining life of the facilities. In developing these assumptions, management uses estimates of contracted and merchant prices, anticipated production levels, planned and unplanned outages, changes to regulations, and transmission capacity or constraints for the estimated remaining life of the facilities. Appropriate discount rates reflecting the risks specific to TEA, Wyoming Wind, Big Level and Antrim, Lakeswind and Mass Solar are used in the valuations. Management also develops assumptions in respect of ongoing financing and tax positions of TEA, Wyoming Wind, Big Level and Antrim, Lakeswind and Mass Solar. These estimates and assumptions are susceptible to change from period to period and actual results can, and often do, differ from the estimates, and can have either a positive or negative impact on the estimate of the fair value of the instrument, and may be material. Additional disclosures on these measurements are presented in Note 8.

II. Commodity and Other Risk Management Assets and Liabilities

The Corporation's commodity-based risk management assets and liabilities relate to trading activities and certain contracting activities. Other risk management assets and liabilities include risk management assets and liabilities that are used in managing foreign-denominated receipts and expenditures, capital project expenditures and debt. To the extent applicable, changes in net risk management assets and liabilities for non-hedge positions are reflected within net earnings.

The following table summarizes the net risk management liabilities:

	Cash flow hedges	Non-hedges	
	Level II	Level II	Total
Net risk management liabilities at Dec. 31, 2020	**—**	**(2)**	**(2)**
Net risk management liabilities at Dec. 31, 2019	—	(2)	(2)

III. Financial Instruments – Not Measured at Fair Value

The carrying value of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities, and dividends payable approximates their fair value at the Consolidated Statements of Financial Position date due to their short-term nature. The fair values of the loans receivable, TEA demand loan and the finance lease receivable approximate their carrying values.

The fair value of financial instruments not measured at fair value is as follows:

As at	Dec. 31, 2020		Dec. 31, 2019	
	Fair value Level II	**Carrying value**	Fair value Level II	Carrying value
Loans receivable(1)	**70**	**70**	160	160
TEA demand loan	**195**	**195**	—	—
Long-term debt(2)	**748**	**670**	943	938

(1) Includes current portion and excludes interest income receivable.
(2) Includes current portion of long-term debt and excludes lease obligations.

The fair value of the debt is determined by calculating an implied price based on a current assessment of the yield to maturity. The fair values of the loans receivable discussed in Note 18 approximate their carrying values.

IV. Non-Hedges

Commodity

The Corporation enters into various derivative transactions as well as other contracting activities that do not qualify for hedge accounting. As a result, the related assets and liabilities are classified as FVTPL. Changes in the fair value of these derivatives are reported in earnings in the period the change occurs.

The fair value liability associated with commodity activities as at Dec. 31, 2020, is $2 million (2019 – $2 million). The outstanding commodity derivative instruments are as follows:

As at Dec. 31	2020		2019	
Type (thousands)	**Notional amount sold**	**Notional amount purchased**	Notional amount sold	Notional amount purchased
Electricity *(MWh)*	**46**	**—**	33	—
Natural gas *(GJ)*	**—**	**237**	—	378
Emissions *(MWh)*	**175**	**35**	115	35

C. Net Risk Management Assets and Liabilities

I. Netting Arrangements

Information about the Corporation's financial asset and liabilities that are subject to enforceable master netting arrangements or similar agreements is as follows:

As at Dec. 31	2020			
	Current financial assets	**Long-term financial assets**	**Current financial liabilities**	**Long-term financial liabilities**
Gross amounts recognized	**1**	**—**	**(2)**	**(1)**
Gross amounts set-off	**(1)**	**—**	**1**	**—**
Net amounts as presented in the Consolidated Statements of Financial Position	**—**	**—**	**(1)**	**(1)**

D. Nature and Extent of Risks Arising from Financial Instruments and Derivatives

I. Credit Risk

Credit risk is the risk that customers or counterparties will cause a financial loss for the Corporation by failing to discharge their obligations, and the risk to the Corporation associated with changes in creditworthiness of entities with which commercial exposures exist. The Corporation actively manages its exposure to credit risk by assessing the ability of counterparties to fulfil their obligations under the related contracts before entering into such contracts. The Corporation makes detailed assessments of the credit quality of all counterparties and, where appropriate, obtains corporate guarantees, cash collateral, letters of credit or third-party insurance to support the ultimate collection of these receivables. For commodity trading, the Corporation sets strict credit limits for each counterparty and monitors exposures on a daily basis. If credit limits are exceeded, the Corporation will request collateral from the counterparty or halt trading activities with the counterparty.

The Corporation has limited direct exposure to credit risk, as the majority of its power sales contracts are with TransAlta, governments and large utility customers with extensive operations. Historically, the Corporation has not had collection issues associated with its receivables and the aging of receivables is reviewed on a regular basis to ensure the timely collection of amounts owing to the Corporation.

The Corporation's maximum exposure to credit risk at Dec. 31, 2020, without taking into account collateral held or right of set-off, and including indirect exposures arising from the Corporation's investments in subsidiaries of TransAlta discussed in Note 8, is detailed as follows:

	Direct exposure	Indirect exposure[2]
Counterparty credit rating	Receivables[1]	Trade accounts receivable
Investment grade	**62**	**40**
Non-investment grade	**33**	**8**
TransAlta and subsidiaries of TransAlta	**57**	—
No external rating	**52**	—

(1) Includes trade accounts receivable, distributions receivable from subsidiaries of TransAlta, risk management assets and loans receivable.
(2) Includes accounts receivable of TEA. Receivables of other economic interest investments were approximately $6 million in total and are with investment grade and other high-quality counterparties.

The Corporation uses external credit ratings, as well as internal ratings in circumstances where external ratings are not available, to establish credit limits for counterparties. In certain cases, the Corporation will require security instruments such as parental guarantees, letters of credit, cash collateral or third-party credit insurance to reduce overall credit risk.

