Management's Report on Internal Control over Financial Reporting

The consolidated financial statements and Management's Discussion and Analysis (MD&A) included in this Annual Report are the responsibility of the management of TC Energy Corporation (TC Energy or the Company) and have been approved by the Board of Directors of the Company. The consolidated financial statements have been prepared by management in accordance with United States generally accepted accounting principles (GAAP) and include amounts that are based on estimates and judgments. The MD&A is based on the Company's financial results. It compares the Company's financial and operating performance in 2021 to that in 2020, and highlights significant changes between 2020 and 2019. The MD&A should be read in conjunction with the consolidated financial statements and accompanying notes. Financial information contained elsewhere in this Annual Report is consistent with the consolidated financial statements.

Management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. Management has designed and maintains a system of internal control over financial reporting, including a program of internal audits to carry out its responsibility. Management believes these controls provide reasonable assurance that financial records are reliable and form a proper basis for the preparation of financial statements. The internal control over financial reporting includes management's communication to employees of policies that govern ethical business conduct.

Under the supervision and with the participation of the President and Chief Executive Officer and the Chief Financial Officer, management conducted an evaluation of the effectiveness of its internal control over financial reporting based on the framework in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Management concluded, based on its evaluation, that internal control over financial reporting was effective as of December 31, 2021, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes.

The Board of Directors is responsible for reviewing and approving the financial statements and MD&A and ensuring that management fulfills its responsibilities for financial reporting and internal control. The Board of Directors carries out these responsibilities primarily through the Audit Committee, which consists of independent, non-management directors. The Audit Committee meets with management at least five times a year and meets independently with internal and external auditors and as a group to review any significant accounting, internal control and auditing matters in accordance with the terms of the Charter of the Audit Committee, which is set out in the Annual Information Form. The Audit Committee's responsibilities include overseeing management's performance in carrying out its financial reporting responsibilities and reviewing the Annual Report, including the consolidated financial statements and MD&A, before these documents are submitted to the Board of Directors for approval. The internal and independent external auditors have access to the Audit Committee without the requirement to obtain prior management approval.

The Audit Committee approves the terms of engagement of the independent external auditors and reviews the annual audit plan, the Auditors' Report and the results of the audit. It also recommends to the Board of Directors the firm of external auditors to be appointed by the shareholders.

The shareholders have appointed KPMG LLP as independent external auditors to express an opinion as to whether the consolidated financial statements present fairly, in all material respects, the Company's consolidated financial position, results of operations and cash flows in accordance with GAAP. The reports of KPMG LLP outline the scope of its examinations and its opinions on the consolidated financial statements and the effectiveness of the Company's internal control over financial reporting.

François L. Poirier President and Chief Executive Officer

February 14, 2022

Joel E. Hunter

Executive Vice-President and Chief Financial Officer

Report of Independent Registered Public Accounting Firm

To the Shareholders of TC Energy Corporation

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of TC Energy Corporation (the Company) as of December 31, 2021 and 2020, the related consolidated statements of income, comprehensive income, cash flows, and equity for each of the years in the three-year period ended December 31, 2021, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 14, 2022 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the Audit Committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements; and (2) involved our especially challenging, subjective or complex judgment. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Qualitative goodwill impairment indicators

As discussed in Note 13 to the consolidated financial statements, the goodwill balance as of December 31, 2021 was \$12,582 million. The Company assesses goodwill for impairment testing annually or more frequently if events or changes in circumstances indicate that the carrying value of a reporting unit, including goodwill, might be impaired. Other than the Columbia Pipeline Group, Inc. (Columbia) reporting unit where the Company has elected to proceed directly to a quantitative goodwill impairment test, the Company performed qualitative assessments to determine whether events or changes in circumstances indicate that goodwill might be impaired. These qualitative assessments were performed as of December 31, 2021.

We identified the evaluation of qualitative goodwill impairment indicators, or qualitative factors, as a critical audit matter. The assessment of the potential impact that these qualitative factors have on a reporting unit's fair value required the application of subjective auditor judgment. Qualitative factors include macroeconomic conditions, industry and market considerations, valuation multiples and discount rates, cost factors, historical and forecasted financial results and events specific to the reporting units, which required a higher degree of auditor judgment to evaluate. These qualitative factors could have had a significant effect on the Company's qualitative assessment and the potential for the need to perform a quantitative goodwill impairment test. In addition, the audit effort associated with this evaluation required specialized skills and knowledge.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the Company's goodwill impairment assessment process, including controls related to the assessment of potential qualitative factors. We evaluated the Company's assessment of identified event-specific changes against our knowledge of event-specific changes obtained through other audit procedures. We evaluated information from analyst reports in the energy and utility industries, including global energy consumption forecasts and natural gas production forecasts, which were compared to geopolitical and market considerations used by the Company. We compared current valuation multiples and discount rates, cost factors, historical and forecasted financial results of the reporting units, including the impact of newly approved growth projects to assumptions used in quantitative goodwill impairment tests performed in previous periods. In addition, we involved a valuation professional with specialized skills and knowledge, who assisted in:

- evaluating the Company's determination of valuation multiples by comparing them to independently observed, recent market transactions of comparable assets and using publicly available market data for comparable entities
- · evaluating the discount rates used by management in the assessment, by comparing them against a discount rate range that was independently developed using publicly available market data for comparable entities.

Valuation of goodwill for the Columbia reporting unit

As discussed in Note 13 to the consolidated financial statements, the goodwill balance as of December 31, 2021 was \$12,582 million, of which \$9,303 million related to the Columbia reporting unit. The Company assesses goodwill for impairment testing annually or more frequently if events or changes in circumstances indicate that the carrying value of a reporting unit, including goodwill, might be impaired. The Company has the option to first assess qualitative factors to determine whether it is necessary to perform the quantitative qoodwill impairment assessment. In respect of the Columbia reporting unit, the Company elected to proceed directly to the quantitative goodwill impairment test following an uncontested rate case settlement with shippers in 2021. The quantitative goodwill impairment assessment involves determining the fair value of a reporting unit and comparing that value to the carrying value of the reporting unit, including goodwill. Fair value is estimated using a discounted cash flow model which requires the use of assumptions related to revenue and capital expenditure projections, the valuation multiple and the discount rate (key assumptions).

We identified the valuation of goodwill for the Columbia reporting unit as a critical audit matter. A high degree of auditor judgment was required to evaluate the key assumptions. Minor changes to the key assumptions could have had a significant effect on the Company's determination of the fair value of the Columbia reporting unit. In addition, the audit effort associated with this estimate required specialized skills and knowledge.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the critical audit matter. This included controls related to the Company's determination of the fair value of the Columbia reporting unit and key assumptions. We compared the Company's historical revenue and capital expenditure projections to actual results to assess the Company's ability to accurately forecast. We evaluated the Company's revenue and capital expenditure projections by comparing them to the actual results and the outcomes of the uncontested rate case settlement with shippers in 2021. We also compared the Company's revenue and capital expenditure projections to assumptions used in industry publications related to North American and global energy consumption and natural gas production forecasts. In addition, we involved a valuation professional with specialized skills and knowledge, who assisted in:

- evaluating the Company's determination of a valuation multiple by comparing it to independently observed recent market transactions of comparable assets and publicly available market data for comparable entities
- evaluating the discount rate used by management in the valuation, by comparing it against a discount rate range that was independently developed using publicly available market data for comparable entities
- evaluating the Company's estimate of the fair value of the Columbia reporting unit by comparing the result of the Company's estimate to publicly available market data and valuation metrics for comparable entities.

KPMGLLP

Chartered Professional Accountants We have served as the Company's auditor since 1956.

Calgary, Canada February 14, 2022

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of TC Energy Corporation

Opinion on Internal Control Over Financial Reporting

We have audited TC Energy Corporation's (the Company) internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2021 and 2020, the related consolidated statements of income, comprehensive income, cash flows, and equity for each of the years in the three-year period ended December 31, 2021, and the related notes (collectively, the consolidated financial statements), and our report dated February 14, 2022 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting included in the Company's Management's Discussion and Analysis. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

KPMGLLP

Chartered Professional Accountants Calgary, Canada February 14, 2022

Consolidated statement of income

year ended December 31			
(millions of Canadian \$, except per share amounts)	2021	2020	2019
Revenues (Note 5)			
Canadian Natural Gas Pipelines	4,519	4,469	4,010
U.S. Natural Gas Pipelines	5,233	5,031	4,978
Mexico Natural Gas Pipelines	605	716	603
Liquids Pipelines	2,306	2,371	2,879
Power and Storage	724	412	785
	13,387	12,999	13,255
Income from Equity Investments (Note 10)	898	1,019	920
Operating and Other Expenses			
Plant operating costs and other	4,098	3,878	3,913
Commodity purchases resold	87	_	365
Property taxes	774	727	727
Depreciation and amortization	2,522	2,590	2,464
Asset impairment charge and other (Note 6)	2,775	_	_
	10,256	7,195	7,469
Net Gain/(Loss) on Assets Sold/Held for Sale (Note 28)	30	(50)	(121)
Financial Charges			
Interest expense (Note 19)	2,360	2,228	2,333
Allowance for funds used during construction	(267)	(349)	(475)
Interest income and other	(200)	(213)	(460)
	1,893	1,666	1,398
Income before Income Taxes	2,166	5,107	5,187
Income Tax Expense (Note 18)			
Current	305	252	699
Deferred	(185)	(58)	55
	120	194	754
Net Income	2,046	4,913	4,433
Net income attributable to non-controlling interests (Note 21)	91	297	293
Net Income Attributable to Controlling Interests	1,955	4,616	4,140
Preferred share dividends	140	159	164
Net Income Attributable to Common Shares	1,815	4,457	3,976
Net Income per Common Share (Note 22)			
Basic	\$1.87	\$4.74	\$4.28
Diluted	\$1.86	\$4.74	\$4.27
Diuted	\$1100	ψπ./ π	ΨΨ.Δ1
Dividends Declared per Common Share	\$3.48	\$3.24	\$3.00
Weighted Average Number of Common Shares (millions) (Note 22)			
	973	940	929
			931
Basic Diluted	973 974	940 940	

Consolidated statement of comprehensive income

year ended December 31			
(millions of Canadian \$)	2021	2020	2019
Net Income	2,046	4,913	4,433
Other Comprehensive Income/(Loss), Net of Income Taxes			
Foreign currency translation gains and losses on net investment in foreign operations	(108)	(609)	(944)
Reclassification to net income of foreign currency translation gains on disposal of foreign operations	_	_	(13)
Change in fair value of net investment hedges	(2)	36	35
Change in fair value of cash flow hedges	(10)	(583)	(62)
Reclassification to net income of gains and losses on cash flow hedges	55	489	14
Unrealized actuarial gains and losses on pension and other post-retirement benefit plans	158	12	(10)
Reclassification to net income of actuarial gains and losses on pension and other post-retirement benefit plans	14	17	10
Other comprehensive income/(loss) on equity investments	535	(280)	(82)
Other comprehensive income/(loss) (Note 24)	642	(918)	(1,052)
Comprehensive Income	2,688	3,995	3,381
Comprehensive income attributable to non-controlling interests	81	259	194
Comprehensive Income Attributable to Controlling Interests	2,607	3,736	3,187
Preferred share dividends	140	159	164
Comprehensive Income Attributable to Common Shares	2,467	3,577	3,023

Consolidated statement of cash flows

year ended December 31	2024	2022	0040
(millions of Canadian \$)	2021	2020	2019
Cash Generated from Operations			
Net income	2,046	4,913	4,433
Depreciation and amortization	2,522	2,590	2,464
Asset impairment charge and other (Note 6)	2,775	_	_
Deferred income taxes (Note 18)	(185)	(58)	55
Income from equity investments (Note 10)	(898)	(1,019)	(920)
Distributions received from operating activities of equity investments (Note 10)	975	1,123	1,213
Employee post-retirement benefits funding, net of expense (Note 25)	(5)	(19)	(45)
Net (gain)/loss on assets sold/held for sale (Note 28)	(30)	50	121
Equity allowance for funds used during construction	(191)	(235)	(299)
Unrealized losses/(gains) on financial instruments	194	(103)	(134)
Foreign exchange losses/(gains) on loan receivable from affiliate (Note 11)	41	86	(53)
Other	(67)	57	(46)
(Increase)/decrease in operating working capital (Note 27)	(287)	(327)	293
Net cash provided by operations	6,890	7,058	7,082
Investing Activities			
Capital expenditures (Note 4)	(5,924)	(8,013)	(7,475)
Capital projects in development (Note 4)	_	(122)	(707)
Contributions to equity investments (Notes 4 and 10)	(1,210)	(765)	(602)
Proceeds from sales of assets, net of transaction costs	35	3,407	2,398
Loan to affiliate (Note 11)	(239)	· —	· _
Acquisition	_	(88)	_
Other distributions from equity investments (Note 10)	73	_	186
Payment for unredeemed shares of Columbia Pipeline Group, Inc. (Note 28)	_	_	(373)
Deferred amounts and other	(447)	(471)	(299)
Net cash used in investing activities	(7,712)	(6,052)	(6,872)
Financing Activities	(- //	(-77	(-7)
Notes payable issued/(repaid), net	1,003	(220)	1,656
Long-term debt issued, net of issue costs	10,730	5,770	3,024
Long-term debt repaid	(7,758)	(3,977)	(3,502)
Junior subordinated notes issued, net of issue costs	495	(5,511) —	1,436
Loss on settlement of financial instruments (Note 26)	(10)	(130)	
Redeemable non-controlling interest repurchased (Note 6)	(633)	(150)	_
Contributions from redeemable non-controlling interest (Note 6)	(055)	1,033	_
Dividends on common shares	(3,317)	(2,987)	(1,798)
Dividends on preferred shares	(141)	(159)	(160)
Distributions to non-controlling interests	(74)	(221)	(216)
Distributions on Class C Interests (Note 6)	(16)	(221)	(210)
Common shares issued, net of issue costs	148	91	253
Preferred shares redeemed (Note 23)	(500)	91	233
Acquisition of TC PipeLines, LP transaction costs (Note 21)	(15)	_	
Net cash (used in)/provided by financing activities	(88)	(800)	693
Effect of Foreign Exchange Rate Changes on Cash and Cash Equivalents	53	(19)	(6)
(Decrease)/Increase in Cash and Cash Equivalents		187	(6) 897
Cash and Cash Equivalents	(857)	10/	09/
	1 520	1 2/12	116
Beginning of year Cash and Cash Equivalents	1,530	1,343	446
	673	1 520	1 7/17
End of year	673	1,530	1,343

Consolidated balance sheet

at December 31		
(millions of Canadian \$)	2021	2020
ASSETS		
Current Assets		
Cash and cash equivalents	673	1,530
Accounts receivable	3,092	2,162
Loans receivable from affiliates (Note 11)	1,217	_
Inventories (1) (1) (2)	724 1 717	629
Other current assets (Note 7)	1,717	880
Plant Provide and Englishment (N. 1. O)	7,423	5,201
Plant, Property and Equipment (Note 8)	70,182	69,775
Equity Investments (Note 10)	8,441	6,677
Long-Term Loans Receivable from Affiliates (Note 11)	238	1,338
Restricted Investments	2,182	1,898
Regulatory Assets (Note 12)	1,767	1,753
Goodwill (Note 13)	12,582	12,679
Other Long-Term Assets (Note 14)	1,403	979
	104,218	100,300
LIABILITIES		
Current Liabilities		
Notes payable (Note 15)	5,166	4,176
Accounts payable and other (Note 16)	5,099	3,816
Dividends payable	879 577	795 595
Accrued interest	5//	633
Redeemable non-controlling interest (Note 6)	 1,320	1,972
Current portion of long-term debt (Note 19)	13,041	11,987
Regulatory Liabilities (Note 12)	4,300	4,148
Regulatory Liabilities (Note 12) Other Long-Term Liabilities (Note 17)	4,300 1,059	1,475
	•	•
Deferred Income Tax Liabilities (Note 18)	6,142	5,806
Long-Term Debt (Note 19)	37,341	34,913
Junior Subordinated Notes (Note 20)	8,939	8,498
	70,822	66,827
Redeemable Non-Controlling Interest (Note 6)	_	393
EQUITY	26 716	24.400
Common shares, no par value (Note 22)	26,716	24,488
Issued and outstanding: December 31, 2021 – 981 million shares December 31, 2020 – 940 million shares		
Preferred shares (Note 23)	3,487	3,980
Additional paid-in capital	729	2
Retained earnings	3,773	5,367
Accumulated other comprehensive loss (Note 24)	(1,434)	(2,439)
Controlling Interests	33,271	31,398
Non-controlling interests (Note 21)	125	1,682
	33,396	33,080
	104,218	100,300

Commitments, Contingencies and Guarantees (Note 29)

Variable Interest Entities (Note 30)

The accompanying Notes to the consolidated financial statements are an integral part of these statements.

On behalf of the Board:

François L. Poirier, Director

Una M. Power, Director

Consolidated statement of equity

year ended December 31			
(millions of Canadian \$)	2021	2020	2019
Common Shares (Note 22)			
Balance at beginning of year	24,488	24,387	23,174
Shares issued:			
Acquisition of TC PipeLines, LP, net of transaction costs (Note 21)	2,063	_	_
Exercise of stock options	165	101	282
Dividend reinvestment and share purchase plan	_	_	931
Balance at end of year	26,716	24,488	24,387
Preferred Shares (Note 23)			
Balance at beginning of year	3,980	3,980	3,980
Redemption of shares	(493)	_	_
Balance at end of year	3,487	3,980	3,980
Additional Paid-In Capital			
Balance at beginning of year	2	_	17
Keystone XL project-level credit facility retirement and issuance of Class C Interests (Note 6)	737	_	_
Acquisition of TC PipeLines, LP (Note 21)	(398)	_	_
Repurchase of redeemable non-controlling interest (Note 6)	394	_	_
Issuance of stock options, net of exercises	(6)	2	(17)
Balance at end of year	729	2	_
Retained Earnings			
Balance at beginning of year	5,367	3,955	2,773
Net income attributable to controlling interests	1,955	4,616	4,140
Common share dividends	(3,409)	(3,045)	(2,794)
Preferred share dividends	(133)	(159)	(164)
Redemption of preferred shares	(7)	_	_
Balance at end of year	3,773	5,367	3,955
Accumulated Other Comprehensive Loss (Note 24)			
Balance at beginning of year	(2,439)	(1,559)	(606)
Other comprehensive income/(loss) attributable to controlling interests	652	(880)	(953)
Acquisition of TC PipeLines, LP (Note 21)	353	_	_
Balance at end of year	(1,434)	(2,439)	(1,559)
Equity Attributable to Controlling Interests	33,271	31,398	30,763
Equity Attributable to Non-Controlling Interests			
Balance at beginning of year	1,682	1,634	1,655
Net income attributable to non-controlling interests	90	307	293
Other comprehensive loss attributable to non-controlling interests	(10)	(38)	(99)
Distributions declared to non-controlling interests	(74)	(221)	(215)
Acquisition of TC PipeLines, LP (Note 21)	(1,563)		
Balance at end of year	125	1,682	1,634
Total Equity	33,396	33,080	32,397

Notes to consolidated financial statements

1. DESCRIPTION OF TC ENERGY'S BUSINESS

TC Energy Corporation (TC Energy or the Company) is a leading North American energy infrastructure company which operates in five business segments: Canadian Natural Gas Pipelines, U.S. Natural Gas Pipelines, Mexico Natural Gas Pipelines, Liquids Pipelines and Power and Storage. These segments offer different products and services, including certain natural gas, crude oil and electricity marketing and storage services. The Company also has a Corporate segment, consisting of corporate and administrative functions that provide governance, financing and other support to the Company's business segments.

Canadian Natural Gas Pipelines

The Canadian Natural Gas Pipelines segment primarily consists of the Company's investments in 40,580 km (25,216 miles) of regulated natural gas pipelines currently in operation.

U.S. Natural Gas Pipelines

The U.S. Natural Gas Pipelines segment primarily consists of the Company's investments in 50,211 km (31,199 miles) of regulated natural gas pipelines, 535 Bcf of regulated natural gas storage facilities and other assets currently in operation.

Mexico Natural Gas Pipelines

The Mexico Natural Gas Pipelines segment primarily consists of the Company's investments in 2,503 km (1,554 miles) of regulated natural gas pipelines currently in operation.

Liquids Pipelines

The Liquids Pipelines segment primarily consists of the Company's investments in 4,856 km (3,019 miles) of crude oil pipeline systems currently in operation which connect Alberta and U.S. crude oil supplies to U.S. refining markets in Illinois, Oklahoma and Texas.

Power and Storage

The Power and Storage segment primarily consists of the Company's investments in seven power generation facilities and 118 Bcf of non-regulated natural gas storage facilities. These assets are located in Alberta, Ontario, Québec and New Brunswick.

2. ACCOUNTING POLICIES

The Company's consolidated financial statements have been prepared by management in accordance with U.S. generally accepted accounting principles. Amounts are stated in Canadian dollars unless otherwise indicated.