Amidst the current economic conditions resulting from the COVID-19 pandemic, TransAlta, on behalf of the Corporation, has implemented the following additional measures to monitor its counterparties for changes in their ability to meet obligations:

- weekly monitoring of events impacting counterparty creditworthiness and counterparty credit downgrades;
- weekly oversight and follow-up, if applicable, of accounts receivables; and
- review and monitoring of key suppliers, counterparties and customers (i.e., off-takers).

As needed, additional risk mitigation tactics will be taken to reduce the risk to the Corporation. These risk mitigation tactics may include, but are not limited to, immediate follow-up on overdue amounts, adjusting payment terms to ensure a portion of funds are received sooner, requiring additional collateral, reducing transaction terms and working closely with impacted counterparties on negotiated solutions.

II. Other Market Risks

The Corporation is exposed to market risks based on changes in the fair value of the Preferred Shares Tracking Australia Cash Flows, and the preferred shares tracking earnings and distributions of Wyoming Wind, Big Level and Antrim, Lakeswind and Mass Solar. A one per cent increase (decrease) in the value of these securities would result in an $11 million increase (decrease) in OCI as at Dec. 31, 2020.

III. Liquidity Risk

Liquidity risk relates to the Corporation's ability to access capital to be used in commodity hedging, capital projects, debt refinancing and general corporate purposes. The Corporation is focused on maintaining a strong financial position.

The Corporation manages its liquidity risk associated with its financial liabilities by utilizing cash flow generated from operations, capital markets and its third-party credit facility. The Corporation manages liquidity risk associated with its long-term debt through preparing and revising long-term external financing plans reflecting business plans and market availability of capital. The Corporation is in compliance with all financial covenants relating to its debt obligations as at Dec. 31, 2020.

The following table presents the contractual maturities of the Corporation's financial liabilities:

	2021	2022	2023	2024	2025	2026 and thereafter	Total
Accounts payable and accrued liabilities	50	—	—	—	—	—	**50**
TEA demand loan[1]	195	—	—	—	—	—	**195**
Long-term debt[2]	52	54	101	59	62	348	**676**
Lease obligations[2]	1	1	1	1	1	17	**22**
Net risk management liabilities	1	1	—	—	—	—	**2**
Interest on debt and lease obligations[3]	36	33	23	20	17	67	**196**
Dividends payable	63	—	—	—	—	—	**63**
Total	**398**	**89**	**125**	**80**	**80**	**432**	**1,204**

(1) Scheduled maturity repayment of TEA demand loan on Oct. 26, 2022.
(2) Includes current portion.
(3) Not recognized as a financial liability on the Consolidated Statements of Financial Position.

IV. Foreign Currency Rate Risk

The Corporation has exposure to US and Australian dollars as a result of investments in subsidiaries of TransAlta. The Corporation mitigates the anticipated incremental exposure to the Australian- and US-dollar-denominated cash flows arising from these investments using foreign exchange forward contracts.

The possible effect on net earnings and OCI for the years ended Dec. 31, 2020 and 2019 due to changes in foreign exchange rates associated with financial instruments denominated in currencies other than the Corporation's functional currency is outlined below. The sensitivity analysis has been prepared using management's assessment that an average three cent (2019 – three cent) increase or decrease in these currencies relative to the Canadian dollar is a reasonable potential change over the next quarter.

As at Dec. 31	**2020**		2019	
Currency	**Net earnings decrease[1]**	**OCI gain[1]**	Net earnings increase[1]	OCI gain[1]
USD	**—**	**11**	2	21
AUD	**(5)**	**19**	14	21
Total	**(5)**	**30**	16	42

(1) These calculations assume an increase in the value of this currency relative to the Canadian dollar. A decrease would have the opposite effect.

V. Interest Rate Risk

Interest rate risk arises when the future cash flows of financial instruments fluctuate due to changes in market interest rates, and can impact the Corporation's borrowing costs. All of the Corporation's long-term debt, except its credit facility, as described in Note 18, is comprised of fixed interest rate debt. The Corporation's interest rate risk management strategy is to minimize cash flow volatility due to interest rate risk by ensuring its long-term debt has fixed interest rates, where possible.

The Interest Rate Benchmark Reform and the phasing out of LIBOR could impact interest rate risk with respect to the Corporation's Canadian dollar credit facility. The credit facility references US LIBOR for US-dollar drawings and the Canadian Dollar Offered Rate for Canadian drawings. As at Dec. 31, 2020, there were no drawings under the credit facility. The Corporation is monitoring the reform and does not expect any material impact. See Note 3 for additional information.

VI. Commodity Price Risk

The Corporation's contractual profile minimizes commodity price risk as substantially all power is sold under long-term contracts.

13. Property, Plant and Equipment

The changes in the cost of major classes of PP&E and related accumulated depreciation are as follows:

	Hydro generation	Wind generation	Gas generation	Capital spares	Total
Cost					
As at Dec. 31, 2018	275	1,906	648	13	2,842
Transfer to right-of-use assets	—	(7)	—	—	(7)
Additions	3	10	10	8	31
Disposals and retirements	(2)	(3)	(13)	—	(18)
Revisions and additions to decommissioning costs	(1)	(1)	10	—	8
Asset impairment	(2)	—	—	—	(2)
Transfers	—	1	3	(8)	(4)
As at Dec. 31, 2019	273	1,906	658	13	2,850
Additions(1)	**3**	**20**	**4**	**—**	**27**
Disposals and retirements	**—**	**(3)**	**(1)**	**—**	**(4)**
Revisions and additions to decommissioning costs	**3**	**1**	**(12)**	**—**	**(8)**
Asset impairment	**(2)**	**—**	**—**	**—**	**(2)**
Transfers(1)	**—**	**(11)**	**1**	**3**	**(7)**
As at Dec. 31, 2020	**277**	**1,913**	**650**	**16**	**2,856**
Accumulated depreciation					
As at Dec. 31, 2018	92	589	342	—	1,023
Transfer to right-of-use-assets	—	(3)	—	—	(3)
Depreciation(2)	9	77	34	—	120
Disposals and retirements	(1)	—	(12)	—	(13)
Transfers	—	—	(5)	—	(5)
As at Dec. 31, 2019	100	663	359	—	1,122
Depreciation	**8**	**76**	**37**	**—**	**121**
Disposals and retirements	**—**	**(3)**	**(1)**	**—**	**(4)**
As at Dec. 31, 2020	**108**	**736**	**395**	**—**	**1,239**
Carrying amount					
As at Dec. 31, 2019	173	1,243	299	13	1,728
As at Dec. 31, 2020	**169**	**1,177**	**255**	**16**	**1,617**

(1) On Aug. 1, 2020, the Corporation acquired the 10 MW WindCharger battery storage project which began commercial operation on Oct. 15, 2020. Amounts receivable under the Corporation's finance lease associated with the WindCharger battery storage project have been transferred from the Wind generation cost to finance lease receivables and $7 million to accounts receivable related to the co-funding to be received from Emissions Reduction Alberta. See Note 4.
(2) Includes a one-time adjustment to wind generation depreciation in the third quarter of 2019 as a result of changes in useful life.

During the third quarter of 2020, the Corporation recorded an impairment of $2 million due to a post-construction review of water resources that resulted in a revision to the forecasted production related to a BC hydro facility.

During the third quarter of 2019, the Corporation recognized an impairment charge of $2 million related to one Ontario hydro facility. The impairment arose mainly due to higher estimated sustaining capital requirements.

During 2019, the Corporation received $4 million in an insurance recovery related to a tower fire at Summerview in 2018. The proceeds were recorded as income as the tower was not rebuilt and capacity was reduced.

14. Finance Lease Receivable

On Aug. 1, 2020, the Corporation acquired the 10 MW/20 MWh WindCharger battery storage project that began commercial operation on Oct. 15, 2020. Amounts receivable under the Corporation's finance lease associated with the WindCharger battery storage project are as follows:

As at Dec. 31	**2020**	
	Minimum lease receipts	**Present value of minimum lease receipts**
Within one year	**1**	**1**
Second to fifth years inclusive	**3**	**2**
More than five years	**13**	**4**
	17	**7**
Less: unearned finance lease income	**10**	**—**
Total finance lease receivables	**7**	**7**

15. Right-of-Use Assets and Leases

The Corporation leases land, buildings, vehicles and various types of equipment. Lease contracts are typically entered into for fixed periods. Leases are negotiated on an individual basis and include a range of different terms and conditions.

A reconciliation of the changes in the carrying amount of the right-of-use assets is as follows:

	Land	Other(2)	Total
New leases recognized in Jan. 1, 2019	16	—	16
Transfers(1)	—	7	7
Additions	6	1	7
Amortization	(1)	(1)	(2)
As at Dec. 31, 2019	21	7	28
Amortization	(1)	—	(1)
As at Dec. 31, 2020	**20**	**7**	**27**

(1) Transfer of right-of-use assets on Jan. 1, 2019, from PP&E and other assets related to pre-existing lease arrangements.
(2) Other right-of-use assets include equipment, vehicles and buildings.

For the year ended Dec. 31, 2020, the Corporation paid $2 million (2019 – $2 million) related to recognized lease liabilities, consisting of $1 million (2019 – $1 million) in interest and $1 million (2019 – $1 million) in principal repayments.

For the year ended Dec. 31, 2020, the Corporation expensed nil (2019 – nil) in total related to short-term and low-value leases. Short-term leases (term of less than 12 months) and leases with total lease payments below the Corporation's capitalization threshold do not require recognition as lease liabilities and right-of-use assets.

Some of the Corporation's land leases that met the definition of a lease were not recognized as they require variable payments based on production or revenue. Additionally, certain land leases require payments be made on the basis of the greater of minimum fixed payments and variable payments based on production or revenue. For these leases, lease liabilities have been recognized on the basis of the minimum fixed payments. For the year ended Dec. 31, 2020, the Corporation expensed $7 million (2019 – $6 million) in variable land lease payments related to these leases.

For further information regarding recognized lease liabilities see Note 18.

16. Intangible Assets

A reconciliation of the changes in the carrying amount of intangible assets is as follows:

	Power sale contracts[1]	Software	Total
Cost			
As at Dec. 31, 2018	209	12	221
Transfers	—	2	2
As at Dec. 31, 2019	209	14	223
Additions	**—**	**1**	**1**
As at Dec. 31, 2020	**209**	**15**	**224**
Accumulated amortization			
As at Dec. 31, 2018	88	9	97
Amortization	10	2	12
As at Dec. 31, 2019	98	11	109
Amortization	**11**	**1**	**12**
As at Dec. 31, 2020	**109**	**12**	**121**
Carrying amount			
As at Dec. 31, 2019	111	3	114
As at Dec. 31, 2020	**100**	**3**	**103**

(1) Comprised of values associated with certain power sale contracts that arose on TransAlta's acquisition of Canadian Hydro Developers and Kent Breeze, whereby the price of electricity to be delivered under the contracts exceeded the market price.

17. Other Assets

As at	**Dec. 31, 2020**	**Dec. 31, 2019**
Big Level and Antrim promissory notes *(I)*	**18**	113
Kent Hills Wind LP loan receivable *(II)*	**52**	47
Long-term prepaids	**2**	2
Total other assets	**72**	162
Less: current portion	**(18)**	(113)
Total long-term other assets	**54**	49

The promissory notes and loan receivable are classified as a debt instrument at amortized cost under IFRS 9, as the contractual cash flows are solely payments of principal and interest and the Corporation manages the loans receivable under a business model in which it will collect the contractual cash flows.

I. Big Level and Antrim Promissory Note

The following promissory notes are outstanding:

Big Level and Antrim promissory notes	Principal amount ($US)	Carrying value
As at Dec. 31, 2018	17	23
Issuances	105	142
Repayments	(40)	(52)
Interest receivable[(1)]	4	5
Unrealized foreign exchange loss	—	(5)
As at Dec. 31, 2019	86	113
Repayments	**(72)**	**(98)**
Unrealized foreign exchange gain	**—**	**3**
As at Dec. 31, 2020	**14**	**18**

(1) On Dec. 16, 2019, all promissory notes outstanding with the Big Level and Antrim project entities were terminated, consolidated and reissued to a subsidiary of TransAlta. This amount included US$4 million in accrued interest.