Basis of Presentation

These consolidated financial statements include the accounts of TC Energy and its subsidiaries. The Company consolidates variable interest entities (VIEs) for which it is considered to be the primary beneficiary as well as voting interest entities in which it has a controlling financial interest. To the extent there are interests owned by other parties, these interests are included in non-controlling interests, although certain non-controlling interests with redemption features are presented in mezzanine equity. TC Energy uses the equity method of accounting for joint ventures in which the Company is able to exercise joint control and for investments in which the Company is able to exercise significant influence. Certain prior year amounts have been reclassified to conform to current year presentation.

Use of Estimates and Judgments

In preparing these consolidated financial statements, TC Energy is required to make estimates and assumptions that affect both the amount and timing of recording assets, liabilities, revenues and expenses since the determination of these items may be dependent on future events. The Company uses the most current information available and exercises careful judgment in making these estimates and assumptions.

Certain estimates and judgments have a material impact where the assumptions underlying these accounting estimates relate to matters that are highly uncertain at the time the estimate or judgment is made or are subjective. These estimates and judgments include, but are not limited to:

- fair value of reporting units that contain goodwill (Notes 13 and 28)
- fair value of assets and liabilities acquired in a business combination (Note 28).

Some of the estimates and judgments the Company has to make have a material impact on the consolidated financial statements, but do not involve significant subjectivity or uncertainty. These estimates and judgments include, but are not limited to:

- valuation of Keystone XL assets (Note 6)
- recoverability and depreciation rates of plant, property and equipment (Note 8)
- determining whether a contract contains a lease (Note 9)
- fair value of equity investments (Note 10)
- carrying value of regulatory assets and liabilities (Note 12)
- carrying value of asset retirement obligations (Note 17)
- provisions for income taxes, including valuation allowances and releases (Note 18)
- assumptions used to measure retirement and other post-retirement benefit obligations (Note 25)
- fair value of financial instruments (Note 26)
- provisions for commitments, contingencies and guarantees (Note 29).

TC Energy continues to assess the impact of climate change on the consolidated financial statements. The Company has announced internal greenhouse gas reduction targets and closely monitors regulatory initiatives that may impact its existing businesses. The impact of these changes are continuously assessed to ensure any changes in assumptions that would impact estimates listed above are adjusted on a timely basis.

Actual results could differ from these estimates.

Regulation

Certain Canadian, U.S. and Mexico natural gas pipeline and storage assets are regulated with respect to construction, operations and the determination of tolls. In Canada, regulated natural gas pipelines and liquids pipelines are subject to the authority of the Canada Energy Regulator (CER), formerly the National Energy Board (NEB), the Alberta Energy Regulator or the B.C. Oil and Gas Commission. In the U.S., regulated natural gas pipelines, liquids pipelines and regulated natural gas storage assets are subject to the authority of the Federal Energy Regulatory Commission (FERC). In Mexico, regulated natural gas pipelines are subject to the authority of the Energy Regulatory Commission (CRE). Rate-regulated accounting (RRA) standards may impact the timing of the recognition of certain revenues and expenses in TC Energy's rate-regulated businesses which may differ from that otherwise recognized in non-rate-regulated businesses to reflect the economic impact of the regulators' decisions regarding revenues and tolls. Regulatory assets represent costs that are expected to be recovered in customer rates in future periods and regulatory liabilities represent amounts that are expected to be returned to customers through future rate-setting processes. An operation qualifies for the use of RRA when it meets three criteria:

- a regulator must establish or approve the rates for the regulated services or activities
- the regulated rates must be designed to recover the cost of providing the services or products and
- it is reasonable to assume that rates set at levels to recover the cost can be charged to (and collected from) customers because of the demand for services or products and the level of direct or indirect competition.

TC Energy's businesses that apply RRA currently include natural gas pipelines in Canada, U.S. and Mexico, and regulated U.S. natural gas storage. RRA is not applicable to the Company's liquids pipelines as the regulators' decisions regarding operations and tolls on those systems generally do not have an impact on timing of recognition of revenues and expenses.

Revenue Recognition

The total consideration for services and products to which the Company expects to be entitled can include fixed and variable amounts. The Company has variable revenue that is subject to factors outside the Company's influence, such as market prices, actions of third parties and weather conditions. The Company considers this variable revenue to be "constrained" as it cannot be reliably estimated and, therefore, recognizes variable revenue when the service is provided.

Revenues from contracts with customers are recognized net of any commodity taxes collected from customers which are subsequently remitted to governmental authorities. The Company's contracts with customers include natural gas and liquids pipelines capacity arrangements and transportation contracts, power generation contracts, natural gas storage and other contracts.

The majority of income earned from marketing activities, as it relates to the purchase and sale of crude oil, natural gas and electricity, is recorded on a net basis in the month of delivery.

Canadian Natural Gas Pipelines

Capacity Arrangements and Transportation

Revenues from the Company's Canadian natural gas pipelines are generated from contractual arrangements for committed capacity and from the transportation of natural gas. Revenues earned from firm contracted capacity arrangements are recognized ratably over the term of the contract regardless of the amount of natural gas that is transported. Transportation revenues for interruptible or volumetric-based services are recognized when the service is performed.

Revenues from the Company's Canadian natural gas pipelines under federal jurisdiction are subject to regulatory decisions by the CER. The tolls charged on these pipelines are based on revenue requirements designed to recover the costs of providing natural gas capacity for transportation services, which includes a return of and on capital, as approved by the CER. The Company's Canadian natural gas pipelines are generally not subject to earnings volatility related to variances in revenues and costs. These variances, except as related to incentive arrangements, are generally subject to deferral treatment and are recovered or refunded in future tolls. Revenues recognized prior to a CER decision on rates for that period reflect the CER's last approved return on equity (ROE) assumptions. Adjustments to revenues are recorded when the CER decision is received. Canadian natural gas pipelines' revenues are invoiced and received on a monthly basis. The Company does not take ownership of the natural gas that it transports for customers.

Other

The Company is contracted to provide pipeline construction services to a partially-owned entity for a development fee. The development fee is considered variable consideration due to refund provisions in the contract. The Company recognizes its estimate of the most likely amount of the variable consideration to which it will be entitled. The development fee is recognized over time as the services are provided based on the input method using an estimate of activity level.

U.S. Natural Gas Pipelines

Capacity Arrangements and Transportation

Revenues from the Company's U.S. natural gas pipelines are generated from contractual arrangements for committed capacity and from the transportation of natural gas. Revenues earned from firm contracted capacity arrangements are generally recognized ratably over the term of the contract regardless of the amount of natural gas that is transported. Transportation revenues for interruptible or volumetric-based services are recognized when the service is performed.

The Company's U.S. natural gas pipelines are subject to FERC regulations and, as a result, a portion of revenues collected may be subject to refund if invoiced during an interim period when a rate proceeding is ongoing. Allowances for these potential refunds are recognized using management's best estimate based on the facts and circumstances of the proceeding. Any allowances that are recognized during the proceeding process are refunded or retained at the time a regulatory decision becomes final. U.S. natural gas pipelines' revenues are invoiced and received on a monthly basis. The Company does not take ownership of the natural gas that it transports for customers.

Natural Gas Storage and Other

Revenues from the Company's regulated U.S. natural gas storage services are generated mainly from firm committed capacity storage contracts. The performance obligation in these contracts is the reservation of a specified amount of capacity for storage including specifications with regard to the amount of natural gas that can be injected or withdrawn on a daily basis. Revenues are recognized ratably over the contract period for firm committed capacity regardless of the amount of natural gas that is stored, and when gas is injected or withdrawn for interruptible or volumetric-based services. Natural gas storage services revenues are invoiced and received on a monthly basis. The Company does not take ownership of the natural gas that it stores for customers.

The Company owns mineral rights associated with certain natural gas storage facilities. These mineral rights can be leased or contributed to producers of natural gas in return for a royalty interest which is recognized when natural gas and associated liquids are produced.

During 2019, TC Energy sold certain Columbia Midstream assets that were part of the acquisition of Columbia Pipeline Group, Inc. (Columbia) in 2016. Prior to the sale, revenues from the Company's midstream natural gas services, including gathering, treating, conditioning, processing, compression and liquids handling services, were generated from contractual arrangements and were recognized ratably over the term of the contract. Midstream natural gas service revenues were invoiced and received on a monthly basis. The Company did not take ownership of the natural gas for which it provided midstream services. Refer to Note 28, Acquisitions and dispositions, for additional information regarding the sale of the Columbia Midstream assets.

Mexico Natural Gas Pipelines

Capacity Arrangements and Transportation

Revenues from the Company's Mexico natural gas pipelines are primarily collected based on CRE-approved negotiated firm capacity contracts and are generally recognized ratably over the term of the contract. Transportation revenues related to interruptible or volumetric-based services are recognized when the service is performed. Mexico natural gas pipelines' revenues are invoiced and received on a monthly basis. The Company does not take ownership of the natural gas that it transports for customers.

Other

The Company is contracted to provide operating services to a partially-owned entity for a fee which is recognized over time as services are provided. The Company's construction services to this entity have been performed and the related development fee has been recognized.

Liquids Pipelines

Capacity Arrangements and Transportation

Revenues from the Company's liquids pipelines are generated mainly from providing customers with firm capacity arrangements to transport crude oil. The performance obligation in these contracts is the reservation of a specified amount of capacity together with the transportation of crude oil on a monthly basis. Revenues earned from these arrangements are recognized ratably over the term of the contract regardless of the amount of crude oil that is transported. Revenues for interruptible or volumetric-based services are recognized when the service is performed. Liquids pipelines' revenues are invoiced and received on a monthly basis. The Company does not take ownership of the crude oil that it transports for customers.

Power and Storage

Power

Revenues from the Company's Power and Storage business are primarily derived from long-term contractual commitments to provide power capacity to meet the demands of the market, and from the sale of electricity to both centralized markets and to customers. Power generation revenues also include revenues from the sale of steam to customers. Revenues and capacity payments are recognized as the services are provided and as electricity and steam is delivered. Power generation revenues are invoiced and received on a monthly basis.

Natural Gas Storage and Other

Non-regulated natural gas storage contracts include park, loan and term storage arrangements. Revenues are recognized as the services are provided. Term storage revenues are invoiced and received on a monthly basis. Revenues from ancillary services are recognized as the service is provided. The Company does not take ownership of the natural gas that it stores for customers.

Cash and Cash Equivalents

The Company's Cash and cash equivalents consist of cash and highly liquid short-term investments with original maturities of three months or less and are recorded at cost, which approximates fair value.

Inventories

Inventories primarily consist of materials and supplies including spare parts and fuel, proprietary crude oil in transit and proprietary natural gas inventory in storage. Inventories are carried at the lower of cost and net realizable value.

Assets Held for Sale

The Company classifies assets as held for sale when management approves and commits to a formal plan to actively market a disposal group and expects the sale to close within the next 12 months. Upon classifying an asset as held for sale, the asset is recorded at the lower of its carrying amount or its estimated fair value, net of selling costs, and any losses are recognized in net income. Gains related to the expected sale of these assets are not recognized until the transaction closes. Once an asset is classified as held for sale, depreciation expense is no longer recorded.

Plant, Property and Equipment

Natural Gas Pipelines

Plant, property and equipment for natural gas pipelines is carried at cost. Depreciation is calculated on a straight-line basis once the assets are ready for their intended use. Pipeline and compression equipment are depreciated at annual rates ranging from 0.6 per cent to seven per cent, and metering and other plant equipment are depreciated at various rates reflecting their estimated useful lives. The cost of major overhauls of equipment is capitalized and depreciated over the estimated service lives of the overhauls. The cost of regulated natural gas pipelines includes an allowance for funds used during construction (AFUDC) consisting of a debt component and an equity component based on the rate of return on rate base approved by regulators. AFUDC is reflected as an increase in the cost of the assets in Plant, property and equipment with a corresponding credit recognized in Allowance for funds used during construction in the Consolidated statement of income. The equity component of AFUDC is a non-cash expenditure. Interest is capitalized during construction of non-regulated natural gas pipelines.

Natural gas pipelines' linepack and natural gas storage base gas are valued at cost and are maintained to ensure adequate pressure exists to transport natural gas through pipelines and deliver natural gas held in storage. Linepack and base gas are not depreciated.

When rate-regulated natural gas pipelines retire plant, property and equipment from service, the original book cost is removed from the gross plant amount and recorded as a reduction to accumulated depreciation with no amount recorded to net income. Costs incurred to remove plant, property and equipment from service, net of any salvage proceeds, are also recorded in accumulated depreciation.

Other

The Company participates as a working interest partner in the development of certain Marcellus and Utica acreage. The working interest allows the Company to invest in drilling activities in addition to receiving a royalty interest in well production. The Company uses the successful efforts method of accounting for natural gas and crude oil resulting from its portion of drilling activities. Capitalized well costs are depleted based on the units of production method.

Prior to its sale in 2019, plant, property and equipment for Columbia Midstream was carried at cost. Depreciation was calculated on a straight-line basis once the assets were ready for their intended use. Gathering and processing facilities were depreciated at annual rates ranging from 1.7 per cent to 2.5 per cent, and other plant and equipment were depreciated at various rates reflecting their estimated useful lives. When these assets were retired from plant, property and equipment, the original book cost and related accumulated depreciation were derecognized and any gain or loss was recorded in net income. Refer to Note 28, Acquisitions and dispositions, for additional information.

Liquids Pipelines

Plant, property and equipment for liquids pipelines is carried at cost. Depreciation is calculated on a straight-line basis once the assets are ready for their intended use. Pipeline and pumping equipment are depreciated at annual rates ranging from two per cent to 2.5 per cent, and other plant and equipment are depreciated at various rates reflecting their estimated useful lives. The cost of these assets includes interest capitalized during construction. When liquids pipelines retire plant, property and equipment from service, the original book cost and related accumulated depreciation are derecognized and any gain or loss is recorded in net income.

Power and Storage

Plant, property and equipment for Power and Storage assets are recorded at cost and, once the assets are ready for their intended use, depreciated by major component on a straight-line basis over their estimated service lives at average annual rates ranging from two per cent to 20 per cent. Other equipment is depreciated at various rates reflecting their estimated useful lives. The cost of major overhauls of equipment is capitalized and depreciated over the estimated service lives of the overhauls. Interest is capitalized on facilities under construction. When these assets are retired from plant, property and equipment, the original book cost and related accumulated depreciation are derecognized and any gain or loss is recorded in net income.

Natural gas storage base gas, which is valued at original cost, represents gas volumes that are maintained to ensure adequate reservoir pressure exists to deliver gas held in storage. Base gas is not depreciated.

Corporate

Corporate plant, property and equipment is recorded at cost and depreciated on a straight-line basis over its estimated useful life at average annual rates ranging from four per cent to 20 per cent.

Capital Projects in Development

The Company capitalizes project costs once advancement of the project to a construction stage is probable or costs are otherwise likely to be recoverable. The Company also capitalizes interest costs for non-regulated projects in development and AFUDC for regulated projects in development. Capital projects in development are included in Other long-term assets on the Consolidated balance sheet. These represent larger projects that generally require regulatory or other approvals before physical construction can begin. Once approvals are received, projects are moved to plant, property and equipment under construction.

Leases

Lessee Accounting Policy

The Company determines if an arrangement is a lease at inception of the contract. Operating leases are recognized as right-of-use (ROU) assets and included in Plant, property and equipment while corresponding liabilities are included in Accounts payable and other and Other long-term liabilities on the Consolidated balance sheet.

Operating lease ROU assets and operating lease liabilities are recognized based on the present value of the future minimum lease payments over the lease term at the commencement date of the lease agreement. Lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. As the Company's lease contracts do not provide an implicit interest rate, the Company uses its incremental borrowing rate based on the information available at commencement date in determining the present value of future payments. Operating lease expense is recognized on a straight-line basis over the lease term and included in Plant operating costs and other in the Consolidated statement of income.

The Company applies the practical expedients to not recognize ROU assets or lease liabilities for leases that qualify for the short-term lease recognition exemption and to not separate lease and non-lease components for all leases for which the Company is a lessee.

Lessor Accounting Policy

The Company is the lessor within certain contracts, including power purchase agreements (PPA), and these are accounted for as operating leases. The Company recognizes lease payments as income over the lease term on a straight-line basis. Variable lease payments are recognized as income in the period in which they occur.

The Company applies the practical expedient to not separate lease and non-lease components for facilities and liquids tank terminals for which the Company is the lessor.

Impairment of Long-Lived Assets

The Company reviews long-lived assets such as plant, property and equipment, equity investments and capital projects in development for impairment whenever events or changes in circumstances indicate the carrying value may not be recoverable. If the total of the estimated undiscounted future cash flows for an asset within plant, property and equipment, or the estimated selling price of any long-lived asset is less than the carrying value of an asset, an impairment loss is recognized for the excess of the carrying value over the estimated fair value of the asset.

Acquisitions and Goodwill

The Company accounts for business combinations using the acquisition method of accounting and, accordingly, the assets and liabilities of the acquired entities are primarily measured at their estimated fair values at the date of acquisition. The excess of the fair value of the consideration transferred over the estimated fair value of the net assets acquired is classified as goodwill. Goodwill is not amortized and is tested for impairment on an annual basis, or more frequently if events or changes in circumstances indicate that it might be impaired.

The annual review for goodwill impairment is performed at the reporting unit level which is one level below the Company's operating segments. The Company can initially assess qualitative factors to determine whether events or changes in circumstances indicate that goodwill might be impaired. The factors the Company considers include, but are not limited to, macroeconomic conditions, industry and market considerations, current valuation multiples and discount rates, cost factors, historical and forecasted financial results, and events specific to that reporting unit.

If the Company concludes that it is not more likely than not that the fair value of the reporting unit is greater than its carrying value, the Company will then perform a quantitative goodwill impairment test. The Company can elect to proceed directly to the quantitative goodwill impairment test for any of its reporting units. If the quantitative goodwill impairment test is performed, the Company compares the fair value of the reporting unit to its carrying value, including its goodwill. If the carrying value of a reporting unit exceeds its fair value, goodwill impairment is measured at the amount by which the reporting unit's carrying value exceeds its fair value. The fair value of a reporting unit is determined by using a discounted cash flow analysis which requires the use of assumptions that may include, but are not limited to, revenue and capital expenditure projections, valuation multiples, and discount rates.

When a portion of a reporting unit that constitutes a business is disposed, goodwill associated with that business is included in the carrying amount of the business in determining the gain or loss on disposal. The amount of goodwill disposed is determined based on the relative fair values of the business to be disposed and the portion of the reporting unit that will be retained. A goodwill impairment test will be completed for both the goodwill disposed and the portion of the goodwill that will be retained.

Loans and Receivables

Loans receivable from affiliates and accounts receivable are measured at amortized cost.

Impairment of Financial Assets

The Company reviews financial assets carried at amortized cost for impairment using the lifetime expected loss of the financial asset at initial recognition and throughout the life of the financial asset. TC Energy uses historical credit loss and recovery data, adjusted for management's judgment regarding current economic and credit conditions, along with supportable forecasts to determine any impairment, which is recognized in Plant operating costs and other.

Restricted Investments

The Company has certain investments that are restricted as to their withdrawal and use. These restricted investments are classified as available for sale and are recorded at fair value on the Consolidated balance sheet.

As a result of the CER's Land Matters Consultation Initiative (LMCI), TC Energy is required to collect funds to cover estimated future pipeline abandonment costs for larger CER-regulated Canadian pipelines. Funds collected are placed in trusts that hold and invest the funds and are accounted for as restricted investments (LMCI restricted investments). LMCI restricted investments may only be used to fund the abandonment of the CER-regulated pipeline facilities, therefore, a corresponding regulatory liability is recorded on the Consolidated balance sheet. The Company also has other restricted investments that have been set aside to fund insurance claim losses to be paid by the Company's wholly-owned captive insurance subsidiary.

Income Taxes

The Company uses the asset and liability method of accounting for income taxes. This method requires the recognition of deferred income tax assets and liabilities for future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred income tax assets and liabilities are measured using enacted tax rates at the balance sheet date that are anticipated to apply to taxable income in the years in which temporary differences are expected to be reversed or settled. Changes to these balances are recognized in net income in the period in which they occur, except for changes in balances related to regulated natural gas pipelines which are deferred until they are refunded or recovered in tolls, as permitted by the regulator. Deferred income tax assets and liabilities are classified as non-current on the Consolidated balance sheet. The Company's exposure to uncertain tax positions is evaluated and a provision is made where it is more likely than not that this exposure will materialize.

Canadian income taxes are not provided for on the unremitted earnings of foreign investments that the Company does not intend to repatriate in the foreseeable future.

Asset Retirement Obligations

The Company recognizes the fair value of a liability for asset retirement obligations (ARO) in the period in which it is incurred, when a legal obligation exists and a reasonable estimate of fair value can be made. The fair value is added to the carrying amount of the associated asset and the liability is accreted through charges to Plant operating costs and other in the Consolidated statement of income.

In determining the fair value of ARO, the following assumptions are used:

- the expected retirement date
- the scope and cost of abandonment and reclamation activities that are required
- · appropriate inflation and discount rates.

The Company's AROs are substantively related to its power generation facilities. The scope and timing of asset retirements related to the Company's natural gas and liquids pipelines and storage facilities are indeterminable because the Company intends to operate them as long as there is supply and demand. As a result, the Company has not recorded an amount for ARO related to these assets.

Environmental Liabilities

The Company records liabilities on an undiscounted basis for environmental remediation efforts that are likely to occur and where the cost can be reasonably estimated. These estimates, including associated legal costs, are based on available information using existing technology and enacted laws and regulations, and are subject to revision in future periods based on actual costs incurred or new circumstances. Amounts expected to be recovered from other parties, including insurers, are recorded as an asset separate from the associated liability.

Emission allowances or credits purchased for compliance are recorded on the Consolidated balance sheet at historical cost and derecognized when they are utilized or cancelled/retired by government agencies. Compliance costs are expensed when incurred. Allowances granted to or internally generated by TC Energy are not attributed a value for accounting purposes. When required, TC Energy accrues emission liabilities on the Consolidated balance sheet using the best estimate of the amount required to settle the compliance obligation. Allowances and credits not used for compliance are sold and any gain or loss is recorded in Revenues in the Consolidated statement of income.

Stock Options and Other Compensation Programs

TC Energy's Stock Option Plan permits options for the purchase of common shares to be awarded to certain employees, including officers. Stock options granted are recorded using the fair value method. Under this method, compensation expense is measured at the grant date based on the fair value as calculated using a binomial model and is recognized on a straight-line basis over the vesting period with an offset to Additional paid-in capital. Forfeitures are accounted for when they occur. Upon exercise of stock options, amounts originally recorded against Additional paid-in capital are reclassified to Common shares on the Consolidated balance sheet.

The Company has medium-term incentive plans under which payments are made to eligible employees. The expense related to these incentive plans is accounted for on an accrual basis. Under these plans, benefits vest when certain conditions are met, including the employees' continued employment during a specified period and achievement of specified corporate performance targets.

Employee Post-Retirement Benefits

The Company sponsors defined benefit pension plans (DB Plans), defined contribution plans (DC Plans), savings plans and other post-retirement benefit plans. Contributions made by the Company to the DC Plans and savings plans are expensed in the period in which contributions are made. The cost of the DB Plans and other post-retirement benefits received by employees is actuarially determined using the projected benefit method pro-rated based on service, and management's best estimate of expected plan investment performance, salary escalation, retirement age of employees and expected health care costs.

The DB Plans' assets are measured at fair value at December 31 of each year. The expected return on the DB Plans' assets is determined using market-related values based on a five-year moving average value for all of the DB Plans' assets. Past service costs are amortized over the expected average remaining service life (EARSL) of the employees. Adjustments arising from plan amendments are amortized on a straight-line basis over the EARSL of employees active at the date of amendment. The Company recognizes the overfunded or underfunded status of its DB Plans as an asset or liability, respectively, on its Consolidated balance sheet and recognizes changes in that funded status through Other comprehensive income/(loss) (OCI) in the year in which the change occurs. The excess of net actuarial gains or losses over 10 per cent of the greater of the benefit obligation and the market-related value of the DB Plans' assets, if any, is amortized out of Accumulated other comprehensive income/(loss)(AOCI) and into net income over the EARSL of the active employees. When the restructuring of a benefit plan gives rise to both a curtailment and a settlement, the curtailment is accounted for prior to the settlement.

For certain regulated operations, post-retirement benefit amounts are recoverable through tolls as benefits are funded. The Company records any unrecognized gains or losses or changes in actuarial assumptions related to these post-retirement benefit plans as either regulatory assets or liabilities. The regulatory assets or liabilities are amortized on a straight-line basis over the EARSL of active employees.

Foreign Currency Transactions and Translation

Foreign currency transactions are those transactions whose terms are denominated in a currency other than the currency of the primary economic environment in which the Company or reporting subsidiary operates. This is referred to as the functional currency. Transactions denominated in foreign currencies are translated into the functional currency using the exchange rate prevailing at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated to the functional currency using the rate of exchange in effect at the balance sheet date whereas non-monetary assets and liabilities are translated at the historical rate of exchange in effect on the date of the transaction. Exchange gains and losses resulting from translation of monetary assets and liabilities are recorded in net income except for exchange gains and losses on any foreign currency debt related to Canadian regulated natural gas pipelines, which are deferred until they are refunded or recovered in tolls, as permitted by the CER.

Gains and losses arising from translation of foreign operations' functional currencies to the Company's Canadian dollar reporting currency are reflected in OCI until the operations are sold, at which time the gains and losses are reclassified to net income. Asset and liability accounts are translated at the period-end exchange rates while revenues, expenses, gains and losses are translated at the exchange rates in effect at the time of the transaction. The Company's U.S. dollar-denominated debt and certain derivative hedging instruments have been designated as a hedge of the net investment in foreign subsidiaries and, as a result, the unrealized foreign exchange gains and losses on the U.S. dollar-denominated debt and derivatives are also reflected in OCI.

Derivative Instruments and Hedging Activities

All derivative instruments are recorded on the Consolidated balance sheet at fair value, unless they qualify for and are designated under a normal purchase and normal sales exemption, or are considered to meet other permitted exemptions.

The Company applies hedge accounting to arrangements that qualify for and are designated for hedge accounting treatment. This includes fair value and cash flow hedges and hedges of foreign currency exposures of net investments in foreign operations. Hedge accounting is discontinued prospectively if the hedging relationship ceases to be effective or the hedging or hedged items cease to exist as a result of maturity, expiry, sale, termination, cancellation or exercise.

In a fair value hedging relationship, the carrying value of the hedged item is adjusted for changes in fair value attributable to the hedged risk and these changes are recognized in net income. Changes in the fair value of the hedged item, to the extent that the hedging relationship is effective, are offset by changes in the fair value of the hedging item, which are also recorded in net income. Changes in the fair value of foreign exchange and interest rate fair value hedges are recorded in Interest income and other and Interest expense, respectively. If hedge accounting is discontinued, the carrying value of the hedged item is no longer adjusted and the cumulative fair value adjustments to the carrying value of the hedged item are amortized to net income over the remaining term of the original hedging relationship.

In a cash flow hedging relationship, the change in the fair value of the hedging derivative is recognized in OCI. When hedge accounting is discontinued, the amounts recognized previously in AOCI are reclassified to Revenues, Interest expense and Interest income and other, as appropriate, during the periods when the variability in cash flows of the hedged item affects net income or as the original hedged item settles. Gains and losses on derivatives are reclassified immediately to net income from AOCI when the hedged item is sold or terminated early, or when it becomes probable that the anticipated transaction will not occur. Termination payments on interest rate derivatives are classified as a financing activity on the Consolidated statement of cash flows.

In hedging the foreign currency exposure of a net investment in a foreign operation, the foreign exchange gains and losses on the hedging instruments are recognized in OCI. The amounts recognized previously in AOCI are reclassified to net income in the event the Company reduces its net investment in a foreign operation.

In some cases, derivatives do not meet the specific criteria for hedge accounting treatment. In these instances, the changes in fair value are recorded in net income in the period of change.

Gains and losses arising from changes in the fair value of derivatives accounted for as part of RRA, including those that qualify for hedge accounting treatment, are refunded or recovered through the tolls charged by the Company. As a result, these gains and losses are deferred as regulatory assets or liabilities and are refunded to or collected from ratepayers in subsequent periods when the derivative settles.

Derivatives embedded in other financial instruments or contracts (host instrument) are recorded as separate derivatives. Embedded derivatives are measured at fair value if their economic characteristics are not clearly and closely related to those of the host instrument, their terms are the same as those of a stand-alone derivative and the total contract is not held for trading or accounted for at fair value. When changes in the fair value of embedded derivatives are measured separately, they are included in net income.

Long-Term Debt Transaction Costs and Issuance Costs

The Company records long-term debt transaction costs and issuance costs as a deduction from the carrying amount of the related debt liability and amortizes these costs using the effective interest method except those related to the Canadian natural gas regulated pipelines, which continue to be amortized on a straight-line basis in accordance with the provisions of regulatory tolling mechanisms.

Guarantees

Upon issuance, the Company records the fair value of certain guarantees entered into by the Company on behalf of a partially-owned entity or by partially-owned entities for which contingent payments may be made. The fair value of these guarantees is estimated by discounting the cash flows that would be incurred by the Company if letters of credit were used in place of the guarantees as appropriate in the circumstances. Guarantees are recorded as an increase to Equity investments or Plant, property and equipment and a corresponding liability is recorded in Other long-term liabilities. The release from the obligation is recognized either over the term of the quarantee or upon expiration or settlement of the quarantee.

3. ACCOUNTING CHANGES

Changes in Accounting Policies for 2021

Income Taxes

In December 2019, the Financial Accounting Standards Board (FASB) issued new guidance that simplified the accounting for income taxes and clarified existing quidance. This new quidance was effective January 1, 2021, and did not have a material impact on the Company's consolidated financial statements.

Reference Rate Reform

In response to the expected cessation of the U.S. dollar London Interbank Offered Rate (LIBOR), for which certain rate settings ceased to be published at the end of 2021 with full cessation by mid-2023, the FASB issued new optional quidance in March 2020 that eases the potential burden in accounting for such reference rate reform. The new guidance provides optional expedients for contracts and hedging relationships that are affected by reference rate reform if certain criteria are met. Each of the expedients can be applied as of January 1, 2020 through December 31, 2022. For eligible hedging relationships existing as of January 1, 2020 and prospectively, the Company has applied an optional expedient allowing an entity to assume that the hedged forecasted transaction in a cash flow hedge is probable of occurring. The Company has completed necessary system changes to facilitate the adoption of the proposed standard market reference rates. The Company has also completed its analysis of contracts impacted by reference rate reform. Contract modifications, if required, will take place prior to the full cessation date in mid-2023. The Company expects to use practical expedients available in the quidance to treat contract modifications as events that do not require contract remeasurement or reassessment of previous accounting determinations. As such, these changes are not expected to have a material impact on the consolidated financial statements; however, the Company will continue to monitor any new developments up to the full cessation date.

Future Accounting Changes

Government Assistance

In November 2021, the FASB issued new guidance that expands annual disclosure requirements for entities that account for a transaction with a government by applying a grant or contribution accounting model by analogy to other accounting quidance. Entities are required to disclose the nature of the transactions, the related accounting policies used to account for the transactions, the effect of the transactions on an entity's financial statements, and any significant terms and conditions of the transaction. This new quidance is effective for annual disclosure requirements at December 31, 2022 and can be applied either prospectively or retrospectively, with early application permitted. The Company is currently evaluating the impact of the adoption of this guidance and has not yet determined the effect on its consolidated financial statements.

Contract Assets and Liabilities from Contracts with Customers

In October 2021, the FASB issued new guidance that amends the accounting for contract assets and liabilities from contracts with customers acquired in a business combination. At the acquisition date, an acquirer should account for the contract assets and liabilities in accordance with quidance on revenue from contracts with customers. This new quidance is effective January 1, 2023 and is applied prospectively with early adoption permitted. Early adoption requires the application of the amendments retrospectively to all business combinations with an acquisition date in the year of early adoption. The Company is currently evaluating the timing of the adoption of this guidance.

4. SEGMENTED INFORMATION

year ended December 31, 2021 (millions of Canadian \$)	Canadian Natural Gas Pipelines	U.S. Natural Gas Pipelines	Mexico Natural Gas Pipelines	Liquids Pipelines	Power and Storage	Corporate ¹	Total
Revenues	4,519	5,233	605	2,306	724	_	13,387
Intersegment revenues	-	145	_		14	(159) ²	.5,507
intersegment revenues	4,519	5,378	605	2,306	738	(159)	13.387
Income from equity investments	12	244	119	71	411	41 ³	898
Plant operating costs and other	(1,567)	(1,393)	(55)	(700)	(455)	72 ²	(4,098)
Commodity purchases resold	_	_	(3)	(84)	_	_	(87)
Property taxes	(289)	(367)	_	(113)	(5)	_	(774)
Depreciation and amortization	(1,226)	(791)	(109)	(318)	(78)	_	(2,522)
Asset impairment charge and other	_	_	_	(2,775)	_	_	(2,775)
Gain on sale of assets	_	_	_	13	17	_	30
Segmented Earnings/(Losses)	1,449	3,071	557	(1,600)	628	(46)	4,059
Interest expense							(2,360)
Allowance for funds used during construction							267
Interest income and other ³							200
Income before Income Taxes							2,166
Income tax expense							(120)
Net Income							2,046
Net income attributable to non-controlling interests							(91)
Net Income Attributable to Controlling Interests							1,955
Preferred share dividends							(140)
Net Income Attributable to Common Shares							1,815
Capital Spending							
Capital expenditures	2,629	2,611	129	488	32	35	5,924
Contributions to equity investments	108	209	_	83	810	_	1,210
	2,737	2,820	129	571	842	35	7,134

Includes intersegment eliminations.

The Company records intersegment sales at contracted rates. For segmented reporting, these transactions are included as Intersegment revenues in the segment providing the service and Plant operating costs and other in the segment receiving the service. These transactions are eliminated on consolidation. Intersegment profit is recognized when the product or service has been provided to third parties or otherwise realized.

Income from equity investments includes the Company's proportionate share of Sur de Texas foreign exchange gains and losses on the peso-denominated loans from affiliates which are fully offset in Interest income and other by the corresponding foreign exchange losses and gains on the affiliate receivable balance. Refer to Note 11, Loans receivable from affiliates, for additional information.

year ended December 31, 2020	Canadian Natural Gas	U.S. Natural Gas	Mexico Natural Gas	Liquids	Power and	- 1	
(millions of Canadian \$)	Pipelines	Pipelines	Pipelines	Pipelines	Storage	Corporate ¹	Total
Revenues	4,469	5,031	716	2,371	412	_	12,999
Intersegment revenues		165			20	(185) 2	
	4,469	5,196	716	2,371	432	(185)	12,999
Income from equity investments	12	264	127	75	455	86 ³	1,019
Plant operating costs and other	(1,631)	(1,485)	(57)	(654)	(220)	169 ²	(3,878)
Property taxes	(284)	(337)	_	(101)	(5)	_	(727)
Depreciation and amortization	(1,273)	(801)	(117)	(332)	(67)	_	(2,590)
Net gain/(loss) on sale of assets	364				(414)	_	(50)
Segmented Earnings	1,657	2,837	669	1,359	181	70	6,773
Interest expense							(2,228)
Allowance for funds used during construction							349
Interest income and other ³							213
Income before Income Taxes							5,107
Income tax expense							(194)
Net Income							4,913
Net income attributable to non-controlling interests							(297)
Net Income Attributable to Controlling Interests							4,616
Preferred share dividends							(159)
Net Income Attributable to Common Shares							4,457
Capital Spending							
Capital expenditures	3,503	2,785	173	1,315	179	58	8,013
Capital projects in development	_	_	_	122	_	_	122
Contributions to equity investments	105			5	655		765
	3,608	2,785	173	1,442	834	58	8,900

¹ Includes intersegment eliminations.

² The Company records intersegment sales at contracted rates. For segmented reporting, these transactions are included as Intersegment revenues in the segment providing the service and Plant operating costs and other in the segment receiving the service. These transactions are eliminated on consolidation. Intersegment profit is recognized when the product or service has been provided to third parties or otherwise realized.

Income from equity investments includes the Company's proportionate share of Sur de Texas foreign exchange gains and losses on the peso-denominated loans and losses on the pero-denominated loans are considered to the company's proportionate share of Sur de Texas foreign exchange gains and losses on the peso-denominated loans are considered to the company's proportionate share of Sur de Texas foreign exchange gains and losses on the peso-denominated loans are considered to the company's proportionate share of Sur de Texas foreign exchange gains and losses on the peso-denominated loans are considered to the company's proportionate share of Sur de Texas foreign exchange gains and losses on the peso-denominated loans are considered to the constant of the confrom affiliates which are fully offset in Interest income and other by the corresponding foreign exchange losses and gains on the affiliate receivable balance. Refer to Note 11, Loans receivable from affiliates, for additional information.

year ended December 31, 2019 (millions of Canadian \$)	Canadian Natural Gas Pipelines	U.S. Natural Gas Pipelines	Mexico Natural Gas Pipelines	Liquids Pipelines	Power and Storage	Corporate ¹	Total
Revenues	4,010	4,978	603	2,879	785		13,255
	4,010	•	603	2,879	785 19	— (183) ²	13,233
Intersegment revenues	4.010	164		2.070			12.255
W 16	4,010	5,142	603	2,879	804	(183)	13,255
Income/(loss) from equity investments	12	264	56	70	571	(53) ³	920
Plant operating costs and other	(1,473)	(1,581)	(54)	(728)	(243)	166 2	(3,913)
Commodity purchases resold	_	_	_	_	(365)	_	(365)
Property taxes	(275)	(345)	_	(101)	(6)	_	(727)
Depreciation and amortization	(1,159)	(754)	(115)	(341)	(95)	_	(2,464)
Net gain/(loss) on assets sold/held for sale	_	21	_	69	(211)		(121)
Segmented Earnings/(Losses)	1,115	2,747	490	1,848	455	(70)	6,585
Interest expense							(2,333)
Allowance for funds used during construction							475
Interest income and other ³							460
Income before Income Taxes							5,187
Income tax expense							(754)
Net Income							4,433
Net income attributable to non-controlling interests							(293)
Net Income Attributable to Controlling Interests							4,140
Preferred share dividends							(164)
Net Income Attributable to Common Shares							3,976
Capital Spending							
Capital expenditures	3,900	2,500	323	239	481	32	7,475
Capital projects in development	6	_	_	701	_	_	707
Contributions to equity investments		16	34	14	538		602
	3,906	2,516	357	954	1,019	32	8,784

Includes intersegment eliminations.

The Company records intersegment sales at contracted rates. For segmented reporting, these transactions are included as Intersegment revenues in the segment providing the service and Plant operating costs and other in the segment receiving the service. These transactions are eliminated on consolidation. Intersegment profit is recognized when the product or service has been provided to third parties or otherwise realized.

Income/(loss) from equity investments includes the Company's proportionate share of Sur de Texas foreign exchange gains and losses on the peso-denominated loans from affiliates which are fully offset in Interest income and other by the corresponding foreign exchange losses and gains on the affiliate receivable balance. Refer to Note 11, Loans receivable from affiliates, for additional information.

at December 31		
(millions of Canadian \$)	2021	2020
Total Assets by segment		
Canadian Natural Gas Pipelines	25,213	22,852
U.S. Natural Gas Pipelines	45,502	43,217
Mexico Natural Gas Pipelines	7,547	7,215
Liquids Pipelines	14,951	16,744
Power and Storage	6,563	5,062
Corporate	4,442	5,210
	104,218	100,300

Geographic Information

year ended December 31			
(millions of Canadian \$)	2021	2020	2019
Revenues			
Canada – domestic	4,603	4,392	4,059
Canada – export	1,226	1,059	1,035
United States	6,953	6,832	7,558
Mexico	605	716	603
	13,387	12,999	13,255

at December 31		
(millions of Canadian \$)	2021	2020
Plant, Property and Equipment		
Canada	24,890	24,092
United States	39,335	39,698
Mexico	5,957	5,985
	70,182	69,775

5. REVENUES

Disaggregation of Revenues

year ended December 31, 2021 (millions of Canadian \$)	Canadian Natural Gas Pipelines	U.S. Natural Gas Pipelines	Mexico Natural Gas Pipelines	Liquids Pipelines	Power and Storage	Total
Revenues from contracts with customers						
Capacity arrangements and transportation	4,432	4,139	576	2,025	_	11,172
Power generation	_	_	_	_	324	324
Natural gas storage and other ¹	87	1,057	29	5	278	1,456
	4,519	5,196	605	2,030	602	12,952
Other revenues ^{2,3}	_	37	_	276	122	435
	4,519	5,233	605	2,306	724	13,387

Includes \$87 million of fee revenues from an affiliate related to development and construction of the Coastal GasLink pipeline project which is 35 per cent owned by TC Energy as at December 31, 2021. Refer to Note 28, Acquisitions and dispositions, for additional information.

Other revenues from U.S. Natural Gas Pipelines include the amortization of the net regulatory liabilities resulting from U.S. Tax Reform. Refer to Note 12, Rate-regulated businesses, for additional information.

year ended December 31, 2020 (millions of Canadian \$)	Canadian Natural Gas Pipelines	U.S. Natural Gas Pipelines	Mexico Natural Gas Pipelines	Liquids Pipelines	Power and Storage	Total
Revenues from contracts with customers						
Capacity arrangements and transportation	4,408	4,301	607	2,206	_	11,522
Power generation	_	_	_	_	192	192
Natural gas storage and other ¹	61	654	109	3	106	933
	4,469	4,955	716	2,209	298	12,647
Other revenues ^{2,3}	_	76	_	162	114	352
	4,469	5,031	716	2,371	412	12,999

Includes \$138 million of fee revenues from affiliates, of which \$77 million was related to the construction of the Sur de Texas pipeline which is 60 per cent owned by TC Energy and \$61 million was related to development and construction of the Coastal GasLink pipeline project which is 35 per cent owned by TC Energy as at December 31, 2020. Refer to Note 28, Acquisitions and dispositions, for additional information.