During 2020, the Corporation received repayment of $98 million (US$72 million) of the outstanding promissory notes. The interest-bearing promissory notes outstanding at Dec. 31, 2020, bear interest at 3.97 per cent and is due on demand.

II. Kent Hills Wind LP Loan Receivable

The Corporation's subsidiary, Kent Hills Wind LP, advanced $39 million of the Kent Hills Wind bond financing proceeds to its 17 per cent partner on Nov. 2, 2017, $10 million in 2019 and an additional $5 million in 2020. The loan bears interest at 4.55 per cent, with interest payable quarterly, is unsecured and matures on Oct. 2, 2022. The balance of the loan receivable at Dec. 31, 2020, was $52 million (2019 – $47 million).

Other assets also includes long-term prepaid expenses of $2 million at Dec. 31, 2020 (2019 – $2 million) as described in Note 25(B)(II).

18. TEA Demand Loan, Debt and Lease Obligations

A. Amounts Outstanding

As at	Dec. 31, 2020			Dec. 31, 2019		
	Carrying value	**Face value**	**Interest[(1)]**	Carrying value	Face value	Interest[(1)]
TEA demand loan[(2)]	**195**	**195**	**4.32 %**	—	—	— %
Long-term debt:						
Credit facility	**—**	**—**	**— %**	220	220	**3.53 %**
Pingston bond	**45**	**45**	**2.95 %**	45	45	**2.95 %**
Melancthon Wolfe Wind bond	**268**	**270**	**3.83 %**	298	302	**3.83 %**
New Richmond Wind bond	**127**	**128**	**3.96 %**	134	136	**3.96 %**
Kent Hills Wind bond	**230**	**233**	**4.45 %**	241	244	**4.45 %**
Total long-term debt	**670**	**676**		938	947	
Lease obligations	**22**			23		
	692			961		
Less: current portion of long-term debt	**(52)**			(51)		
Less: current portion of lease obligations	**(1)**			(1)		
Total long-term debt and lease obligations	**639**			909		

(1) Interest rate reflects the stipulated rate or the average rate weighted by principal amounts outstanding.
(2) Principal amount of AU$200 million.

TEA demand loan is unsecured, due on demand and bears interest at 4.32 per cent, with interest payable quarterly until maturity on Oct. 26, 2022.

Credit Facility The Corporation has a $700 million committed syndicated credit facility, of which $608 million was available as at Dec. 31, 2020 (2019 – $381 million) including the undrawn letters of credit. The Corporation is in compliance with the terms of the credit facility.

In the second quarter of 2019, the credit facility was amended from $500 million to $700 million and extended to 2023. The $700 million credit facility is the primary source for short-term liquidity after the cash flow generated from the Corporation's business. Interest rates on the credit facility vary depending on the type of borrowing selected: Canadian prime, bankers' acceptances, LIBOR or US base rate in accordance with a pricing grid that is standard for such a facility. The agreement is fully committed for four years, expiring in 2023.

The Interest Rate Benchmark Reform and the phasing out of LIBOR could impact interest rate risk with respect to the Corporation's Canadian dollar credit facility. The credit facility references US LIBOR for US-dollar drawings and the Canadian Dollar Offered Rate for Canadian drawings. As at Dec. 31, 2020, there were no drawings under the credit facility. The Corporation is monitoring the reform and does not expect any material impact.

The **Pingston bond** bears interest at 2.95 per cent, with interest payable semi-annually and no principal repayments until maturity in May 2023, and is secured by the Pingston hydro facility, which at Dec. 31, 2020, had a carrying value of $43 million (2019 – $44 million).

The **Melancthon Wolfe Wind bond** bears interest at 3.83 per cent, with principal and interest payable semi-annually in blended payments until maturity on Dec. 31, 2028, and is secured by a first ranking charge over all assets of the issuer, which primarily include the Melancthon and Wolfe Island Wind facilities, which at Dec. 31, 2020, had a combined carrying value of $510 million (2019 – $541 million). As at Dec. 31, 2020, the bonds have a rating of BBB+ from Dominion Bond Rating Service Limited, upgraded from BBB on Oct 30, 2020.

The **New Richmond Wind bond** bears interest at 3.96 per cent, with principal and interest payable semi-annually in blended payments until maturity on June 30, 2032. The New Richmond Wind bond is secured by a first ranking charge over all the assets of the issuer, New Richmond Wind LP, which primarily includes the New Richmond Wind facilities, which at Dec. 31, 2020, had a carrying value of $169 million (2019 – $176 million).

The **Kent Hills Wind bond** issued in October 2017, bears interest at 4.45 per cent, with principal and interest payable quarterly in blended payments until maturity on Nov. 30, 2033. The Kent Hills Wind bond is secured by a first ranking charge over all of the assets of the issuer, Kent Hills Wind LP, which primarily includes the Kent Hills 1, 2 and 3 wind facilities, which at Dec. 31, 2020, had a combined carrying value of $198 million (2019 – $207 million).

B. Restrictions

The Melancthon Wolfe Wind, Pingston, New Richmond Wind and Kent Hills Wind bonds are subject to customary financing conditions and covenants that may restrict the Corporation's ability to access funds generated by the facilities' operations. Upon meeting certain distribution tests, typically performed once per quarter, the funds can be distributed by the subsidiary entities to their respective parent entity. The funds held in these entities will remain there until the next debt service coverage ratio can be calculated in the first quarter of 2021. As at Dec. 31, 2020, $24 million of cash was subject to these financial restrictions (2019 – $23 million).

C. Covenants

As of Dec. 31, 2020, neither the Corporation nor any of its subsidiaries was in violation of any positive or negative covenants related to its debt.

D. Restricted Cash

The Corporation has no restricted cash as at Dec. 31, 2020 and Dec. 31, 2019.

Additionally, the Melancthon Wolfe Wind, New Richmond Wind and Kent Hills Wind bonds require that certain reserve accounts be established and funded through cash held on deposit and/or by providing letters of credit. The Corporation has elected to utilize letters of credit to fund these reserve accounts.

E. Principal Repayments of Debt

Principal repayments	2021	2022	2023	2024	2025	2026 and thereafter	Total
TEA demand loan[1]	195	—	—	—	—	—	**195**
Long-term debt[2]	52	54	101	59	62	348	**676**

(1) Scheduled maturity repayment of TEA demand loan on Oct. 26, 2022.
(2) Includes current portion.

F. Letters of Credit

The Corporation has an uncommitted $100 million demand letter of credit facility, under which $92 million of letters of credit have been issued as at Dec. 31, 2020 (2019 – $99 million). Letters of credit are issued to counterparties under various contractual arrangements with the Corporation and certain subsidiaries of the Corporation. If the Corporation or its subsidiary does not perform under such contracts, the counterparty may present its claim for payment to the financial institution through which the letter of credit was issued. Any amounts owed by the Corporation or its subsidiaries under these contracts are reflected in the Consolidated Statements of Financial Position. All letters of credit expire within one year and are expected to be renewed, as needed, in the normal course of business.

19. Decommissioning Provisions

The change in the decommissioning and restoration provision balance is outlined below:

	Total
Balance, Dec. 31, 2018	44
Accretion	4
Revisions in estimated cash flow	13
Revisions in discount rates	(5)
Balance, Dec. 31, 2019	56
Accretion	**3**
Revisions in estimated cash flow	**(15)**
Revisions in discount rates	**7**
Balance, Dec. 31, 2020	**51**

Carrying value	
Balance, Dec. 31, 2019	56
Current portion	—
Non-current portion	56
Balance, Dec. 31, 2020	**51**
Current portion	**—**
Non-current portion	**51**

A decommissioning and restoration provision has been recognized for all generating facilities for which the Corporation is legally, or constructively, required to remove the facilities at the end of their useful lives and restore the sites to their original condition.

In the fourth quarter of 2020, the Corporation adjusted the Sarnia decommissioning and restoration provision to reflect an updated engineering study. The Corporation's current best estimate of the decommissioning and restoration provision decreased by $15 million. This resulted in a decrease in the related assets in PP&E.

The Corporation estimates that the undiscounted amount of cash flows required to settle the decommissioning and restoration obligations is approximately $185 million (2019 – $220 million), which will be incurred between 2029 and 2050. The majority of the costs will be incurred between 2035 and 2045.

20. Common Shares

A. Authorized and Outstanding

The Corporation is authorized to issue an unlimited number of common shares without nominal or par value and an unlimited number of preferred shares. The common shares entitle the holders thereof to one vote per share at meetings of shareholders. The preferred shares are issuable in series and have such rights, restrictions, conditions and limitations as the Board may from time to time determine. No preferred shares have been issued.

The change in issued and outstanding common shares is as follows:

As at Dec. 31	2020		2019	
	Common shares *(millions)*	**Amount *(millions)***	Common shares *(millions)*	Amount *(millions)*
Issued and outstanding, beginning of year	**265.6**	**3,039**	263.4	3,011
Dividend reinvestment plan[1]	**1.3**	**20**	2.2	28
Issued and outstanding, end of year	**266.9**	**3,059**	265.6	3,039

(1) The DRIP was suspended in the fourth quarter of 2020.

B. Dividends

The declaration of dividends on the Corporation's common shares is at the discretion of the Board.

The following table summarizes the common share dividends declared in 2020 and 2019:

Dividends declared	Total dividends per share	Total dividends	TransAlta	Other shareholders
Year ended Dec. 31, 2020	**0.93996**	**251**	**151**	**100**
Year ended Dec. 31, 2019	**0.93996**	**249**	**151**	**98**

On Oct. 29, 2020, the Corporation declared a monthly dividend of $0.07833 per common share payable on Jan. 29, 2021, Feb. 26, 2021, and March 31, 2021.

On Feb. 22, 2021, the Corporation declared a monthly dividend of $0.07833 per common share payable on April 30, 2021, May 31, 2021, and June 30, 2021.

C. DRIP Suspended

On May 31, 2018, the Corporation implemented a DRIP for Canadian holders of common shares of the Corporation. Commencing with the dividend payable on July 31, 2018, eligible shareholders could elect to automatically reinvest monthly dividends into additional common shares of the Corporation. The price per common share under the DRIP was 98 per cent of the average market price of the common shares for the five trading days on which not less than 500 common shares of the Corporation were traded immediately prior to the dividend payment date. Eligible shareholders were not required to participate in the DRIP.

In the fourth quarter of 2020, the Corporation suspended its DRIP in respect of any future declared dividends until further notice. Accordingly, the dividend payable on Oct. 30, 2020, to shareholders of record on Oct. 15, 2020, was the last dividend payment eligible for reinvestment by participating shareholders under the DRIP. Subsequent dividends will be paid only in cash. Upon any reinstatement of the DRIP, plan participants enrolled in the DRIP at the time of its suspension who remain enrolled at the time of its reinstatement will automatically resume participation in the DRIP.

21. Cash Flow Information

A. Change in Non-Cash Operating Working Capital

Year ended Dec. 31	**2020**	2019
Source (use):		
Accounts receivable	**(34)**	37
Inventory	**—**	(1)
Accounts payable and accrued liabilities	**3**	(13)
Change in non-cash operating working capital	**(31)**	23

B. Changes in Liabilities from Financing Activities

	As at Jan. 1, 2020	Cash inflows	Cash outflows	Other	**As at Dec. 31, 2020**
Dividends payable	**62**	**—**	**(231)**	**232**	**63**
TEA demand loan	**—**	**188**	**—**	**7**	**195**
Long-term debt[(1)]	**938**	**—**	**(271)**	**3**	**670**
Lease obligations	**23**	**—**	**(1)**	**—**	**22**
Total liabilities from financing activities	**1,023**	**188**	**(503)**	**242**	**950**

(1) Includes current portion. Credit facility cash inflows and outflows included on a net basis.