Other revenues include income from the Company's marketing activities, financial instruments and lease arrangements. Refer to Note 9, Leases, and Note 26, Risk management and financial instruments, for additional information on income from lease arrangements and financial instruments, respectively.

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Other revenues from U.S. Natural Gas Pipelines include the amortization of the net regulatory liabilities resulting from U.S. Tax Reform. Refer to Note 12, Rate-regulated businesses, for additional information.

year ended December 31, 2019 (millions of Canadian \$)	Canadian Natural Gas Pipelines	U.S. Natural Gas Pipelines	Mexico Natural Gas Pipelines	Liquids Pipelines	Power and Storage	Total
Revenues from contracts with customers						
Capacity arrangements and transportation	4,010	4,245	601	2,423	_	11,279
Power generation	_	_	_	_	662	662
Natural gas storage and other	_	650	2	4	73	729
	4,010	4,895	603	2,427	735	12,670
Other revenues ^{1,2}	_	83	_	452	50	585
	4,010	4,978	603	2,879	785	13,255

Other revenues include income from the Company's marketing activities, financial instruments and lease arrangements. Refer to Note 9, Leases, and Note 26, Risk management and financial instruments, for additional information on income from lease arrangements and financial instruments, respectively.

Contract Balances

at December 31			Affected line item on the
(millions of Canadian \$)	2021	2020	Consolidated balance sheet
Receivables from contracts with customers	1,627	1,330	Accounts receivable
Contract assets (Note 7)	202	132	Other current assets
Long-term contract assets (Note 14)	249	192	Other long-term assets
Contract liabilities ¹ (Note 16)	90	129	Accounts payable and other
Long-term contract liabilities (Note 17)	184	203	Other long-term liabilities

During the year ended December 31, 2021, \$15 million (2020 - \$18 million) of revenues were recognized that were included in contract liabilities at the beginning of the year.

Contract assets and long-term contract assets primarily relate to the Company's right to revenues for services completed but not invoiced at the reporting date on long-term committed capacity natural gas pipelines contracts. The change in contract assets is primarily related to the transfer to Accounts receivable when these rights become unconditional and the customer is invoiced, as well as the recognition of additional revenues that remain to be invoiced. Contract liabilities and long-term contract liabilities primarily relate to force majeure fixed capacity payments received on long-term capacity arrangements in Mexico.

Future Revenues from Remaining Performance Obligations

As at December 31, 2021, future revenues from long-term pipeline capacity arrangements and transportation as well as natural gas storage and other contracts extending through 2049 are approximately \$23.8 billion, of which approximately \$3.4 billion is expected to be recognized in 2022.

A significant portion of the Company's revenues are considered constrained and therefore not included in the future revenue amounts above as the Company uses the following practical expedients:

- right to invoice practical expedient applied to all U.S. and certain Mexico rate-regulated natural gas pipeline capacity arrangements and flow-through revenues
- variable consideration practical expedient applied to the following variable revenues:
 - interruptible transportation service revenues as volumes cannot be estimated
 - liquids pipelines capacity revenues based on volumes transported
 - power generation revenues related to market prices that are subject to factors outside the Company's influence
- contracts for a duration of one year or less.

In addition, future revenues from the Company's Canadian natural gas pipelines' regulated firm capacity contracts include fixed revenues only for the time periods that approved tolls under current rate settlements are in effect and certain.

Other revenues from U.S. Natural Gas Pipelines include the amortization of the net regulatory liabilities resulting from U.S. Tax Reform. Refer to Note 12, Rate-regulated businesses, for additional information.

6. KEYSTONE XL

Asset Impairment Charge and Other

Following the revocation of the Presidential Permit for the Keystone XL pipeline project on January 20, 2021, and after a comprehensive review of options in consultation with its partner, the Government of Alberta, on June 9, 2021, the Company terminated the Keystone XL pipeline project. The Keystone XL investment was evaluated for impairment in 2021, along with TC Energy's investments in related capital projects, including Heartland Pipeline, TC Terminals and Keystone Hardisty Terminal. As a result, the Company determined that the carrying amount of these assets within the Liquids Pipelines segment was no longer fully recoverable and recognized an asset impairment charge, net of expected contractual recoveries and other contractual and legal obligations related to termination activities, of \$2,775 million (\$2,134 million after tax) for the year ended December 31, 2021. The asset impairment charge was based on the excess of the carrying value of \$3,301 million over the estimated fair value of \$175 million. Termination activities and related costs will continue through 2022 with any adjustments to the estimated fair value and future contractual and legal obligations expensed as determined.

year ended December 31, 2021	Estimated Fair Value of Plant, Property	Asset impairment charg	e and other
(millions of Canadian \$)	and Equipment	Pre tax	After tax
Asset impairment charge			
Plant and equipment	175	412	312
Related capital projects in development	_	230	175
Other capitalized costs	_	2,158	1,642
Capitalized interest	_	326	248
	175	3,126	2,377
Other			
Contractual recoveries	n/a	(693)	(525)
Contractual and legal obligations related to termination activities ¹	n/a	342	282
	175	2,775	2,134

In 2021, the Company paid \$192 million towards contractual and legal obligations related to termination activities.

The estimated fair value of \$175 million related to plant and equipment is based on the price that is expected to be received from selling these assets in their current condition and is updated as required. Key assumptions used in the determination of selling price included an estimated two-year disposal period and current energy market demand. The valuation considered a variety of potential selling prices based on various markets that could be used to dispose of these assets and required the use of unobservable inputs. As a result, the fair value is classified in Level III of the fair value hierarchy.

As the Company did not see the related capital projects in development proceeding at the time of the assessment in 2021, it recorded an asset impairment charge equal to the carrying value of these projects included in Other long-term assets on the Consolidated balance sheet as the estimated fair value of these related projects was determined to be nil.

Redeemable Non-Controlling Interest and Long-Term Debt

In March 2020, the Company announced that it would proceed with construction of the Keystone XL pipeline. As part of the funding plan, the Government of Alberta invested \$1,033 million in the form of Class A Interests in the year ended December 31, 2020. At December 31, 2020, TC Energy had reclassified \$630 million related to Class A Interests to Current liabilities on the Consolidated balance sheet to reflect the expectation that the Company would exercise its call right in January 2021 in accordance with contractual terms. For the year ended December 31, 2020, redeemable non-controlling interest in Current liabilities of \$633 million also included \$3 million of return accrued that was recorded in Interest expense in the Consolidated statement of income.

On January 8, 2021, the Company exercised its call right in accordance with contractual terms and paid \$633 million (US\$497 million) to repurchase the Government of Alberta Class A Interests in certain Keystone XL subsidiaries which were classified as Current liabilities on the Consolidated balance sheet at December 31, 2020. This transaction was funded by draws on the project-level credit facility. Following the revocation of the Presidential Permit for the Keystone XL pipeline project on January 20, 2021, the Company ceased accruing a return on the remaining Government of Alberta Class A Interests. On January 4, 2021, the Company put in place a US\$4.1 billion project-level credit facility to support construction of the Keystone XL pipeline, that was fully quaranteed by the Government of Alberta and non-recourse to the Company. For the year ended December 31, 2021, the Company made draws under the Keystone XL project-level credit facility totaling \$1,028 million (US\$849 million) and in accordance with the terms of the quarantee, the Government of Alberta repaid the full outstanding balance in June 2021 and it was subsequently terminated. As part of this arrangement, TC Energy issued \$91 million of Class C Interests in the Keystone XL subsidiaries which entitle the Government of Alberta to future liquidation proceeds from specified Keystone XL project assets. The Class C Interests of \$91 million, net of \$16 million of related distributions to the Government of Alberta, were recorded in Accounts payable and other on the Consolidated balance sheet at December 31, 2021. Termination of the project-level credit facility, net of the issuance of Class C Interests, resulted in \$937 million (\$737 million after tax) recorded to Additional paid-in capital.

In June 2021, the Company repurchased the remaining Government of Alberta Class A Interests for a nominal amount, which was accounted for as an equity transaction and resulted in \$394 million recognized in Additional paid-in capital.

The changes in Redeemable non-controlling interest classified in mezzanine equity were as follows:

year ended December 31		
(millions of Canadian \$)	2021	2020
Balance at beginning of year	393	_
Class A Interests issued	_	1,033
Net income/(loss) attributable to redeemable non-controlling interest ¹	1	(10)
Class A Interests repurchased	(394)	_
Class A Interests transferred to Current liabilities	_	(630)
Balance at end of year	_	393

Includes a return accrual and a foreign currency translation loss on Class A Interests, both of which were presented within Net income attributable to non-controlling interests in the Consolidated statement of income.

7. OTHER CURRENT ASSETS

at December 31		
(millions of Canadian \$)	2021	2020
Keystone XL contractual recoveries (Note 6)	640	_
Cash provided as collateral	273	142
Contract assets (Note 5)	202	132
Fair value of derivative contracts (Note 26)	169	235
Keystone XL assets held for sale	138	_
Prepaid expenses	112	126
Regulatory assets (Note 12)	53	131
Other	130	114
	1,717	880

8. PLANT, PROPERTY AND EQUIPMENT

at December 31		2021			2020	
(millions of Canadian \$)	Cost	Accumulated Depreciation	Net Book Value	Cost	Accumulated Depreciation	Net Book Value
Canadian Natural Gas Pipelines						
NGTL System						
Pipeline	14,892	5,751	9,141	14,190	5,278	8,912
Compression	6,191	2,065	4,126	5,421	1,906	3,515
Metering and other	1,458	705	753	1,393	648	745
	22,541	8,521	14,020	21,004	7,832	13,172
Under construction	2,285	_	2,285	1,402	_	1,402
	24,826	8,521	16,305	22,406	7,832	14,574
Canadian Mainline						
Pipeline	10,423	7,698	2,725	10,297	7,443	2,854
Compression	4,165	3,125	1,040	3,930	3,000	930
Metering and other	652	264	388	637	239	398
	15,240	11,087	4,153	14,864	10,682	4,182
Under construction	139	_	139	150	_	150
	15,379	11,087	4,292	15,014	10,682	4,332
Other Canadian Natural Gas Pipelines ¹						
Other	1,937	1,567	370	1,885	1,508	377
Under construction	58	_	58	42	_	42
	1,995	1,567	428	1,927	1,508	419
	42,200	21,175	21,025	39,347	20,022	19,325
U.S. Natural Gas Pipelines						
Columbia Gas						
Pipeline	11,205	799	10,406	10,198	557	9,641
Compression	4,522	381	4,141	4,287	276	4,011
Metering and other	3,657	257	3,400	3,388	185	3,203
	19,384	1,437	17,947	17,873	1,018	16,855
Under construction	433	_	433	1,070	_	1,070
	19,817	1,437	18,380	18,943	1,018	17,925
ANR						
Pipeline	1,820	557	1,263	1,685	512	1,173
Compression	2,559	565	1,994	2,146	489	1,657
Metering and other	1,391	422	969	1,289	388	901
	5,770	1,544	4,226	5,120	1,389	3,731
Under construction	833		833	431	_	431
	6,603	1,544	5,059	5,551	1,389	4,162

at December 31		2021			2020	
(millions of Canadian \$)	Cost	Accumulated Depreciation	Net Book Value	Cost	Accumulated Depreciation	Net Book Value
Other U.S. Natural Gas Pipelines						
Columbia Gulf	2,749	178	2,571	2,638	151	2,487
GTN	2,701	1,071	1,630	2,330	1,008	1,322
Great Lakes	2,162	1,255	907	2,117	1,223	894
Other ²	1,755	657	1,098	1,568	578	990
	9,367	3,161	6,206	8,653	2,960	5,693
Under construction	533	_	533	389	· _	389
	9,900	3,161	6,739	9,042	2,960	6,082
	36,320	6,142	30,178	33,536	5,367	28,169
Mexico Natural Gas Pipelines			20,	33,330	3,301	20,103
Pipeline	2,957	476	2,481	2,952	411	2,541
Compression	480	80	400	480	69	411
Metering and other	626	155	471	624	133	491
	4,063	711	3,352	4,056	613	3,443
Under construction	2,590	_	2,590	2,525	_	2,525
	6,653	711	5,942	6,581	613	5,968
Liquids Pipelines						
Keystone Pipeline System						
Pipeline	9,209	1,758	7,451	9,254	1,579	7,675
Pumping equipment	1,020 3,534	252 737	768 2,797	1,025	228 644	797
Tanks and other	13,763	2,747	11,016	3,522 13,801	2,451	2,878 11,350
Under construction ³	72		72	2,870	2,431	2,870
	13,835	2,747	11,088	16,671	2,451	14,220
Intra-Alberta Pipelines	199	14	185	198	2, .2 .	189
	14,034	2,761	11,273	16,869	2,460	14,409
Power and Storage	<u> </u>	<u> </u>	<u> </u>	,	,	,
Natural Gas	1,267	605	662	1,255	569	686
Natural Gas Storage and Other	797	216	581	780	194	586
	2,064	821	1,243	2,035	763	1,272
Under construction	5	_	5	11	_	11
	2,069	821	1,248	2,046	763	1,283
Corporate	836	320	516	993	372	621
	102,112	31,930	70,182	99,372	29,597	69,775

Includes Foothills, Ventures LP and Great Lakes Canada.

² Includes Portland, North Baja, Tuscarora, Crossroads and mineral rights.

Following the revocation of the Presidential Permit for the Keystone XL pipeline project on January 20, 2021, the Company recognized a pre-tax asset impairment charge of \$3,126 million, of which \$2,896 million was related to Keystone XL assets under construction and \$230 million was related to associated capital projects in development. Refer to Note 6, Keystone XL, for additional information.

9. LEASES

As a Lessee

The Company has operating leases for corporate offices, other various premises, equipment and land. Some leases have an option to renew for periods of one to 25 years, and some may include options to terminate the lease within one year. Payments due under lease contracts include fixed payments plus, for many of the Company's leases, variable payments such as a proportionate share of the buildings' property taxes, insurance and common area maintenance. The Company subleases some of the leased premises.

Operating lease cost was as follows:

year ended December 31		
(millions of Canadian \$)	2021	2020
Operating lease cost ¹	105	124
Sublease income	(8)	(13)
Net operating lease cost	97	111

Includes short-term leases and variable lease costs.

Other information related to operating leases is noted in the following tables:

year ended December 31		
(millions of Canadian \$)	2021	2020
Cash paid for amounts included in the measurement of operating lease liabilities	69	77
ROU assets obtained in exchange for new operating lease liabilities	32	14

at December 31	2021	2020
Weighted average remaining lease term	9 years	10 years
Weighted average discount rate	3.5%	3.5%

Maturities of operating lease liabilities are as follows:

(millions of Canadian \$)	2021	2020
Less than one year	63	72
One to two years	60	61
Two to three years	58	59
Three to four years	55	58
Four to five years	54	54
More than five years	213	269
Total operating lease payments	503	573
Imputed interest	(74)	(90)
Operating lease liabilities	429	483

The amounts recognized on TC Energy's Consolidated balance sheet for its operating lease liabilities were as follows:

at December 31		
(millions of Canadian \$)	2021	2020
Accounts payable and other	49	56
Other long-term liabilities (Note 17)	380	427
	429	483

As at December 31, 2021, the carrying value of the ROU assets recorded under operating leases was \$415 million (2020 - \$473 million) and is included in Plant, property and equipment on the Consolidated balance sheet.

As a Lessor

The Grandview and Bécancour power plants in the Power and Storage segment are accounted for as operating leases. The Company has long-term PPAs for the sale of power from these assets which expire between 2024 and 2026.

Some leases contain variable lease payments that are based on operating hours and the reimbursement of variable costs, and options to purchase the underlying asset at fair value or based on a formula considering the remaining fixed payments. Lessees have rights under some leases to terminate under certain circumstances.

The Company also leases liquids tanks which are accounted for as operating leases.

The fixed portion of the operating lease income recorded by the Company for the year ended December 31, 2021 was \$126 million (2020 - \$130 million; 2019 - \$180 million).

Future lease payments to be received under operating leases are as follows:

(millions of Canadian \$)	2021	2020
	445	
Less than one year	113	119
One to two years	111	111
Two to three years	110	109
Three to four years	94	109
Four to five years	70	94
More than five years	_	70
	498	612

The cost and accumulated depreciation for facilities accounted for as operating leases was \$812 million and \$340 million, respectively, at December 31, 2021 (2020 - \$858 million and \$327 million, respectively).

10. EQUITY INVESTMENTS

	Ownership		ne from Equity vestments		Equity Investme	
	Interest at year ended December 31 December 31,		31	at December 31		
(millions of Canadian \$)	2021	2021	2020	2019	2021	2020
Canadian Natural Gas Pipelines						
TQM ¹	50.0%	12	12	12	118	90
Coastal GasLink ^{1,2}	35.0%	_	_	_	386	211
U.S. Natural Gas Pipelines						
Northern Border ³	50.0%	80	100	91	505	521
Millennium	47.5%	91	96	92	474	482
Iroquois ⁴	50.0%	55	52	54	392	197
Other	Various	18	16	27	137	120
Mexico Natural Gas Pipelines						
Sur de Texas⁵	60.0%	160	213	3	835	680
Liquids Pipelines						
Grand Rapids ^{1,6}	50.0%	54	53	56	980	998
Northern Courier ^{1,7}	nil	16	22	14	_	53
Port Neches Link LLC ^{1,8}	95.0%	_	_	_	103	_
HoustonLink Pipeline ¹	50.0%	1	_	_	18	19
Power and Storage						
Bruce Power ^{1,9}	48.4%	411	439	527	4,493	3,306
Portlands Energy Centre ^{1,10}	nil	_	12	35	_	_
TransCanada Turbines ¹¹	100.0%	_	4	9	_	
		898	1,019	920	8,441	6,677

- Classified as a non-consolidated VIE. Refer to Note 30, Variable interest entities, for additional information.
- In May 2020, TC Energy completed the sale of a 65 per cent equity interest in Coastal GasLink Pipeline Limited Partnership and subsequently applied the equity method to account for its 35 per cent retained equity interest in the jointly-controlled entity. Refer to Note 28, Acquisitions and dispositions, for additional information. At December 31, 2021, the difference between the carrying value of the investment and the underlying equity in the net assets of Coastal GasLink Pipeline Limited Partnership was \$167 million (2020 - \$188 million) due mainly to the fair value assessment of assets at the time of partial monetization along with deferred development fee revenue accounting.
- At December 31, 2021, the difference between the carrying value of the investment and the underlying equity in the net assets of Northern Border was US\$115 million (2020 – US\$116 million) due mainly to the fair value assessment of assets at the time of acquisition.
- At December 31, 2021, the difference between the carrying value of the investment and the underlying equity in the net assets of Iroquois was US\$39 million (2020 - US\$39 million) due mainly to the fair value assessment of the assets at the times of acquisition.
- Sur de Texas was placed into service in September 2019. TC Energy has a 60 per cent equity interest and, as a jointly-controlled entity, applies the equity method of accounting. Income from equity investments recorded in the Corporate segment reflects the Company's proportionate share of Sur de Texas foreign exchange gains and losses on the peso-denominated loans from affiliates which are fully offset in Interest income and other in the Consolidated statement of income. At December 31, 2021, the difference between the carrying value of the investment and the underlying equity in the net assets of Sur de Texas was US\$77 million (2020 - US\$79 million) due mainly to the accounting for fees earned from the successful construction of the pipeline.
- At December 31, 2021, the difference between the carrying value of the investment and the underlying equity in the net assets of Grand Rapids was \$96 million (2020 - \$98 million) due mainly to interest capitalized during construction.
- On November 30, 2021, TC Energy sold its remaining 15 per cent equity interest in Northern Courier. Refer to Note 28, Acquisitions and dispositions, for additional information. At December 31, 2020, the difference between the carrying value of the investment and the underlying equity in the net assets of Northern Courier was \$56 million due mainly to the fair value of guarantees and the fair value assessment of assets at the time of partial monetization.
- On March 8, 2021, TC Energy entered a joint venture with Motiva Enterprises to construct the Port Neches Link pipeline system. TC Energy has a 95 per cent equity interest and, as a jointly-controlled entity, applies the equity method of accounting.
- At December 31, 2021, the difference between the carrying value of the investment and the underlying equity in the net assets of Bruce Power was \$755 million (2020 – \$796 million) due mainly to capitalized interest and the fair value assessment of assets at the time of acquisition.
- In April 2020, TC Energy sold its investment in Portlands Energy Centre. Refer to Note 28, Acquisitions and dispositions, for additional information.
- In November 2020, TC Energy purchased the remaining 50 per cent ownership in TransCanada Turbines which was subsequently consolidated. Refer to Note 28, Acquisitions and dispositions, for additional information.

Distributions and Contributions

Distributions received from equity investments for the year ended December 31, 2021 were \$1,048 million (2020 - \$1,123 million; 2019 - \$1,399 million). For the year ended December 31, 2021, \$73 million (2020 - nil; 2019 - \$186 million) was included in Investing activities in the Consolidated statement of cash flows relating to TC Energy's proportionate share of the Sur de Texas 2021 partial debt repayment, and in 2019, included distributions received from Bruce Power and Northern Border from their respective financing programs.

Contributions made to equity investments for the year ended December 31, 2021 were \$1,210 million (2020 - \$765 million; 2019 - \$602 million) and were included in Investing activities in the Consolidated statement of cash flows. For 2019, contributions of \$32 million related to TC Energy's proportionate share of the Sur de Texas debt financing requirements.

Summarized Financial Information of Equity Investments

year ended December 31			
(millions of Canadian \$)	2021	2020	2019
Income			
Revenues	5,447	5,838	5,693
Operating and other expenses	(3,293)	(3,341)	(3,408)
Net income	1,859	2,047	1,990
Net income attributable to TC Energy	898	1,019	920

at December 31		
(millions of Canadian \$)	2021	2020
Balance Sheet		
Current assets	3,498	2,911
Non-current assets	30,165	26,957
Current liabilities	(2,540)	(3,727)
Non-current liabilities	(16,400)	(15,309)

11. LOANS RECEIVABLE FROM AFFILIATES

Related party transactions are conducted in the normal course of business and are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

Sur de Texas

TC Energy holds a 60 per cent equity interest in a joint venture with IEnova to own the Sur de Texas pipeline, for which TC Energy is the operator. In 2017, TC Energy entered into a MXN\$21.3 billion unsecured revolving credit facility with the joint venture, which bears interest at a floating rate and matures in March 2022. At December 31, 2021, Loans receivable from affiliates under Current assets on the Company's Consolidated balance sheet reflected a MXN\$19.7 billion or \$1.2 billion loan receivable from the Sur de Texas joint venture which represents TC Energy's proportionate share of debt financing to the joint venture. At December 31, 2020, this loan was recorded as Long-term loans receivable from affiliates on the Company's Consolidated balance sheet and amounted to MXN\$20.9 billion or \$1.3 billion.

The Company's Consolidated statement of income reflects the related interest income and foreign exchange impact on this loan receivable which were fully offset upon consolidation with corresponding amounts included in TC Energy's proportionate share of Sur de Texas equity earnings as follows:

year ended December 31				
(millions of Canadian \$)	2021	2020	2019	Affected line item in the Consolidated statement of income
Interest income ¹	87	110	147	Interest income and other
Interest expense ²	(87)	(110)	(147)	Income from equity investments
Foreign exchange (losses)/gains ¹	(41)	(86)	53	Interest income and other
Foreign exchange gains/(losses) ¹	41	86	(53)	Income from equity investments

- Included in the Corporate segment.
- Included in the Mexico Natural Gas Pipelines segment.

Coastal GasLink Pipeline Limited Partnership

TC Energy holds a 35 per cent equity interest in Coastal GasLink Pipeline Limited Partnership (Coastal GasLink LP) and has been contracted to develop and operate the Coastal GasLink pipeline.

Subordinated Demand Revolving Credit Facility

The Company has a subordinated demand revolving credit facility with Coastal GasLink LP to provide additional short-term liquidity and funding flexibility to the project. The facility bears interest at a floating market-based rate and had a capacity of \$500 million at December 31, 2021 with an outstanding balance of \$1 million (December 31, 2020 - nil) reflected in Loans receivable from affiliates under Current assets on the Company's Consolidated balance sheet.

Subordinated Loan Agreement

On December 6, 2021, the Company entered into a subordinated loan agreement with Coastal GasLink LP to provide interim temporary financing, if necessary, of up to \$3,275 million to fund incremental project costs as a bridge to a required increase in the project-level financing. Financing available to Coastal GasLink LP under this agreement is provided through a combination of interest-bearing facilities subject to floating market-based rates and non-interest-bearing facilities that are subject to a return to the Company under certain conditions at the time the final cost of the project is determined. At December 31, 2021, Long-term loans receivable from affiliates on the Company's Consolidated balance sheet reflected \$238 million in amounts outstanding under the subordinated loan agreement.

12. RATE-REGULATED BUSINESSES

TC Energy's businesses that apply RRA currently include almost all of the Canadian, U.S. and Mexico natural gas pipelines and certain U.S. natural gas storage operations. Rate-regulated businesses account for and report assets and liabilities consistent with the resulting economic impact of the regulators' established rates, provided the rates are designed to recover the costs of providing the regulated service and the competitive environment makes it probable that such rates can be charged and collected. Certain revenues and expenses subject to utility regulation or rate determination that would otherwise be reflected in the statement of income are deferred on the balance sheet and are expected to be recovered from or refunded to customers in future service rates.

Canadian Regulated Operations

The majority of TC Energy's Canadian natural gas pipelines are regulated by the CER under the Canadian Energy Regulator Act (CER Act). In August 2019, the CER and CER Act replaced the NEB and the National Energy Board Act, respectively. The impact assessment and decision-making for designated major transboundary pipeline projects also changed at that time with the implementation of the new Impact Assessment Act which required designated projects, on a prospective basis, to be assessed by the Impact Assessment Agency of Canada.

The CER regulates the construction and operation of facilities, and the terms and conditions of services, including rates, for the Company's Canadian regulated natural gas transmission systems under federal jurisdiction.

TC Energy's Canadian natural gas transmission services are supplied under natural gas transportation tariffs that provide for cost recovery, including return of and on capital as approved by the CER or NEB. Rates charged for these services are typically set through a process that involves filing an application with the regulator wherein forecasted operating costs, including a return of and on capital, determine the revenue requirement for the upcoming year or multiple years. To the extent actual costs and revenues are more or less than forecasted costs and revenues, the regulators generally allow the difference to be deferred to a future period and recovered or refunded in rates at that time. Differences between actual and forecasted costs that the regulator does not allow to be deferred are included in the determination of net income in the year they occur. The Company's most significant regulated Canadian natural gas pipelines, based on total operated pipe length, are described below.

NGTL System

The NGTL System currently operates under the terms of the 2020-2024 Revenue Requirement Settlement which includes an ROE of 10.1 per cent on 40 per cent deemed common equity, the opportunity to increase depreciation rates if tolls fall below specified levels and an incentive mechanism for certain operating costs where variances from projected amounts are shared between the NGTL System and its customers.

NGTL System's 2019 results reflect the terms of the 2018-2019 Revenue Requirement Settlement which included an ROE of 10.1 per cent on 40 per cent deemed common equity, a mechanism for sharing variances above and below a fixed annual operating, maintenance and administration amount and flow-through treatment of all other costs.

Canadian Mainline

The Canadian Mainline currently operates under the terms of the 2015-2030 Tolls Application approved in 2014 (the NEB 2014 Decision). The terms in the 2015-2020 six-year settlement of the NEB 2014 Decision, which ended December 31, 2020, included an ROE of 10.1 per cent on 40 per cent deemed common equity, an incentive mechanism that had both upside and downside risk and a \$20 million after-tax annual TC Energy contribution to reduce the revenue requirement. Toll stabilization was achieved through the use of deferral accounts, namely the bridging amortization account and the long-term adjustment account (LTAA), to capture the surplus or shortfall between the Company's revenues and cost of service for each year over the 2015-2020 six-year fixed-toll term of the NEB 2014 Decision. The NEB 2014 Decision also directed TC Energy to file an application to review tolls for the 2018-2020 period. In December 2018, an NEB decision was received on the 2018-2020 Tolls Review which included an accelerated amortization of the December 31, 2017 LTAA balance and an increase to the composite depreciation rate from 3.2 per cent to 3.9 per cent.

In April 2020, the CER approved the six-year unanimous negotiated settlement (2021-2026 Mainline Settlement) effective January 1, 2021. Similar to previous settlements, the 2021-2026 Mainline Settlement maintains a base equity return of 10.1 per cent on 40 per cent deemed common equity and includes an incentive to either achieve cost efficiencies and/or increase revenues on the pipeline with a beneficial sharing mechanism to both the shippers and TC Energy. An estimate of the remaining LTAA balance at the end of 2020 was included as an adjustment in the calculation of Mainline fixed tolls and amortized over the settlement term. Similar to the LTAA, the short-term adjustment accounts (STAA) captures the surplus or shortfall between system revenues and cost of service each year under the 2021-2026 Mainline Settlement and the Company will commence amortization over the remaining settlement term when predetermined thresholds per the settlement agreement are met.

U.S. Regulated Operations

TC Energy's U.S. regulated natural gas pipelines operate under the provisions of the Natural Gas Act (NGA) of 1938, the Natural Gas Policy Act of 1978 and the Energy Policy Act of 2005, and are subject to the jurisdiction of FERC. The NGA grants FERC authority over the construction and operation of pipelines and related facilities, including the regulation of tariffs which incorporates maximum and minimum rates for services and allows U.S. regulated natural gas pipelines to discount or negotiate rates on a non-discriminatory basis. The Company's most significant regulated U.S. natural gas pipelines, based on effective ownership and total operated pipe length, are described below.

In 2018, FERC prescribed changes (2018 FERC Actions) related to H.R.1, the Tax Cuts and Jobs Act (U.S. Tax Reform). The U.S. corporate income tax rate was reduced from 35 per cent to 21 per cent in 2017 as a result of U.S. Tax Reform. The U.S. regulated operations, where applicable, established regulatory liabilities amortized over the remaining average useful lives of the underlying property for the differences between the amounts previously recovered in rates and the expected deferred tax liabilities.

Columbia Gas

Columbia Gas' natural gas transportation and storage services are provided under a tariff at rates subject to FERC approval. A FERC-approved modernization settlement provided for cost recovery and return on investment of up to US\$2.6 billion from 2013-2020 to modernize the Columbia Gas system thereby improving system integrity and enhancing service reliability and flexibility.

In July 2020, Columbia Gas filed a general NGA Section 4 Rate Case with FERC requesting an increase on its maximum transportation rates to be effective February 1, 2021, subject to refund on completion of the rate proceeding. On October 29, 2021, Columbia Gas filed a petition with FERC requesting approval of the Stipulation and Agreement of Settlement (Columbia Gas Settlement) that reflects a rate case settlement with its customers and, if approved, will increase Columbia Gas' maximum rates effective February 1, 2021. On December 17, 2021, the presiding Administrative Law Judge recommended the settlement for approval and certified it as uncontested to FERC for its review and approval. The Columbia Gas Settlement (a) extends Columbia's modernization program allowing for the cost recovery and return on additional investment of up to US\$1.2 billion over a four-year period through 2024 (b) establishes a rate case and tariff filing moratorium through April 1, 2025 and (c) requires Columbia Gas to file a general rate case under Section 4 of the NGA with new rates to be effective no later than April 1, 2026.

ANR Pipeline

ANR Pipeline operates under rates established through a FERC-approved rate settlement in 2016. To meet terms of the 2016 settlement, on January 28, 2022, ANR Pipeline filed a Section 4 Rate Case with FERC requesting an increase to maximum transportation rates effective August 1, 2022, subject to refund. As the rate process progresses, the Company expects to engage in a collaborative process to achieve settlement with its customers, FERC and other stakeholders.

Columbia Gulf

Columbia Gulf reached a rate settlement with its customers, which was approved by FERC in December 2019, increasing Columbia Gulf's recourse rates to take effect on August 1, 2020. This settlement establishes a rate case and tariff filing moratorium through August 1, 2022 and Columbia Gulf is required to file a general rate case under Section 4 of the NGA no later than January 31, 2027, with new rates to be effective August 1, 2027.

Great Lakes

Great Lakes operates under a settlement approved by FERC in February 2018 which does not include a moratorium. However, Great Lakes will be required to file for new rates no later than March 31, 2022, with new rates to be effective October 1, 2022.

As a result of the 2018 FERC Actions, Great Lakes made a limited NGA Section 4 filing and reduced rates by two per cent effective February 1, 2019.

Gas Transmission Northwest

Gas Transmission Northwest (GTN) operates under a settlement approved by FERC in November 2018. GTN and its customers agreed upon a moratorium on further rate changes until December 31, 2021 and GTN is required to have new rates in effect on January 1, 2022.

On September 29, 2021, GTN filed a rate settlement (2021 GTN Settlement) which was approved by FERC on November 18, 2021, extending the Company's existing maximum transportation rates at their current levels, with GTN's annual depreciation rates remaining unchanged. The 2021 GTN Settlement contains a moratorium until December 31, 2023, at which point GTN will be required to file for new rates to become effective no later than April 1, 2024.

Mexico Regulated Operations

TC Energy's Mexico natural gas pipelines are regulated by CRE and operate in accordance with CRE-approved tariffs. The rates in effect on TC Energy's Mexico natural gas pipelines were established based on CRE-approved contracts that provide for cost recovery, including a return of and on invested capital.

Regulatory Assets and Liabilities

at December 31			Remaining Recovery/ Settlement Period
(millions of Canadian \$)	2021	2020	(years)
Regulatory Assets			
Deferred income taxes ¹	1,509	1,287	n/a
Pensions and other post-retirement benefits ^{1,2}	203	401	n/a
Foreign exchange on long-term debt ^{1,3}	3	7	1-8
Operating and debt-service regulatory assets ⁴	1	54	1
Other	104	135	n/a
	1,820	1,884	
Less: Current portion included in Other current assets (Note 7)	53	131	
	1,767	1,753	
Regulatory Liabilities			
Pipeline abandonment trust balances ⁵	2,086	1,842	n/a
Deferred income taxes – U.S. Tax Reform ⁶	1,141	1,170	n/a
Canadian Mainline bridging amortization account ⁷	483	537	9
Cost of removal ⁸	254	246	n/a
Canadian Mainline long-term adjustment account ^{7,9}	186	223	5
Deferred income taxes ¹	139	115	n/a
Canadian Mainline short-term adjustment and toll-stabilization accounts ^{7,9,10}	60	4	n/a
ANR post-employment and retirement benefits other than pension ¹¹	40	40	n/a
Operating and debt-service regulatory liabilities ⁴	32	48	1
Pensions and other post-retirement benefits ²	13	18	n/a
Other	66	58	n/a
	4,500	4,301	
Less: Current portion included in Accounts payable and other (Note 16)	200	153	
	4,300	4,148	

- These regulatory assets and liabilities are underpinned by non-cash transactions or are recovered without an allowance for return as approved by the regulator. Accordingly, these regulatory assets or liabilities are not included in rate base and do not yield a return on investment during the recovery period.
- 2 These balances represent the regulatory offset to pension plan and other post-retirement benefit obligations to the extent the amounts are expected to be collected from or refunded to customers in future rates.
- Foreign exchange on long-term debt of the NGTL System represents the variance resulting from revaluing foreign currency-denominated debt instruments to the current foreign exchange rate from the historical foreign exchange rate at the time of issue. Foreign exchange gains and losses realized when foreign debt matures or is redeemed early are expected to be recovered or refunded through the determination of future tolls.
- Operating and debt-service regulatory assets and liabilities represent the accumulation of cost and revenue variances to be included in determination of rates in 4 the following year.
- 5 This balance represents the amounts collected in tolls from shippers and included in the LMCI restricted investments to fund future abandonment of the Company's CER-regulated pipeline facilities.
- 6 The regulatory liabilities will be amortized over varying terms that approximate the expected reversal of the underlying deferred tax liabilities that gave rise to the regulatory liabilities.
- These regulatory accounts are used to capture revenue and cost variances plus toll-stabilization adjustments during the 2015-2030 settlement term. 7
- 8 This balance represents anticipated costs of removal that have been, and continue to be, included in depreciation rates and collected in the service rates of certain rate-regulated operations for future costs to be incurred.
- Under the terms of the 2021-2026 Mainline Settlement, \$223 million is amortized over the six-year settlement term and the residual of \$4 million was transferred to the STAA at December 31, 2020.
- 10 Under the terms of the 2021-2026 Mainline Settlement, the STAA account will commence amortization over the remainder of the six-year settlement term when predetermined thresholds per the settlement agreement are met.
- This balance represents the amount ANR estimates it would be required to refund to its customers for post-retirement and post-employment benefit amounts collected through its FERC-approved rates that have not been used to pay benefits to its employees. Pursuant to a FERC-approved rate settlement, the \$40 million (US\$32 million) balance at December 31, 2021 is subject to resolution through future regulatory proceedings and, accordingly, a settlement period cannot be determined at this time.

13. GOODWILL

The Company has recorded the following Goodwill on its acquisitions:

(millions of Canadian \$)	U.S. Natural Gas Pipelines
Balance at January 1, 2020	12,887
Foreign exchange rate changes	(208)
Balance at December 31, 2020	12,679
Foreign exchange rate changes	(97)
Balance at December 31, 2021	12,582

As part of the annual goodwill impairment assessment at December 31, 2021, the Company evaluated qualitative factors impacting the fair value of the underlying reporting units for all its reporting units other than the Columbia reporting unit. It was determined that it was more likely than not that the fair value of these reporting units exceeded their carrying amounts, including goodwill.

The Company elected to proceed directly to a quantitative annual goodwill impairment test at December 31, 2021 for the \$9,303 million of goodwill related to the Columbia reporting unit following an uncontested rate case settlement with shippers in 2021. It was determined that the fair value of Columbia exceeded its carrying value, including goodwill at December 31, 2021.

Sale of Columbia Midstream Assets

In August 2019, TC Energy completed the sale of certain Columbia Midstream assets. As these assets constituted a business, and there was goodwill within this reporting unit, \$595 million of Columbia's goodwill allocated to these assets was released and netted in the pre-tax gain on sale. The amount released was determined based on the relative fair values of the assets sold and the portion of the reporting unit retained. The fair value of the reporting unit was determined using a discounted cash flow analysis. Refer to Note 28, Acquisitions and dispositions, for additional details.

14. OTHER LONG-TERM ASSETS

at December 31		
(millions of Canadian \$)	2021	2020
Deferred income tax assets (Note 18)	509	177
Employee post-retirement benefits (Note 25)	312	207
Long-term contract assets (Note 5)	249	192
Keystone XL contractual recoveries (Note 6)	50	_
Fair value of derivative contracts (Note 26)	48	41
Capital projects in development ¹	14	231
Other	221	131
	1,403	979

Following the revocation of the Presidential Permit for the Keystone XL pipeline project on January 20, 2021, the Company recognized a pre-tax asset impairment charge of \$3,126 million, of which \$2,896 million was related to Keystone XL assets under construction and \$230 million was related to associated capital projects in development. Refer to Note 6, Keystone XL, for additional information.

15. NOTES PAYABLE

	20	2021		2020		
(millions of Canadian \$, unless otherwise noted)	Outstanding at December 31	Weighted Average Interest Rate per Annum at December 31	Outstanding at December 31	Weighted Average Interest Rate per Annum at December 31		
Canada ¹	4,953	0.4%	2,836	0.4%		
U.S. (2021 – US\$54; 2020 – US\$900)	68	0.3%	1,149	0.4%		
Mexico (2021 – US\$115; 2020 – US\$150) ²	145	1.7%	191	1.7%		
	5,166		4,176			

At December 31, 2021, Notes payable consisted of Canadian dollar-denominated notes of \$1,989 million (2020 - \$656 million) and U.S. dollar-denominated notes of US\$2,341 million (2020 - US\$1,709 million).

At December 31, 2021 and 2020, Notes payable reflects short-term borrowings in Canada by TransCanada PipeLines Limited (TCPL), in the U.S. by TransCanada PipeLine USA Ltd. (TCPL USA) and in Mexico by a wholly-owned Mexican subsidiary.

At December 31, 2021, total committed revolving and demand credit facilities were \$12.4 billion (2020 - \$12.4 billion). When drawn, interest on these lines of credit is charged at negotiated floating rates of Canadian and U.S. banks, and at other negotiated financial bases. These unsecured credit facilities included the following:

at December 31					
(billions of Canadian \$, unless otherwise noted)			2021		2020
Borrower	Description	Matures	Total Facilities	Unused Capacity ¹	Total Facilities
Committed, syndicated, revolv	ving, extendible, senior unsecured credit fac	ilities ² :			
TCPL	Supports TCPL's Canadian dollar commercial paper program and for general corporate purposes	December 2026	3.0	1.0	3.0
TCPL / TCPL USA / Columbia / TransCanada American Investments Ltd.	Supports TCPL's and TCPL USA's U.S. dollar commercial paper programs and for general corporate purposes of the borrowers, guaranteed by TCPL	December 2022	US 4.5	US 2.1	US 4.5
TCPL / TCPL USA / Columbia / TransCanada American Investments Ltd.	For general corporate purposes of the borrowers, guaranteed by TCPL	December 2024	US 1.0	US 1.0	US 1.0
Demand senior unsecured rev	olving credit facilities ² :				
TCPL / TCPL USA	Supports the issuance of letters of credit and provides additional liquidity; TCPL USA facility guaranteed by TCPL	Demand	2.1 ³	1.0	2.1 ³
Mexico subsidiary	For Mexico general corporate purposes, guaranteed by TCPL	Demand	MXN 5.0 ³	MXN 2.6	MXN 5.0 ³

Net of commercial paper outstanding and facility draws.