	As at Jan 1, 2019	Cash inflows	Cash outflows	Other	As at Dec. 31, 2019
Dividends payable	62	—	(221)	221	62
Long-term debt[(1)]	932	55	(49)	—	938
Lease obligations	16	—	(1)	8	23
Total liabilities from financing activities	1,010	55	(271)	229	1,023

(1) Includes current portion. Credit facility cash inflows and outflows included on a net basis.

22. Capital

The Corporation's capital management objectives are to ensure it is able to support day-to-day operations, meet required financial obligations, provide for growth opportunities and ensure stable and predictable distributions to shareholders.

The Corporation's capital is comprised of the following:

As at Dec. 31	**2020**	2019
TEA demand loan	**195**	—
Current portion of long-term debt and lease obligations	**53**	52
Long-term debt and lease obligations	**639**	909
Less: available cash and cash equivalents	**(582)**	(63)
Total net debt	**305**	898
Equity		
Common shares	**3,059**	3,039
Deficit	**(796)**	(637)
Accumulated other comprehensive income	**(8)**	(134)
Non-controlling interest	**50**	45
Total capital	**2,610**	3,211

In 2020, the Corporation's percentage of total net debt to capital was lower than 2019. Total debt decreased mainly due to the repayments of the credit facility, Melancthon Wolfe Wind bond, New Richmond Wind bond and Kent Hills Wind bond, partially offset by the issuance of the TEA demand loan. Cash and cash equivalents increased compared to 2019, mainly due to proceeds from the TEC Notes completed in October 2020 to be used in the acquisition of the Windrise wind project that closed on Feb. 26, 2021, and the economic interests in the Ada cogeneration facility and the Skookumchuck wind facility expected to close in the second quarter of 2021. See Note 4 for details of the acquisition.

The Melancthon Wolfe Wind bond of $270 million (2019 – $302 million), the Pingston bond of $45 million (2019 – $45 million), the New Richmond Wind bond of $128 million (2019 – $136 million) and the Kent Hills Wind bond of $233 million (2019 – $244 million) are subject to customary financing restrictions, which restrict the Corporation's ability to access funds generated by the facilities' operations (see Note 18).

At Dec. 31, 2020, the Corporation and its subsidiaries were in compliance with all financial covenants relating to debt obligations.

Dividends on the Corporation's common shares are at the discretion of the Board. In determining the payment and level of future dividends, the Board considers the financial performance, results of operations, cash flow and needs with respect to financing ongoing operations and growth, balanced against returning capital to shareholders.

23. Joint Operations

The Corporation's joint operations at Dec. 31, 2020, and 2019, include the following:

Joint operation	Ownership *(per cent)*	Description
McBride Lake	50	Wind facility in Alberta operated by the Corporation
Pingston	50	Hydro facility in British Columbia operated by the Corporation
Soderglen	50	Wind facility in Alberta operated by the Corporation

24. Commitments and Contingencies

A. Contracts for Goods and Services

In the ordinary course of operations, the Corporation routinely enters into contracts for the purchase of goods and services and for leases of equipment. The Corporation also has several long-term service agreements in place for repairs and maintenance that may be required at its gas facility and on turbines at wind facilities. In addition, the Corporation has entered into the Management Agreement with TransAlta for general, administrative and operational services (Note 25)

Approximate future payments under these and other contractual obligations are as follows:

	Long-term service agreements(1)	General administrative services(2)	Other(3)	Total
2021	30	19	10	**59**
2022	36	20	11	**67**
2023	21	20	3	**44**
2024	17	17	2	**36**
2025	9	17	2	**28**
2026 and thereafter	27	101	36	**164**
Total	**140**	**194**	**64**	**398**

(1) Long-term service agreements for wind and gas facilities including economic interests.
(2) Includes the asset management and optimization fees for the Corporation's Sarnia cogeneration facility.
(3) Includes land access, other leases, purchase contracts and natural gas purchase and transportation. Includes economic interests.

B. Guarantees

As part of the acquisition of the Australian Assets, the Corporation entered into a Guarantee and Indemnification Agreement in favour of TransAlta related to certain guarantees TransAlta has provided to third parties in respect of certain obligations of TEA (the "TEA Guarantees"). The Corporation has agreed to indemnify TransAlta from and against all claims, actions, proceedings, liabilities, losses, costs, expenses or damages against or incurred by TransAlta arising out of or in connection with the TEA Guarantees and to reimburse TransAlta in full for the amount of any payment made by TransAlta under and in accordance with the TEA Guarantees, relating to actions, omissions, events and circumstances that occur on or after May 7, 2015. As at Dec. 31, 2020, the total amounts guaranteed by the Corporation were $540 million (2019 – $512 million).

As consideration for this indemnity, TransAlta is required to pay the Corporation the Canadian-dollar equivalent of the guarantor fees it receives from TEA in respect of any of the TEA Guarantees.

C. Litigation

Line Loss Rule Proceeding

The Corporation has been participating in a transmission line loss rule proceeding before the Alberta Utilities Commission ("AUC"). The AUC directed the Alberta Electric System Operator ("AESO") to recalculate the transmission line loss factors of all Alberta generating facilities for the period from 2006 to 2016 and issue a single invoice charging or crediting market participants for the difference in line loss charges (the "Decision"). The AESO submitted a review and variance application of the Decision to implement a "pay-as-you-go" invoicing scheme rather than a single invoice. The AUC ruled on the AESO's request and approved a three-period invoice process (being 2006-2009, 2010-2013 and 2014-2016). The total liability for the line loss charges was $8 million; however, due to payments made (and received) for the first two invoices, only $1 million of the total liability remains outstanding. The AESO issued the first invoice on Oct. 22, 2020, for $1 million, which was paid by Dec. 30, 2020. The second invoice was issued on Dec. 21, 2020, for $6 million. The third invoice is expected in March 2021.

In November 2020, the AESO sought direction from the AUC with respect to interest payments on the settlement amounts. The AUC ruled in January 2021 that simple interest would apply to the loss charges.