For the year ended December 31, 2021, the cost to maintain the above facilities was \$17 million (2020 - \$21 million; 2019 - \$11 million).

The demand senior unsecured revolving credit facility for the Company's Mexico subsidiary can be drawn in either Mexican pesos or U.S. dollars, up to the total facility amount of MXN\$5.0 billion or the U.S. dollar equivalent.

Provisions of various credit arrangements with the Company's subsidiaries can restrict their ability to declare and pay dividends or make distributions under certain circumstances. If such restrictions apply, they may, in turn, have an impact on the Company's ability to declare and pay dividends on common and preferred shares. These credit arrangements also require the Company to comply with various affirmative and negative covenants and maintain certain financial ratios. At December 31, 2021, the Company was in compliance with all debt covenants.

Or the U.S. dollar equivalent.

16. ACCOUNTS PAYABLE AND OTHER

at December 31		
(millions of Canadian \$)	2021	2020
Trade payables	4,183	3,057
Fair value of derivative contracts (Note 26)	221	72
Regulatory liabilities (Note 12)	200	153
Contract liabilities (Note 5)	90	129
Class C Interests (Note 6)	75	_
Other	330	405
	5,099	3,816

17. OTHER LONG-TERM LIABILITIES

at December 31		
(millions of Canadian \$)	2021	2020
Operating lease obligations (Note 9)	380	427
Long-term contract liabilities (Note 5)	184	203
Employee post-retirement benefits (Note 25)	174	503
Asset retirement obligations	61	54
Fair value of derivative contracts (Note 26)	47	59
Other	213	229
	1,059	1,475

18. INCOME TAXES

Provision for Income Taxes

year ended December 31			
(millions of Canadian \$)	2021	2020	2019
Current			
Canada	29	(54)	84
Foreign ¹	276	306	615
	305	252	699
Deferred			
Canada	(327)	(224)	(29)
Foreign	142	166	84
	(185)	(58)	55
Income Tax Expense	120	194	754

The 2019 current foreign income tax expense mainly relates to the sale of certain Columbia Midstream assets in August 2019. Refer to Note 28, Acquisitions and dispositions, for additional information.

Geographic Components of Income before Income Taxes

year ended December 31			
(millions of Canadian \$)	2021	2020	2019
Canada	(292)	691	1,144
Foreign	2,458	4,416	4,043
Income before Income Taxes	2,166	5,107	5,187

Reconciliation of Income Tax Expense

year ended December 31			
(millions of Canadian \$)	2021	2020	2019
Income before income taxes	2,166	5,107	5,187
Federal and provincial statutory tax rate	23.0%	24.0%	26.5%
Expected income tax expense	498	1,226	1,375
Valuation allowance releases	(8)	(400)	(259)
Foreign income tax rate differentials	(230)	(258)	(180)
Income tax differential related to regulated operations	(139)	(228)	(159)
Income from non-controlling interests and equity investments	(70)	(141)	(78)
Alberta tax rate reduction	_	_	(32)
Non-taxable portion of capital gains	_	(62)	(28)
Non-deductible goodwill on the Columbia Midstream asset disposition	_	_	154
Impact of Mexico inflationary adjustments	32	7	13
Other	37	50	(52)
Income Tax Expense	120	194	754

Deferred Income Tax Assets and Liabilities

at December 31		
(millions of Canadian \$)	2021	2020
Deferred Income Tax Assets		
Tax loss and credit carryforwards	1,163	1,389
Regulatory and other deferred amounts	537	532
Unrealized foreign exchange losses on long-term debt	130	154
Financial instruments	_	48
Other	46	70
	1,876	2,193
Less: Valuation allowance	229	243
	1,647	1,950
Deferred Income Tax Liabilities		
Difference in accounting and tax bases of plant, property and equipment	5,616	6,124
Equity investments	1,219	1,087
Taxes on future revenue requirement	333	287
Other	112	81
	7,280	7,579
Net Deferred Income Tax Liabilities	5,633	5,629

The above deferred tax amounts have been classified on the Consolidated balance sheet as follows:

at December 31		
(millions of Canadian \$)	2021	2020
Deferred Income Tax Assets		
Other long-term assets (Note 14)	509	177
Deferred Income Tax Liabilities		
Deferred income tax liabilities	6,142	5,806
Net Deferred Income Tax Liabilities	5,633	5,629

At December 31, 2021, the Company has recognized the benefit of non-capital loss carryforwards of \$4,067 million (2020 – \$3,671 million) for federal and provincial purposes in Canada, which expire from 2030 to 2041. The Company has not yet recognized the benefit of capital loss carryforwards of \$21 million (2020 - \$253 million) for federal and provincial purposes in Canada which have no expiry date. The Company also has Ontario minimum tax credits of \$113 million (2020 - \$106 million), which expire from 2026 to 2041.

At December 31, 2021, the Company has fully recognized the benefit of net operating loss carryforwards of US\$446 million (2020 – US\$849 million) for federal purposes in the U.S., which expire in 2037.

At December 31, 2021, the Company has recognized the benefit of net operating loss carryforwards of US\$10 million (2020 - US\$13 million) in Mexico, which expire from 2024 to 2031.

TC Energy recorded an income tax valuation allowance of \$229 million and \$243 million against the deferred income tax asset balances at December 31, 2021 and 2020, respectively. At each reporting date, the Company considers new evidence, both positive and negative, that could affect its view of the future realization of deferred tax assets. As at December 31, 2021, the Company determined there was sufficient positive evidence to conclude that it is more likely than not that the net deferred tax assets will be realized.

At December 31, 2020, the Company recorded \$400 million in valuation allowance releases primarily a result of the final investment decision to proceed with the construction of the Keystone XL pipeline, the sale of the Ontario natural gas-fired power plants and the sale of a 65 per cent per cent equity interest in Coastal GasLink LP. Refer to Note 28, Acquisitions and dispositions, for additional information on the sale of the Ontario natural gas-fired power plants and Coastal GasLink LP equity sale.

Unremitted Earnings of Foreign Investments

Income taxes have not been provided on the unremitted earnings of foreign investments that the Company does not intend to repatriate in the foreseeable future. Deferred income tax liabilities would have increased at December 31, 2021 by approximately \$896 million (2020 – \$684 million) if there had been a provision for these taxes.

Income Tax Payments

Income tax payments of \$371 million, net of refunds, were made in 2021 (2020 – payments, net of refunds, of \$252 million; 2019 - payments, net of refunds, of \$713 million).

Reconciliation of Unrecognized Tax Benefit

Below is the reconciliation of the annual changes in the total unrecognized tax benefit:

at December 31			
(millions of Canadian \$)	2021	2020	2019
Unrecognized tax benefit at beginning of year	52	29	19
Gross increases – tax positions in prior years	5	26	13
Gross decreases – tax positions in prior years	(1)	(2)	(1)
Gross increases – tax positions in current year	26	1	_
Lapse of statutes of limitations	(2)	(2)	(2)
Unrecognized Tax Benefit at End of Year	80	52	29

TC Energy's practice is to recognize interest and penalties related to income tax uncertainties in Income tax expense. Income tax expense for the year ended December 31, 2021 reflects \$1 million interest expense (2020 - \$4 million; 2019 - \$4 million). At December 31, 2021, the Company had accrued \$12 million in interest expense (2020 - \$11 million; 2019 - \$7 million). The Company incurred no penalties associated with income tax uncertainties related to Income tax expense for the years ended December 31, 2021, 2020 and 2019 and no penalties were accrued as at December 31, 2021, 2020 and 2019.

Subject to the results of audit examinations by taxing authorities and other legislative amendments, TC Energy does not anticipate further adjustments to the unrecognized tax benefits during the next 12 months that would have a material impact on its financial statements.

TC Energy and its subsidiaries are subject to either Canadian federal and provincial income tax, U.S. federal, state and local income tax or the relevant income tax in other international jurisdictions. The Company has substantially concluded all Canadian federal and provincial income tax matters for the years through 2013. Substantially all material U.S. federal, state and local income tax matters have been concluded for years through 2014. Substantially all material Mexico income tax matters have been concluded for years through 2013, except as further described below.

Mexico Tax Audit

In 2019, the Mexican tax authority, Tax Administration Services (SAT), completed an audit of the 2013 tax return of one of the Company's subsidiaries in Mexico. The audit resulted in a tax assessment which denied the deduction for all interest expense and an assessment of additional tax, penalties and financial charges totaling less than US\$1 million. The Company disagreed with this assessment and commenced litigation. In January 2022, the Company received the tax court's ruling on the 2013 tax return, which was in favour of the SAT. The Company believes this ruling is unreasonable and did not conform with Mexican tax regulations and will appeal this decision. In support of the Company's position, the Mexican Tax Ombudsman (the PRODECON), previously determined that this subsidiary's tax filings were appropriate.

From September 2021 to February 2022, the SAT issued assessments for tax years 2014 through 2017 which denied the deduction of all interest expense as well as assessed incremental withholding tax on the interest. These assessments totaled approximately US\$490 million in tax, interest, penalties and financial charges. If the SAT continues to reassess the tax filings of this subsidiary for subsequent years on a similar basis, there is a risk of a material increase to the Company's exposure.

Based on recent discussions with the SAT, the Company believes that the areas of concern are confined to a subset of matters within these assessments. The Company will defend its position on these assessments and pursue all available legal tax remedies. Based on the Company's own judgment, as well as that of third-party advisors, management believes it is more likely than not that the Company's tax position will be sustained and no provision with respect to this matter has been recognized in the consolidated financial statements.

19. LONG-TERM DEBT

Dutstanding amounts millions of Canadian \$, unless otherwise noted) TRANSCANADA PIPELINES LIMITED Debentures U.S. (2021 – nil; 2020 – US\$400) Medium Term Notes Canadian 2022 to 2049 Senior Unsecured Notes U.S. (2021 – US\$16,542; 2020 – US\$14,292) 2022 to 2049	Outstanding at December 31	Interest Rate ¹	Outstanding at December 31	Interest Rate ¹
Debentures U.S. (2021 – nil; 2020 – US\$400) Medium Term Notes Canadian 2022 to 2049 Senior Unsecured Notes	_	_		
U.S. (2021 – nil; 2020 – US\$400) Medium Term Notes Canadian 2022 to 2049 Senior Unsecured Notes	_	_		
Medium Term Notes Canadian 2022 to 2049 Senior Unsecured Notes	-	_		
Canadian 2022 to 2049 Senior Unsecured Notes	40.40-		510	9.9%
Senior Unsecured Notes	40.40-			
H.C. (2024 - H.C. 4.2. 2020 - H.C. 4.4.202)	12,491	4.2%	11,491	4.5%
U.S. (2021 – US\$16.542: 2020 – US\$14.292)				
2022 (0 2049)	20,936	4.8%	18,227	5.3%
	33,427		30,228	
NOVA GAS TRANSMISSION LTD.				
Debentures and Notes				
Canadian 2024	100	9.9%	100	9.9%
U.S. (2021 and 2020 – US\$200) 2023	254	7.9%	255	7.9%
Medium Term Notes				
Canadian 2025 to 2030	504	7.4%	504	7.4%
U.S. (2021 and 2020 – US\$33) 2026	41	7.5%	42	7.5%
	899		901	
COLUMBIA PIPELINE GROUP, INC.				
Senior Unsecured Notes				
U.S. (2021 and 2020 – US\$1,500) ² 2025 to 2045	1,898	4.9%	1,913	4.9%
TC PIPELINES, LP				
Jnsecured Term Loan				
U.S. (2021 – nil; 2020 – US\$450)	_	_	574	1.4%
Senior Unsecured Notes				
U.S. (2021 – US\$850; 2020 – US\$1,200) 2025 to 2027	1,076	4.2%	1,530	4.4%
	1,076		2,104	
ANR PIPELINE COMPANY				
Senior Unsecured Notes				
U.S. (2021 – US\$372; 2020 – US\$672) 2024 to 2026	472	5.3%	858	7.2%
GAS TRANSMISSION NORTHWEST LLC				
Senior Unsecured Notes				
U.S. (2021 and 2020 – US\$325) 2030 to 2035	411	4.3%	415	4.3%

		2021		2020	
Outstanding amounts (millions of Canadian \$, unless otherwise noted)	Maturity Dates	Outstanding at December 31	Interest Rate ¹	Outstanding at December 31	Interest Rate ¹
PORTLAND NATURAL GAS TRANSMISSION SYSTEM					
Unsecured Loan Facility					
U.S. (2021 – nil; 2020 – US\$25)	2023	_	_	32	1.3%
Senior Unsecured Notes					
U.S. (2021 – US\$250; 2020 – US\$125)	2030 to 2031	316	2.8%	159	2.8%
		316		191	
GREAT LAKES GAS TRANSMISSION LIMITED PARTNERS	HIP				
Senior Unsecured Notes					
U.S. (2021 – US\$167; 2020 – US\$198)	2028 to 2030	211	7.6%	253	7.6%
TUSCARORA GAS TRANSMISSION COMPANY					
Unsecured Term Loan					
U.S. (2021 – US\$36; 2020 – US\$23)	2024	46	1.3%	29	2.2%
NORTH BAJA PIPELINE, LLC					
Unsecured Term Loan					
U.S. (2021 – nil; 2020 – US\$50)		_	_	64	1.2%
		38,756		36,956	
Current portion of long-term debt		(1,320)		(1,972)	
Unamortized debt discount and issue costs		(243)		(238)	
Fair value adjustments ³		148		167	
		37,341		34,913	

Interest rates are the effective interest rates except for those pertaining to long-term debt issued for the Company's Canadian regulated natural gas operations, in which case the weighted average interest rate is presented as approved by the regulators. The effective interest rate is calculated by discounting the expected future interest payments, adjusted for loan fees, premiums and discounts. Weighted average and effective interest rates are stated as at the respective outstanding dates.

Principal Repayments

At December 31, 2021, principal repayments for the next five years on the Company's long-term debt are approximately as follows:

(millions of Canadian \$)	2022	2023	2024	2025	2026
Principal repayments on long-term debt	1,320	1,823	2,657	2,698	1,778

Certain subsidiaries of Columbia have guaranteed the principal payments of Columbia's senior unsecured notes. Each guarantor of Columbia's obligations is required to comply with covenants under the debt indenture and in the event of default, the guarantors would be obligated to pay the principal and related interest.

Related to the acquisition of Columbia.

Long-Term Debt Issued

The Company issued long-term debt over the three years ended December 31, 2021 as follows:

(millions of Canadian \$, unless of	therwise noted)				
Company	Issue Date	Туре	Maturity Date	Amount	Interest Rate
TRANSCANADA PIPELINES LIN	1ITED				
	October 2021	Senior Unsecured Notes	October 2024	US 1,250	1.00%
	October 2021	Senior Unsecured Notes	October 2031	US 1,000	2.50%
	June 2021	Medium Term Notes	June 2024	750	Floating
	June 2021	Medium Term Notes	June 2031	500	2.97%
	June 2021	Medium Term Notes	September 2047	250	4.33%
	April 2020	Senior Unsecured Notes	April 2030	US 1,250	4.10%
	April 2020	Medium Term Notes	April 2027	2,000	3.80%
	September 2019	Medium Term Notes	September 2029	700	3.00%
	September 2019	Medium Term Notes	July 2048	300	4.18%
	April 2019	Medium Term Notes	October 2049	1,000	4.34%
PORTLAND NATURAL GAS TRA	ANSMISSION SYSTEM				
	October 2021	Senior Unsecured Notes	October 2031	US 125	2.68%
	October 2020	Senior Unsecured Notes	October 2030	US 125	2.84%
TUSCARORA GAS TRANSMISS	ION COMPANY				
	August 2021	Unsecured Term Loan	August 2024	US 13	Floating
KEYSTONE XL SUBSIDIARIES ³					
	Various	Project-Level Credit Facility	June 2021	US 849	Floating
COLUMBIA PIPELINE GROUP, I	NC. ⁴				
	January 2021	Unsecured Term Loan	June 2022	US 4,040	Floating
GAS TRANSMISSION NORTHW	/EST LLC				
	June 2020	Senior Unsecured Notes	June 2030	US 175	3.12%
COASTAL GASLINK PIPELINE L	IMITED PARTNERSHIP ⁵				
	April 2020	Senior Secured Credit Facilities	April 2027	1,603	Floating
NORTHERN COURIER PIPELINE	LIMITED PARTNERSHIP ⁶				
	July 2019	Senior Secured Notes	June 2042	1,000	3.365%

Reflects coupon rate on re-opening of a pre-existing Medium Term Notes (MTN) issue. The MTNs were issued at a premium to par, resulting in a re-issuance yield of 4.186 per cent.

Reflects coupon rate on re-opening of a pre-existing MTN issue. The MTNs were issued at a premium to par, resulting in a re-issuance yield of 3.991 per cent.

On January 4, 2021, the Company established a US\$4.1 billion project-level credit facility to support the construction of the Keystone XL pipeline, which was fully guaranteed by the Government of Alberta and non-recourse to TC Energy. The availability of this credit facility was subsequently reduced to US\$1.6 billion and all amounts outstanding were fully repaid by the Government of Alberta in June 2021. Refer to Note 6, Keystone XL, for additional information.

In December 2020, Columbia entered into a US\$4.2 billion Unsecured Term Loan agreement. In January 2021, US\$4.0 billion was drawn on the Unsecured Term Loan and the total availability under the loan agreement was reduced accordingly. The loan was fully repaid and retired in December 2021.

In April 2020, Coastal GasLink LP entered into secured long-term project financing credit facilities. In May 2020, TC Energy completed the sale of a 65 per cent equity interest in Coastal GasLink LP and subsequently accounts for its remaining 35 per cent interest using the equity method. Immediately preceding the equity sale, Coastal GasLink LP made an initial draw of \$1.6 billion on the credit facilities, of which approximately \$1.5 billion was paid to TC Energy. Refer to Note 28, Acquisitions and dispositions, for additional information.

In July 2019, subsequent to the Senior Secured Notes issuance, TC Energy completed the sale of an 85 per cent equity interest in Northern Courier and subsequently accounted for its remaining interest using the equity method. On November 30, 2021, the Company sold its remaining 15 per cent equity interest in Northern Courier. Refer to Note 28, Acquisitions and dispositions, for additional information.

Long-Term Debt Retired/Repaid

The Company retired/repaid long-term debt over the three years ended December 31, 2021 as follows:

(millions of Canadian \$, unless otherwise noted	d) Retirement/			
Company	Repayment Date	Туре	Amount	Interest Rate
TRANSCANADA PIPELINES LIMITED				
	November 2021	Medium Term Notes	500	3.65%
	January 2021	Debentures	US 400	9.875%
	November 2020	Debentures	250	11.80%
	October 2020	Senior Unsecured Notes	US 1,000	3.80%
	March 2020 ¹	Senior Unsecured Notes	US 750	4.60%
	November 2019	Senior Unsecured Notes	US 700	2.125%
	November 2019	Senior Unsecured Notes	US 550	Floating
	May 2019	Medium Term Notes	13	9.35%
	March 2019	Debentures	100	10.50%
	January 2019	Senior Unsecured Notes	US 750	7.125%
	January 2019	Senior Unsecured Notes	US 400	3.125%
COLUMBIA PIPELINE GROUP, INC.				
	December 2021	Unsecured Term Loan ²	US 4,040	Floating
	June 2020	Senior Unsecured Notes	US 750	3.30%
NORTH BAJA PIPELINE, LLC				
	December 2021	Unsecured Term Loan	US 50	Floating
TC PIPELINES, LP				
	November 2021	Unsecured Term Loan	US 450	Floating
	March 2021	Senior Unsecured Notes	US 350	4.65%
	June 2019	Unsecured Term Loan	US 50	Floating
ANR PIPELINE COMPANY				
	November 2021	Senior Unsecured Notes	US 300	9.625%
GREAT LAKES GAS TRANSMISSION LIMITEI	D PARTNERSHIP			
	November 2021	Senior Unsecured Notes	US 10	9.09%
PORTLAND NATURAL GAS TRANSMISSION	SYSTEM			
	October 2021	Unsecured Loan Facility	US 93	Floating
	October 2020	Unsecured Loan Facility	US 99	Floating
KEYSTONE XL SUBSIDIARIES ³				
	June 2021	Project-Level Credit Facility	US 849	Floating
GAS TRANSMISSION NORTHWEST LLC				
	June 2020	Senior Unsecured Notes	US 100	5.29%
	May 2019	Unsecured Term Loan	US 35	Floating

Related unamortized debt issue costs of \$8 million were included in Interest expense in the Consolidated statement of income for the year ended December 31, 2020.