FMG Dispute

While the Corporation is not directly involved in the ongoing dispute with FMG over the purported termination of the South Hedland PPA, the results of the litigation could impact the finance income received as a result of the economic interest in the Australian Assets. TransAlta constructed the South Hedland Power Station for approximately $570 million and the facility was expected to generate approximately $80 million in EBITDA on an annual basis. The Corporation's investment in the Australian Assets is through an economic interest that provides after-tax finance and interest income based on EBITDA of the underlying facilities. The trial is set to proceed for five weeks starting May 3, 2021.

The Corporation recognizes finance and interest income when declared on our investments in the Australian Assets, inclusive of the impacts of any contingent gains when recognized by TransAlta.

Dispute Settled

There was a second dispute involving FMG's claims against TransAlta related to the transfer of the Solomon facility to FMG. FMG claimed certain amounts related to the condition of the facility while TransAlta claimed certain outstanding costs and payments that should be reimbursed or paid. The dispute was settled and dismissed in the Supreme Court of Western Australia on Sept. 9, 2020.

25. Related-Party Transactions and Balances

The Corporation has entered into certain agreements and transactions with TransAlta, which are discussed below.

A. Related-Party Transactions

Related-party transactions include the finance income related to subsidiaries of TransAlta (Note 8) and interest income related to promissory notes due from subsidiaries of TransAlta (Note 9). Also, all derivatives of the Corporation are entered into on behalf of the Corporation by a subsidiary of TransAlta.

Significant related-party transactions that are not otherwise presented elsewhere consist of the following:

Year ended Dec. 31	**2020**	2019
Revenue from TransAlta PPAs *(I)*	**44**	35
Revenue from environmental attributes[(1)]	**6**	13
G&A Reimbursement Fee*(II)*	**17**	17
Natural gas purchases *(III)*	**2**	9
Financial power swap sales– losses (gains) *(III)*	**(1)**	(1)
Interest expense on TEA demand loan	**1**	—
Asset optimization fee[(2)]	**2**	2
Interest expense on credit facility and guarantee fees	**2**	1

(1) The value of the environmental attributes was determined by reference to market information for similar instruments, including historical transactions with third parties.
(2) A subsidiary of TransAlta provides asset management and optimization services for the Corporation's Sarnia cogeneration facility. The Sarnia cogeneration facility is charged a fixed fee of approximately $0.125 million per quarter, plus a variable fee of 1.6 per cent of its gross margin.

All of the above transactions are with TransAlta or subsidiaries of TransAlta.

I. TransAlta PPAs

The Corporation has agreements with TransAlta for certain wind and hydro facilities, providing for the purchase by TransAlta, for a fixed price, of all of the power produced by such facilities. The fixed prices are adjusted annually for changes in the Consumer Price Index ("CPI"). TransAlta is only required to purchase power that is actually produced. Each TransAlta PPA has a term of 20 years or end-of-asset life, where end-of-asset life is less than 20 years.

II. Management, Administrative and Operational Services Agreement ("Management Agreement")

Under the Management Agreement, TransAlta provides all the general administrative services, including key management personnel services, as may be required or advisable for the management of the affairs of the Corporation. As reimbursement for the services provided, the Corporation pays TransAlta a fee (the "G&A Reimbursement Fee"), adjusted annually for changes in the CPI. The G&A Reimbursement Fee is increased or decreased by an amount equal to five per cent of the amount of any increase or decrease, respectively, to the Corporation's total EBITDA resulting from the addition or divestiture of assets by the Corporation. On Feb. 28, 2020, the G&A Reimbursement Fee was amended to a calculation based on five per cent of comparable EBITDA of the immediately prior fiscal quarter, effective Jan. 1, 2020, without duplication for any indirect costs associated with the management, administrative, accounting, planning and other head office costs of TransAlta that reduce the dividends or distributions that would otherwise be payable to the Corporation on any of the tracking preferred shares.

TransAlta also provides operational and maintenance services under the Management Agreement, which generally includes all services as may be necessary or requested for the operation and maintenance of the Corporation's gas, wind and hydro facilities. TransAlta is reimbursed for all out-of-pocket and third-party fees and costs, including salaries, wages and benefits associated with managing and operating the facilities not captured by the G&A Reimbursement Fee.

III. Natural Gas Purchases, Sales and Power Swap Sales

The Corporation's subsidiary, TransAlta (SC) LP, and TransAlta Energy Marketing Corp. ("TEMC"), a Canadian subsidiary of TransAlta, are parties to a Gas Management Intercompany Agreement for the Sarnia facility to obtain its natural gas at the Dawn Hub from TEMC in consideration of TEMC being allowed to trade and profit from Sarnia's storage position. The terms of the Gas Management Intercompany Agreement are as follows:

- All gas burned at Sarnia is purchased from TEMC priced at the ICE NGX Union Gas Dawn Day-Ahead Index (previously NGX Union Dawn Daily Spot Price) published by the Canadian Gas Price Reporter ("CGPR") on the day the gas is burned;
- TEMC will purchase all customer make-up gas from Sarnia at the ICE NGX Union Gas Dawn Day-Ahead Index at the day of occurrence;
- All gas not consumed and used by Sarnia for hedging purposes is purchased by TEMC at the ICE NGX Union Gas Dawn Day-Ahead Index; and
- In exchange for the gas, Sarnia grants TEMC the unlimited right to inject, store and withdraw gas from the Sarnia storage asset for proprietary purposes.

Additionally, TransAlta (SC) LP remains responsible for all storage and transportation costs, which are based on the volumes of gas transported on the Union Gas pipeline from the hub to the facility.

B. Related-Party Balances

Related-party balances include the investments in subsidiaries of TransAlta disclosed in Note 8, the risk management assets and liabilities disclosed in Note 12, the finance lease receivable related to the WindCharger battery storage project in Note 14, the Big Level and Antrim promissory notes in Note 17, the TEA demand loan in Note 18 and the guarantees provided by the Corporation on behalf of TransAlta and TEA disclosed in Note 24.

Significant related-party balances that are not otherwise presented elsewhere consist of the following:

As at Dec. 31	2020	2019
Trade and other receivables	**39**	19
Accounts payable and accrued liabilities (including interest payable)	**11**	8
Dividends payable	**38**	38
TEA Guarantees(1)	**540**	512
Guarantees provided by TransAlta on behalf of the Corporation *(I)*	**207**	314
Long-term prepaid – management fee *(II)*	**2**	2

(1) Not recognized as a financial liability on the Consolidated Statements of Financial Position.