In December 2020, Columbia entered into a US\$4.2 billion Unsecured Term Loan agreement. In January 2021, US\$4.0 billion was drawn on the Unsecured Term Loan and the total availability under the loan agreement was reduced accordingly. The loan was fully repaid and retired in December 2021. Related unamortized debt issue costs of \$5 million were included in Interest expense in the Consolidated statement of income for the year ended December 31, 2021.

In June 2021, in accordance with the terms of the guarantee, the Government of Alberta repaid the US\$849 million outstanding balance under the Keystone XL project-level credit facility bearing interest at a floating rate, subsequent to which it was terminated, resulting in no cash impact to TC Energy. Refer to Note 6, Keystone XL, for additional information.

On March 4, 2021, the Company's subsidiary, TC PipeLines, LP, terminated its US\$500 million Unsecured Loan Facility bearing interest at a floating rate on which no amount was outstanding.

Interest Expense

year ended December 31			
(millions of Canadian \$)	2021	2020	2019
Interest on long-term debt	1,841	1,963	1,931
Interest on junior subordinated notes	453	470	427
Interest on short-term debt	10	46	106
Capitalized interest	(22)	(294)	(186)
Amortization and other financial charges ¹	78	43	55
	2,360	2,228	2,333

Amortization and other financial charges includes amortization of transaction costs and debt discounts calculated using the effective interest method and losses on derivatives used to manage the Company's exposure to changes in interest rates.

The Company made interest payments of \$2,299 million in 2021 (2020 - \$2,203 million; 2019 - \$2,295 million) on long-term debt, junior subordinated notes and short-term debt, net of interest capitalized.

20. JUNIOR SUBORDINATED NOTES

		202	2021		0
Outstanding loan amount (millions of Canadian \$, unless otherwise noted)	Maturity Date	Outstanding at December 31	Effective Interest Rate ¹	Outstanding at December 31	Effective Interest Rate ¹
TRANSCANADA PIPELINES LIMITED					
US\$1,000 notes issued 2007 at 6.35% ²	2067	1,265	4.0%	1,275	4.1%
US\$750 notes issued 2015 at 5.875% ^{3,4}	2075	949	5.0%	957	5.0%
US\$1,200 notes issued 2016 at 6.125% ^{3,4}	2076	1,519	5.8%	1,530	5.8%
US\$1,500 notes issued 2017 at 5.55% ^{3,4}	2077	1,899	4.7%	1,913	4.7%
\$1,500 notes issued 2017 at 4.90% ^{3,4}	2077	1,500	4.5%	1,500	4.5%
US\$1,100 notes issued 2019 at 5.75% ^{3,4}	2079	1,392	5.4%	1,403	5.4%
\$500 notes issued 2021 at 4.45% ^{3,4}	2081	500	4.0%	_	_
		9,024		8,578	
Unamortized debt discount and issue costs		(85)		(80)	
		8,939		8,498	

The effective interest rate is calculated by discounting the expected future interest payments using the coupon rate and any estimated future rate resets, adjusted for issue costs and discounts.

The Junior subordinated notes are subordinated in right of payment to existing and future senior indebtedness or other obligations of TCPL.

Junior subordinated notes of US\$1 billion were issued in 2007 at a fixed rate of 6.35 per cent and converted in 2017 to a floating interest rate that is reset quarterly to the three-month LIBOR plus 2.21 per cent.

The Junior subordinated notes were issued to TransCanada Trust, a financing trust subsidiary wholly owned by TCPL. While the obligations of TransCanada Trust are fully and unconditionally guaranteed by TCPL on a subordinated basis, the Trust is not consolidated in TC Energy's financial statements since TCPL does not have a variable interest in the Trust and the only substantive assets of the Trust are junior subordinated notes of TCPL.

The coupon rate is initially a fixed interest rate for the first 10 years and converts to a floating rate thereafter.

In March 2021, TransCanada Trust (the Trust) issued \$500 million of Trust Notes - Series 2021-A to investors with a fixed interest rate of 4.20 per cent per annum for the first 10 years and resetting on the 10th anniversary and every five years thereafter. All of the proceeds of the issuance by the Trust were loaned to TCPL for \$500 million of junior subordinated notes of TCPL at an initial fixed rate of 4.45 per cent per annum, including a 0.25 per cent administration charge. The rate on the junior subordinated notes of TCPL will reset every five years commencing March 2031 until March 2051 to the then Five-Year Government of Canada Yield, as defined in the document governing the subordinated notes, plus 3.316 per cent per annum; from March 2051 until March 2081, the interest rate will reset to the then Five-Year Government of Canada Yield plus 4.066 per cent per annum. The junior subordinated notes are callable at TCPL's option at any time from December 4, 2030 to March 4, 2031 and on each interest payment and reset date thereafter at 100 per cent of the principal amount plus accrued and unpaid interest to the date of redemption.

In September 2019, the Trust issued US\$1.1 billion of Trust Notes – Series 2019-A to investors with a fixed interest rate of 5.50 per cent per annum for the first 10 years converting to a floating rate thereafter. All of the proceeds of the issuance by the Trust were loaned to TCPL for US\$1.1 billion of junior subordinated notes of TCPL at an initial fixed rate of 5.75 per cent, including a 0.25 per cent administration charge. The rate will reset commencing September 2029 until September 2049 to the then three-month LIBOR plus 4.404 per cent per annum; from September 2049 until September 2079, the interest rate will reset to the then three-month LIBOR plus 5.154 per cent per annum. Refer to Note 3, Accounting changes, for additional information regarding the expected impact to the Company with certain rate settings of LIBOR which ceased to be published at the end of 2021 with full cessation by mid-2023. The junior subordinated notes are callable at TCPL's option at any time on or after September 15, 2029 at 100 per cent of the principal amount plus accrued and unpaid interest to the date of redemption.

Pursuant to the terms of the notes issued between the Trust and TCPL (the Trust Notes) and related agreements, in certain circumstances (1) TCPL may issue deferral preferred shares to holders of the Trust Notes in lieu of interest; and (2) TC Energy and TCPL would be prohibited from declaring or paying dividends on or redeeming their outstanding preferred shares (or, if none are outstanding, their respective common shares) until all deferral preferred shares are redeemed by TCPL. The Trust Notes may also be automatically exchanged for preferred shares of TCPL upon certain kinds of bankruptcy and insolvency events. All of these preferred shares would rank equally with any other outstanding first preferred shares of TCPL.

21. NON-CONTROLLING INTERESTS

TC PipeLines, LP

Acquisition

In December 2020, the Company entered into a definitive agreement and plan of merger to acquire all the outstanding common units of TC PipeLines, LP not beneficially owned by TC Energy or its affiliates in exchange for TC Energy common shares. Upon close of the transaction on March 3, 2021, TC PipeLines, LP common unitholders received 0.70 TC Energy common shares for each issued and outstanding publicly-held TC PipeLines, LP common unit representing, in aggregate, 37,955,093 TC Energy common shares. As a result, TC PipeLines, LP became an indirect, wholly-owned subsidiary of TC Energy.

As the Company controlled TC PipeLines, LP, this acquisition was accounted for as an equity transaction with the following impact reflected on the Consolidated balance sheet:

(millions of Canadian \$)	March 3, 2021
Common shares	2,063
Additional paid-in-capital	(398)
Accumulated other comprehensive loss	353
Non-controlling interests	(1,563)
Deferred income tax liabilities	(443)
Other	(12)

Non-controlling interests

Prior to the March 3, 2021 acquisition described above, the non-controlling interests in TC PipeLines, LP were 74.5 per cent (2020 and 2019 - 74.5 per cent). Subsequent to this acquisition, the remaining non-controlling interest on the Consolidated balance sheet is related to the Company's 61.7 per cent investment in Portland Natural Gas Transmission System (PNGTS), which is held by TC PipeLines, LP.

The Company's Net income attributable to non-controlling interests included in the Consolidated statement of income were as follows:

year ended December 31			
(millions of Canadian \$)	2021	2020	2019
Non-controlling interest in TC PipeLines, LP	60	284	270
Non-controlling interest in PNGTS	30	23	23
Redeemable non-controlling interest (Note 6)	1	(10)	<u> </u>
	91	297	293

22. COMMON SHARES

	Number of Shares	Amount
	(thousands)	(millions of Canadian \$)
Outstanding at January 1, 2019	918,097	23,174
Dividend reinvestment and share purchase plan	15,165	931
Exercise of options	5,138	282
Outstanding at December 31, 2019	938,400	24,387
Exercise of options	1,664	101
Outstanding at December 31, 2020	940,064	24,488
Acquisition of TC PipeLines, LP, net of transaction costs (Note 21)	37,955	2,063
Exercise of options	2,797	165
Outstanding at December 31, 2021	980,816	26,716

Common Shares Issued and Outstanding

The Company is authorized to issue an unlimited number of common shares without par value.

Acquisition of TC PipeLines, LP

On March 3, 2021, TC Energy issued 37,955,093 common shares to acquire all the outstanding publicly-held common units of TC PipeLines, LP. Refer to Note 21, Non-controlling interests, for additional information.

Dividend Reinvestment and Share Purchase Plan

Under the Company's Dividend Reinvestment and Share Purchase Plan (DRP), eligible holders of common and preferred shares of TC Energy can reinvest their dividends and make optional cash payments to obtain additional TC Energy common shares. Commencing with the dividends declared October 31, 2019, common shares purchased with reinvested cash dividends under the Company's DRP are acquired on the open market at 100 per cent of the weighted average purchase price. From January 1, 2019 to October 31, 2019, common shares under the DRP were issued from treasury at a two per cent discount to market prices over a specified period.

TC Energy Corporation At-the-Market Equity Issuance Program

In December 2020, the Company established an At-the-Market Program (ATM Program) that allows, from time to time, for the issuance of common shares from treasury at the prevailing market price when sold through the Toronto Stock Exchange, the New York Stock Exchange or any other existing trading market for TC Energy common shares in Canada or the United States. This ATM program is effective for a 25-month period and will be utilized as appropriate to assist in managing the Company's capital structure. Under this program the Company could issue up to \$1.0 billion in common shares or the U.S. dollar equivalent. No common shares were issued under this program in 2021 or 2020.

Basic and Diluted Net Income per Common Share

Net income per common share is calculated by dividing Net income attributable to common shares by the weighted average number of common shares outstanding. The weighted average number of shares for the diluted earnings per share calculation includes options exercisable under TC Energy's Stock Option Plan and shares issuable under the DRP up to October 31, 2019 when participation was satisfied with common shares issued from treasury.

Weighted Average Common Shares Outstanding			
(millions)	2021	2020	2019
Basic	973	940	929
Diluted	974	940	931

Stock Options

	Number of Options (thousands)	Weighted Average Exercise Prices	Weighted Average Remaining Contractual Life (years)
Options outstanding at January 1, 2021	8,996	\$59.55	
Options granted	1,679	\$56.86	
Options exercised	(2,797)	\$53.10	
Options forfeited/expired	(109)	\$59.96	
Options Outstanding at December 31, 2021	7,769	\$61.29	4.2
Options Exercisable at December 31, 2021	4,410	\$60.13	3.2

At December 31, 2021, an additional 4,826,189 common shares were reserved for future issuance from treasury under TC Energy's Stock Option Plan. The contractual life of options granted is seven years. Options may be exercised at a price determined at the time the option is awarded and vest equally on the anniversary date in each of the three years following the award. Forfeiture of stock options results from their expiration and, if not previously vested, upon resignation or termination of the option holder's employment.

The Company used a binomial model for determining the fair value of options granted applying the following weighted average assumptions:

year ended December 31	2021	2020	2019
Weighted average fair value	\$7.39	\$7.73	\$6.37
Expected life (years) ¹	5.4	5.7	5.7
Interest rate	0.5%	1.5%	1.9%
Volatility ²	25%	17%	19%
Dividend yield	6.0%	4.2%	5.0%

Expected life is based on historical exercise activity.

The amount expensed for stock options, with a corresponding increase in Additional paid-in capital was \$12 million in 2021 (2020 - \$12 million; 2019 - \$13 million). At December 31, 2021, unrecognized compensation costs related to non-vested stock options were \$13 million. The cost is expected to be fully recognized over a weighted average period of 1.8 years.

Volatility is derived based on the average of both the historical and implied volatility of the Company's common shares.

The following table summarizes additional stock option information:

year ended December 31			
(millions of Canadian \$, unless otherwise noted)	2021	2020	2019
Total intrinsic value of options exercised	28	31	75
Total fair value of options that have vested	110	101	143
Total options vested	1.9 million	2.0 million	2.1 million

As at December 31, 2021, the aggregate intrinsic value of the total options exercisable was \$7 million and the aggregate intrinsic value of options outstanding was \$12 million.

Shareholder Rights Plan

TC Energy's Shareholder Rights Plan is designed to provide the Board of Directors (Board) with sufficient time to explore and develop alternatives for maximizing shareholder value in the event of a takeover offer for the Company and to encourage the fair treatment of shareholders in connection with any such offer. Attached to each common share is one right that, under certain circumstances, entitles certain holders to purchase an additional common share of the Company.

23. PREFERRED SHARES

at December 31,	Number of Shares	Current	Annual Dividend	Redemption Price Per	Redemption and Conversion Option	Right to Convert		rying Val cember 3	
2021	Outstanding (thousands)	Yield	Per Share ^{1,2}	Share	Date	Into	2021 (million:	2020 s of Cana	2019 dian \$)
Cumulative Fir	st Preferred Shar	res							
Series 1	14,577	3.479%	\$0.86975	\$25.00	December 31, 2024	Series 2	360	360	360
Series 2	7,423	Floating ⁴	Floating	\$25.00	December 31, 2024	Series 1	179	179	179
Series 3	9,997	1.694%	\$0.4235	\$25.00	June 30, 2025	Series 4	246	246	209
Series 4	4,003	Floating ⁴	Floating	\$25.00	June 30, 2025	Series 3	97	97	134
Series 5	12,071	1.949% ⁵	\$0.48725	\$25.00	January 30, 2026	Series 6	294	310	310
Series 6	1,929	Floating ⁴	Floating	\$25.00	January 30, 2026	Series 5	48	32	32
Series 7	24,000	3.903%	\$0.97575	\$25.00	April 30, 2024	Series 8	589	589	589
Series 9	18,000	3.762%	\$0.9405	\$25.00	October 30, 2024	Series 10	442	442	442
Series 11	10,000	3.351%	\$0.83775	\$25.00	November 28, 2025	Series 12	244	244	244
Series 13	_	_	_	_	_	_	_	493	493
Series 15	40,000	4.90%	\$1.225	\$25.00	May 31, 2022	Series 16	988	988	988
							3,487	3,980	3,980

- Each of the even-numbered series of preferred shares, if in existence, will be entitled to receive floating rate cumulative quarterly preferential dividends per share at an annualized rate equal to the 90-day Government of Canada Treasury bill rate (T-bill rate) plus 1.92 per cent (Series 2), 1.28 per cent (Series 4), 1.54 per cent (Series 6), 2.38 per cent (Series 8), 2.35 per cent (Series 10), 2.96 per cent (Series 12), or 3.85 per cent (Series 16). These rates reset quarterly with the then current T-Bill rate.
- The odd-numbered series of preferred shares, if in existence, will be entitled to receive fixed rate cumulative quarterly preferential dividends, which will reset on the redemption and conversion option date and every fifth year thereafter, at an annualized rate equal to the then five-year Government of Canada bond yield plus 1.92 per cent (Series 1), 1.28 per cent (Series 3), 1.54 per cent (Series 5), 2.38 per cent (Series 7), 2.35 per cent (Series 9), 2.96 per cent (Series 11), or 3.85 per cent, subject to a minimum of 4.90 per cent (Series 15).
- Net of underwriting commissions and deferred income taxes.
- The floating quarterly dividend rate for the Series 2 preferred shares is 2.049 per cent for the period starting December 31, 2021 to, but excluding, March 31, 2022. The floating quarterly dividend rate for the Series 4 preferred shares is 1.409 per cent for the period starting December 31, 2021 to, but excluding, March 31, 2022. The floating quarterly dividend rate for the Series 6 preferred shares is 1.686 per cent for the period starting October 30, 2021 to, but excluding, January 30, 2022. These rates will reset each quarter going forward.
- The fixed rate dividend for Series 5 preferred shares decreased from 2.263 per cent to 1.949 per cent on January 30, 2021 and is due to reset on every fifth anniversary thereafter.

The holders of preferred shares are entitled to receive a fixed cumulative quarterly preferential dividend as and when declared by the Board with the exception of Series 2, Series 4 and Series 6 preferred shares. The holders of Series 2, Series 4 and Series 6 preferred shares are entitled to receive quarterly floating rate cumulative preferential dividends as and when declared by the Board. The holders will have the right, subject to certain conditions, to convert their first preferred shares of a specified series into first preferred shares of another specified series on the conversion option date and every fifth anniversary thereafter as indicated in the table above.

TC Energy may, at its option, redeem all or a portion of the outstanding preferred shares for the redemption price per share, plus all accrued and unpaid dividends on the applicable redemption option date and on every fifth anniversary thereafter. In addition, Series 2, Series 4 and Series 6 preferred shares are redeemable by TC Energy at any time other than on a designated date for \$25.50 per share plus all accrued and unpaid dividends on such redemption date.

On May 31, 2021, TC Energy redeemed all 20,000,000 issued and outstanding Series 13 preferred shares at a redemption price of \$25.00 per share and paid the final quarterly dividend of \$0.34375 per Series 13 preferred share for the period up to but excluding May 31, 2021, as previously declared on May 6, 2021. The Company used the proceeds from the March 2021 issuance of \$500 million of Junior Subordinated Notes through the Trust to finance this preferred share redemption.

On February 1, 2021, 818,876 Series 5 preferred shares were converted, on a one-for-one basis, into Series 6 preferred shares and 175,208 Series 6 preferred shares were converted, on a one-for-one basis, into Series 5 preferred shares.

On June 30, 2020, 401,590 Series 3 preferred shares were converted, on a one-for-one basis, into Series 4 preferred shares and 1,865,362 Series 4 preferred shares were converted, on a one-for-one basis, into Series 3 preferred shares.

On December 31, 2019, 173,954 Series 1 preferred shares were converted, on a one-for-one basis, into Series 2 preferred shares and 5,252,715 Series 2 preferred shares were converted, on a one-for-one basis, into Series 1 preferred shares.

24. OTHER COMPREHENSIVE INCOME/(LOSS) AND ACCUMULATED OTHER COMPREHENSIVE LOSS

Components of other comprehensive income/(loss), including the portion attributable to non-controlling interests and related tax effects, were as follows:

year ended December 31, 2021		Income Tax	
(millions of Canadian \$)	Before Tax Amount	Recovery/ (Expense)	Net of Tax Amount
Foreign currency translation gains and losses on net investment in foreign operations	(100)	(8)	(108)
Change in fair value of net investment hedges	(3)	1	(2)
Change in fair value of cash flow hedges	(13)	3	(10)
Reclassification to net income of gains and losses on cash flow hedges	68	(13)	55
Unrealized actuarial gains and losses on pension and other post-retirement benefit plans	208	(50)	158
Reclassification to net income of actuarial gains and losses on pension and other post-retirement benefit plans	20	(6)	14
Other comprehensive income on equity investments	714	(179)	535
Other Comprehensive Income	894	(252)	642

year ended December 31, 2020	Before Tax	Income Tax Recovery/	Net of Tax
(millions of Canadian \$)	Amount	(Expense)	Amount
Foreign currency translation gains and losses on net investment in foreign operations	(647)	38	(609)
Change in fair value of net investment hedges	48	(12)	36
Change in fair value of cash flow hedges	(771)	188	(583)
Reclassification to net income of gains and losses on cash flow hedges	649	(160)	489
Unrealized actuarial gains and losses on pension and other post-retirement benefit plans	15	(3)	12
Reclassification to net income of actuarial gains and losses on pension and other post-retirement benefit plans	23	(6)	17
Other comprehensive loss on equity investments	(373)	93	(280)
Other Comprehensive Loss	(1,056)	138	(918)

year ended December 31, 2019	Before Tax	Income Tax Recovery/	Net of Tax
(millions of Canadian \$)	Amount	(Expense)	Amount
Foreign currency translation gains and losses on net investment in foreign operations	(914)	(30)	(944)
Reclassification of foreign currency translation gains on disposal of foreign operations	(13)	_	(13)
Change in fair value of net investment hedges	46	(11)	35
Change in fair value of cash flow hedges	(78)	16	(62)
Reclassification to net income of gains and losses on cash flow hedges	19	(5)	14
Unrealized actuarial gains and losses on pension and other post-retirement benefit plans	(15)	5	(10)
Reclassification to net income of actuarial gains and losses on pension and other post-retirement benefit plans	14	(4)	10
Other comprehensive loss on equity investments	(114)	32	(82)
Other Comprehensive Loss	(1,055)	3	(1,052)

The changes in AOCI by component were as follows:

(millions of Canadian \$)	Currency Translation Adjustments	Cash Flow Hedges	Pension and Other Post- Retirement Benefit Plan Adjustments	Equity Investments	Total ¹
AOCI balance at January 1, 2019	107	(23)	(314)	(376)	(606)
Other comprehensive loss before reclassifications ²	(824)	(49)	(10)	(86)	(969)
Amounts reclassified from AOCI	(13)	14	10	5	16
Net current period other comprehensive loss	(837)	(35)	_	(81)	(953)
AOCI balance at December 31, 2019	(730)	(58)	(314)	(457)	(1,559)
Other comprehensive (loss)/income before reclassifications ²	(543)	(567)	12	(292)	(1,390)
Amounts reclassified from AOCI	_	482	17	11	510
Net current period other comprehensive (loss)/income	(543)	(85)	29	(281)	(880)
AOCI balance at December 31, 2020	(1,273)	(143)	(285)	(738)	(2,439)
Other comprehensive (loss)/income before reclassifications ²	(98)	(11)	158	506	555
Amounts reclassified from AOCI ³	_	55	14	28	97
Net current period other comprehensive (loss)/income	(98)	44	172	534	652
Acquisition of TC PipeLines, LP ⁴	362	(13)	_	4	353
AOCI balance at December 31, 2021	(1,009)	(112)	(113)	(200)	(1,434)

All amounts are net of tax. Amounts in parentheses indicate losses recorded to OCI. 1

Other comprehensive (loss) /income before reclassifications on currency translation adjustments, cash flow hedges and equity investments are net of non-controlling interest losses of \$12 million (2020 – losses of \$30 million; 2019 – losses of \$85 million), gains of \$1 million (2020 – losses of \$16 million; 2019 – losses of \$1 million), and gains of \$1 million (2020 – gains of \$1 million; 2019 – losses of \$1 million), respectively.