I. Guarantees

If the Corporation does not perform under the related guarantee agreements, the counterparty may present a claim for payment from TransAlta.

II. Long-Term Prepaid – Management Fee

In the fourth quarter of 2018, the Corporation paid a $2 million one-time upfront fee upon achieving commercial operation of Kent Hills 3 and will be recognized over a 30-year period, in lieu of the annual five per cent of incremental EBITDA that would otherwise be paid pursuant to the Management Agreement.

C. Key Management Personnel Services

The Corporation's key management personnel include the members of its Board and its Corporate Officers. Key management personnel services for Corporate Officers are provided through TransAlta and its subsidiaries and are part of the G&A Reimbursement Fee. Total compensation comprised of short-term employee benefits that pertain exclusively to director compensation, consisting of retainer and meeting fees and an allocation of director compensation towards grants of deferred share units and the purchase of common shares in the market, was approximately $2 million for the year ended Dec. 31, 2020 (2019 – $1 million).

26. Significant Customers

In addition to revenue from TransAlta (see Note 25), which represented 11 per cent of total revenues (2019 – 11 per cent), the Corporation had revenues from two customers (2019 – one customer) that exceeded 10 per cent of the Corporation's total revenues at 49 per cent (2019 – 42 per cent).

27. Segment Disclosures

A. Description of Reportable Segments

The Corporation has four reportable segments outlined below.

B. Reported Segment Earnings (Loss) and Other Segment Information

I. Earnings Information

Year ended Dec. 31, 2020	**Canadian Wind**	**Canadian Hydro**	**Canadian Gas**	**Corporate**	**Total**
Revenues	**239**	**29**	**163**	**—**	**431**
Government incentives	**4**	**1**	**—**	**—**	**5**
Total revenue	**243**	**30**	**163**	**—**	**436**
Fuel, royalties and other costs	**21**	**2**	**54**	**—**	**77**
Gross margin	**222**	**28**	**109**	**—**	**359**
Operations, maintenance and administration	**35**	**6**	**28**	**20**	**89**
Depreciation and amortization	**90**	**8**	**37**	**—**	**135**
Taxes, other than income taxes	**6**	**1**	**1**	**—**	**8**
Asset impairment charge	**—**	**2**	**—**	**—**	**2**
Operating income (loss)	**91**	**11**	**43**	**(20)**	**125**
Finance income related to subsidiaries of TransAlta					**69**
Interest income					**6**
Interest expense					**(46)**
Change in fair value of financial assets					**(59)**
Foreign exchange gain					**27**
Earnings before income taxes					**122**

Year ended Dec. 31, 2019	Canadian Wind	Canadian Hydro	Canadian Gas	Corporate	Total
Revenues	231	26	181	—	438
Government incentives	8	—	—	—	8
Total revenue	239	26	181	—	446
Fuel, royalties and other costs	12	3	68	—	83
Gross margin	227	23	113	—	363
Operations, maintenance and administration	34	4	29	20	87
Depreciation and amortization	90	10	36	—	136
Taxes, other than income taxes	6	1	1	—	8
Asset impairment charge	—	2	—	—	2
Insurance recovery	(4)	—	—	—	(4)
Operating income (loss)	101	6	47	(20)	134
Finance income related to subsidiaries of TransAlta					76
Interest income					8
Interest expense					(45)
Change in fair value of financial assets					49
Foreign exchange loss					(31)
Earnings before income taxes					191

II. Selected Consolidated Statements of Financial Position Information

Year ended Dec. 31, 2020	**Canadian Wind**	**Canadian Hydro**	**Canadian Gas**	**Total**
PP&E	**1,186**	**169**	**262**	**1,617**
Right-of-use assets	**22**	**5**	**—**	**27**
Intangible assets	**100**	**2**	**1**	**103**

Year ended Dec. 31, 2019	Canadian Wind	Canadian Hydro	Canadian Gas	Total
PP&E	1,249	173	306	1,728
Right-of-use assets	23	5	—	28
Intangible assets	110	2	2	114

III. Selected Consolidated Statements of Cash Flows Information

Year ended Dec. 31, 2020	**Canadian Wind**	**Canadian Hydro**	**Canadian Gas**	**Total**
Additions to non-current assets:				
PP&E	**20**	**3**	**4**	**27**
Intangible assets	**1**	**—**	**—**	**1**

Year ended Dec. 31, 2019	Canadian Wind	Canadian Hydro	Canadian Gas	Total
Additions to non-current assets:				
PP&E	18	3	10	31

28. Subsequent Events

TransAlta and the Corporation Announce President and Chief Executive Officer Succession

On Feb. 4, 2021, TransAlta announced that John Kousinioris will succeed Dawn Farrell as President and Chief Executive Officer of TransAlta and will join the Board of TransAlta on April 1, 2021. As part of the transition, Mr. Kousinioris stepped down as President and as a member of the Board of Directors of TransAlta Renewables effective Feb. 5, 2021. Todd Stack assumed the role of President of TransAlta Renewables and joined the Board of TransAlta Renewables effective Feb. 6, 2021. Mr. Stack continues as TransAlta's Executive Vice President, Finance and Chief Financial Officer

Acquisition of the Windrise Wind Project

The Corporation acquired a 100 per cent direct interest in the 207 MW Windrise wind project located in the Municipal District of Willow Creek, Alberta. The acquisition of the Windrise wind project closed on Feb. 26, 2021, and is accounted for as a business combination under common control, as TransAlta controlled the Windrise wind project prior to, and after, the acquisition by the Corporation. Under IFRS 3 *Business Combinations*, common control transactions are generally accounted for using either the fair value or the pooling of interest (book value) methods of accounting. The Corporation applied the pooling of interest method to account for the acquisition of the Windrise wind project, consistent with its accounting policies.

The Windrise wind project is expected to commence commercial operations in the second half of 2021, at which time the results of operations will be included in the Corporation's Consolidated Statements of Earnings.