Losses related to cash flow hedges reported in AOCI and expected to be reclassified to net income in the next 12 months are estimated to be \$62 million (\$47 million, net of tax) at December 31, 2021. These estimates assume constant commodity prices, interest rates and foreign exchange rates over time, however, the amounts reclassified will vary based on the actual value of these factors at the date of settlement.

Represents the AOCI attributable to non-controlling interests of TC PipeLines, LP which was reclassified to AOCI on the Consolidated balance sheet upon completion of the acquisition of all the outstanding publicly-held common units of TC PipeLines, LP on March 3, 2021. Refer to Note 21, Non-controlling interests, for additional information.

Details about reclassifications out of AOCI into the Consolidated statement of income were as follows:

year ended December 31	Amounts Reclassified From AOCI		ed	
(millions of Canadian \$)	2021	2020	2019	Affected Line Item in the Consolidated Statement of Income ¹
Cash flow hedges				
Commodities	(22)	(1)	(7)	Revenues (Power and Storage)
Interest rate	(46)	(28)	(12)	Interest expense
Interest rate	_	(613)	_	Net gain/(loss) on assets sold/held for sale ²
	(68)	(642)	(19)	Total before tax
	13	160	5	Income tax expense ²
	(55)	(482)	(14)	Net of tax ³
Pension and other post-retirement benefit plan adjustments				
Amortization of actuarial losses	(22)	(23)	(14)	Plant operating costs and other ⁴
Settlement gain	2	_	_	Plant operating costs and other ⁴
	(20)	(23)	(14)	Total before tax
	6	6	4	Income tax expense
	(14)	(17)	(10)	Net of tax
Equity investments				
Equity income	(37)	(15)	(8)	Income from equity investments
	9	4	3	Income tax expense
	(28)	(11)	(5)	Net of tax ³
Currency translation adjustments				
Foreign currency translation gains on disposal of foreign operations	_	_	13	Net gain/(loss) on assets sold/held for sale
				Income tax expense
	_	_	13	Net of tax

Amounts in parentheses indicate expenses to the Consolidated statement of income.

Represents a loss of \$613 million (\$459 million, net of tax) related to a contractually required derivative instrument used to hedge the interest rate risk associated with project-level financing of the Coastal GasLink construction. The derivative instrument was derecognized as part of the sale of a 65 per cent equity interest in Coastal GasLink LP. Refer to Note 28, Acquisitions and dispositions, for additional information.

Amounts reclassified from AOCI on cash flow hedges are net of non-controlling interest of nil (2020 - losses of \$7 million; 2019 - nil).

These AOCI components are included in the computation of net benefit cost. Refer to Note 25, Employee post-retirement benefits, for additional information.

25. EMPLOYEE POST-RETIREMENT BENEFITS

The Company sponsors DB Plans for certain of its employees. Pension benefits provided under the DB Plans are generally based on years of service and highest average earnings over three consecutive years of employment. Effective January 1, 2019, there were certain amendments made to the Canadian DB Plan for new members whereby, subsequent to that date, benefits provided for these new members are based on years of service and highest average earnings over five consecutive years of employment. Upon commencement of retirement, pension benefits in the Canadian DB Plan increase annually by a portion of the increase in the Consumer Price Index. The Company's U.S. DB Plan is closed to non-union new entrants and all non-union hires participate in the DC Plan. Net actuarial gains or losses are amortized out of AOCI over the EARSL of Plan participants, which is approximately ten years at December 31, 2021 (2020 and 2019 - nine years).

The Company also provides its employees with savings plans in Canada and Mexico, DC Plans consisting of a 401(k) Plan in the U.S. and post-employment benefits other than pensions, including termination benefits and life insurance and medical benefits beyond those provided by government-sponsored plans. Net actuarial gains or losses for the plans are amortized out of AOCI over the EARSL of employees, which was approximately 11 years at December 31, 2021 (2020 and 2019 - 11 years). In 2021, the Company expensed \$58 million (2020 - \$58 million; 2019 - \$61 million) for the savings and DC Plans.

Total cash contributions by the Company for employee post-retirement benefits were as follows:

year ended December 31			
(millions of Canadian \$)	2021	2020	2019
DB Plans	105	124	122
Other post-retirement benefit plans	8	9	22
Savings and DC Plans	58	58	61
	171	191	205

Current Canadian pension legislation allows for partial funding of solvency requirements over a number of years through letters of credit in lieu of cash contributions, up to certain limits. As such, in addition to the cash contributions noted above, the Company provided a \$20 million letter of credit to the Canadian DB Plan in 2021 (2020 - \$13 million; 2019 - \$12 million), resulting in a total of \$322 million provided to the Canadian DB Plan under letters of credit at December 31, 2021.

The most recent actuarial valuation of the pension plans for funding purposes was as at January 1, 2021 and the next required valuation will be as at January 1, 2022.

In mid-2021, the Company offered a one-time Voluntary Retirement Program (VRP) to eligible employees. Participants in the program retired by December 31, 2021 and received a transition payment along with existing retirement benefits. In 2021, the Company expensed \$81 million mainly related to VRP transition payments which were included in Plant operating costs and other. In addition, \$18 million was recorded in Revenues related to costs that are recoverable through regulatory and tolling structures on a flow-through basis.

As a result of employee participation in the VRP, a settlement and curtailment occurred for the U.S. DB Plan in December 2021. The impact of these amounts were determined using actuarial assumptions consistent with those employed at December 31, 2021. The settlement gain decreased the U.S. DB Plan's unrealized actuarial gain by \$2 million which was included in OCI, while the curtailment gain decreased the U.S. DB Plan's benefit obligation by \$5 million, both of which were recorded in net benefit cost in 2021.

Employee participation in the VRP also resulted in a curtailment in the U.S. other post-retirement benefits plan (OPEB) in December 2021. The curtailment loss decreased the Plan's unrealized actuarial gain by \$3 million which was included in OCI and increased the OPEB obligation by \$3 million, resulting in no adjustment to net benefit cost in 2021.

The Company's funded status at December 31 was comprised of the following:

at December 31	Pension Benefit Plan	15	Other Post-Retire Benefit Plan	
(millions of Canadian \$)	2021	2020	2021	2020
Change in Benefit Obligation ¹				
Benefit obligation – beginning of year	4,326	4,058	457	427
Service cost	171	155	6	6
Interest cost	119	133	12	14
Employee contributions	6	6	1	_
Benefits paid	(372)	(249)	(21)	(21)
Actuarial (gain)/loss	(208)	242	(35)	36
Curtailment	(5)	_	3	_
Foreign exchange rate changes	(10)	(19)	(4)	(5)
Benefit obligation – end of year	4,027	4,326	419	457
Change in Plan Assets				
Plan assets at fair value – beginning of year	4,038	3,693	441	406
Actual return on plan assets	376	485	5	56
Employer contributions ²	105	124	8	9
Employee contributions	6	6	1	_
Benefits paid	(372)	(249)	(21)	(21)
Foreign exchange rate changes	(8)	(21)	(3)	(9)
Plan assets at fair value – end of year	4,145	4,038	431	441
Funded Status – Plan Surplus/(Deficit)	118	(288)	12	(16)

The benefit obligation for the Company's pension benefit plans represents the projected benefit obligation. The benefit obligation for the Company's other post-retirement benefit plans represents the accumulated post-retirement benefit obligation.

The actuarial gain realized on the defined benefit plan obligation is primarily attributable to an increase in the weighted average discount rate from 2.70 per cent in 2020 to 3.05 per cent in 2021.

The actuarial gain realized on the other post-retirement benefit plan obligation is primarily due to the increase in the weighted average discount rate from 2.75 per cent in 2020 to 3.10 per cent in 2021.

The amounts recognized on the Company's Consolidated balance sheet for its DB Plans and other post-retirement benefits plans were as follows:

at December 31	Pension Benefit Plan	Pension Benefit Plans		
(millions of Canadian \$)	2021	2020	2021	2020
Other long-term assets (Note 14)	119	29	193	178
Accounts payable and other	_	_	(8)	(8)
Other long-term liabilities (Note 17)	(1)	(317)	(173)	(186)
	118	(288)	12	(16)

Excludes a \$20 million letter of credit provided to the Canadian DB Plan for funding purposes (2020 – \$13 million).

Included in the above benefit obligation and fair value of plan assets were the following amounts for plans that were not fully funded:

at December 31	Pension Benefit Pla	ns	Other Post-Retirement Benefit Plans		
(millions of Canadian \$)	2021	2020	2021	2020	
Projected benefit obligation ¹	(2,687)	(3,292)	(183)	(194)	
Plan assets at fair value	2,686	2,975	_		
Funded Status – Plan Deficit	(1)	(317)	(183)	(194)	

The projected benefit obligation for the pension benefit plans differs from the accumulated benefit obligation in that it includes an assumption with respect to future compensation levels.

The funded status based on the accumulated benefit obligation for all DB Plans was as follows:

at December 31		
(millions of Canadian \$)	2021	2020
Accumulated benefit obligation	(3,714)	(3,957)
Plan assets at fair value	4,145	4,038
Funded Status – Plan Surplus	431	81

The Company's DB Plans with respect to accumulated benefit obligations and the fair value of plan assets were fully funded as at December 31, 2021 and December 31, 2020.

The Company pension plans' weighted average asset allocations and target allocations by asset category were as follows:

at December 31	Percentage o Plan Assets	Percentage of Plan Assets		
	2021	2020	2021	
Debt securities	34%	33%	25% to 45%	
Equity securities	53%	57%	35% to 65%	
Alternatives	13%	10%	10% to 20%	
	100%	100%		

Debt and equity securities include the Company's debt and common shares as follows:

at December 31			Percentage of Plan Assets		
(millions of Canadian \$)	2021	2020	2021	2020	
Debt securities	7	13	0.2%	0.3%	
Equity securities	5	5	0.1%	0.1%	

Pension plan assets are managed on a going concern basis, subject to legislative restrictions, and are diversified across asset classes to maximize returns at an acceptable level of risk. Asset mix strategies consider plan demographics and may include traditional equity and debt securities as well as alternative assets such as infrastructure, private equity, real estate and derivatives to diversify risk. Derivatives are not used for speculative purposes and the use of leveraged derivatives is prohibited.

All investments are measured at fair value using market prices. Where the fair value cannot be readily determined by reference to generally available price quotations, the fair value is determined by considering the discounted cash flows on a risk-adjusted basis and by comparison to similar assets which are publicly traded. In Level I, the fair value of assets is determined by reference to quoted prices in active markets for identical assets that the Company has the ability to access at the measurement date. In Level II, the fair value of assets is determined using valuation techniques such as option pricing models and extrapolation using significant inputs which are observable directly or indirectly. In Level III, the fair value of assets is determined using a market approach based on inputs that are unobservable and significant to the overall fair value measurement.

The following table presents plan assets for DB Plans and other post-retirement benefits measured at fair value, which have been categorized into the three categories based on a fair value hierarchy. For additional information on the fair value hierarchy, refer to Note 26, Risk management and financial instruments.

at December 31	Quoted P Active M (Leve	larkets	Significar Observabl (Leve	le Inputs	Signifi Unobsei Inpu (Level	vable ts	Tota	al	Percenta Total Po	
(millions of Canadian \$)	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
Asset Category										
Cash and Cash Equivalents	68	87	2	_	_	_	70	87	2	2
Equity Securities:										
Canadian	269	276	148	177	_	_	417	453	9	10
U.S.	649	594	164	211	_	_	813	805	18	18
International	126	114	354	380	_	_	480	494	10	11
Global	111	116	313	368	_	_	424	484	9	11
Emerging	25	35	120	125	_	_	145	160	3	4
Fixed Income Securities:										
Canadian Bonds:										
Federal	_	_	226	207	_	_	226	207	5	5
Provincial	_	_	331	283	_	_	331	283	7	6
Municipal	_	_	16	13	_	_	16	13	_	_
Corporate	_	_	147	151	_	_	147	151	4	3
U.S. Bonds:										
Federal	433	444	15	14	_	_	448	458	10	10
Municipal	_	_	1	2	_	_	1	2	_	_
Corporate	67	72	143	143	_	_	210	215	5	5
International:										
Government	6	8	7	6	_	_	13	14	_	_
Corporate	_	_	73	48	_	_	73	48	2	1
Mortgage backed	42	47	5	4	_	_	47	51	1	1
Other Investments:										
Real estate	_	_	_	_	283	213	283	213	6	5
Infrastructure	_	_	_	_	281	203	281	203	6	5
Private equity funds	_	_	_	_	1	1	1	1	_	_
Derivatives	_	_	_	(8)	_	_	_	(8)	_	_
Funds held on deposit	150	145	_	_	_	_	150	145	3	3
	1,946	1,938	2,065	2,124	565	417	4,576	4,479	100	100

The following table presents the net change in the Level III fair value category:

(millions of Canadian \$, pre-tax)	
Balance at December 31, 2019	379
Purchases and sales	42
Realized and unrealized losses	(4)
Balance at December 31, 2020	417
Purchases and sales	100
Realized and unrealized gains	48
Balance at December 31, 2021	565

The Company's expected funding contributions in 2022 are approximately \$76 million for the DB Plans, approximately \$7 million for the other post-retirement benefit plans and approximately \$55 million for the savings plans and DC Plans. The Company expects to provide an additional estimated \$20 million letter of credit to the Canadian DB Plan for the funding of solvency requirements.

The following are estimated future benefit payments, which reflect expected future service:

(millions of Canadian \$)	Pension Benefits	Other Post-Retirement Benefits
2022	208	25
2023	211	25
2024	216	24
2025	220	24
2026	224	24
2027 to 2031	1,171	114

The rate used to discount pension and other post-retirement benefit plan obligations was developed based on a yield curve of primarily corporate AA bond yields at December 31, 2021. This yield curve is used to develop spot rates that vary based on the duration of the obligations. The estimated future cash flows for the pension and other post-retirement benefit obligations were matched to the corresponding rates on the spot rate curve to derive a weighted average discount rate.

The significant weighted average actuarial assumptions adopted in measuring the Company's benefit obligations were as follows:

at December 31		Pension Benefit Plans		Other Post-Retirement Benefit Plans	
	2021	2020	2021	2020	
Discount rate	3.05%	2.70%	3.10%	2.75%	
Rate of compensation increase	2.95%	2.60%	_	_	

The significant weighted average actuarial assumptions adopted in measuring the Company's net benefit plan costs were as follows:

year ended December 31	Pension Benefit Plans			Other Post-Retirement Benefit Plans		
	2021	2020	2019	2021	2020	2019
Discount rate	2.70%	3.20%	3.90%	2.80%	3.35%	4.10%
Expected long-term rate of return on plan assets	6.15%	6.40%	6.60%	3.00%	3.50%	4.30%
Rate of compensation increase	2.60%	3.00%	3.00%	_	_	_

The overall expected long-term rate of return on plan assets is based on historical and projected rates of return for the portfolio in aggregate and for each asset class in the portfolio. Assumed projected rates of return are selected after analyzing historical experience and estimating future levels and volatility of returns. Asset class benchmark returns, asset mix and anticipated benefit payments from plan assets are also considered in determining the overall expected rate of return. The discount rate is based on market interest rates of high-quality bonds that match the timing and benefits expected to be paid under each plan.

A 5.60 per cent weighted-average annual rate of increase in the per capita cost of covered health care benefits was assumed for 2022 measurement purposes. The rate was assumed to decrease gradually to 5.00 per cent by 2029 and remain at this level

The net benefit cost recognized for the Company's pension benefit plans and other post-retirement benefit plans was as follows:

year ended December 31		Pension Benefit Plans			Other Post-Retirement Benefit Plans			
(millions of Canadian \$)	2021	2020	2019	2021	2020	2019		
Service cost ¹	171	155	126	6	6	5		
Other components of net benefit cost ¹								
Interest cost	119	133	142	12	14	17		
Expected return on plan assets	(234)	(230)	(222)	(13)	(14)	(15)		
Amortization of actuarial loss	23	21	12	2	2	2		
Amortization of regulatory asset	27	25	14	2	2	2		
Curtailment gain	(5)	_	_	_	_	_		
Settlement gain – AOCI	(2)	_	_	_	_			
	(72)	(51)	(54)	3	4	6		
Net Benefit Cost Recognized	99	104	72	9	10	11		

Service cost and other components of net benefit cost are included in Plant operating costs and other in the Consolidated statement of income.

Pre-tax amounts recognized in AOCI were as follows:

at December 31	2021		202	20	2019		
(millions of Canadian \$)	Pension Benefits	Other Post- Retirement Benefits	Pension Benefits	Other Post- Retirement Benefits	Pension Benefits	Other Post- Retirement Benefits	
Net loss	147	5	358	22	398	20	

Pre-tax amounts recognized in OCI were as follows:

at December 31	202	2021 2020		20	2019		
(millions of Canadian \$)	Pension Benefits	Other Post- Retirement Benefits	Pension Benefits	Other Post- Retirement Benefits	Pension Benefits	Other Post- Retirement Benefits	
Amortization of net loss from AOCI to net income	(23)	(2)	(21)	(2)	(12)	(2)	
Curtailment	_	3	_	_	_	_	
Settlement	2	_	_	_	_	_	
Funded status adjustment	(190)	(18)	(18)	3	52	(37)	
	(211)	(17)	(39)	1	40	(39)	

26. RISK MANAGEMENT AND FINANCIAL INSTRUMENTS

Risk Management Overview

TC Energy has exposure to market risk and counterparty credit risk, and has strategies, policies and limits in place to manage the impact of these risks on its earnings, cash flows and, ultimately, shareholder value.

Risk management strategies, policies and limits are designed to ensure TC Energy's risks and related exposures are in line with the Company's business objectives and risk tolerance. Market risk and counterparty credit risk are managed within limits that are established by the Company's Board of Directors, implemented by senior management and monitored by the Company's risk management, internal audit and business segment groups. The Board of Directors' Audit Committee oversees how management monitors compliance with market risk and counterparty credit risk management policies and procedures and oversees management's review of the adequacy of the risk management framework.

Market Risk

The Company constructs and invests in energy infrastructure projects, purchases and sells commodities, issues short- and long-term debt, including amounts in foreign currencies, and invests in foreign operations. Certain of these activities expose the Company to market risk from changes in commodity prices, foreign exchange rates and interest rates, which may affect the Company's earnings, cash flows and the value of its financial assets and liabilities. The Company assesses contracts used to manage market risk to determine whether all, or a portion, meets the definition of a derivative.

Derivative contracts the Company uses to assist in managing exposure to market risk may include the following:

- · Forwards and futures contracts agreements to purchase or sell a specific financial instrument or commodity at a specified price and date in the future
- Swaps agreements between two parties to exchange streams of payments over time according to specified terms
- · Options agreements that convey the right, but not the obligation of the purchaser to buy or sell a specific amount of a financial instrument or commodity at a fixed price, either at a fixed date or at any time within a specified period.

Commodity price risk

The following strategies may be used to manage the Company's exposure to market risk resulting from commodity price risk management activities in the Company's non-regulated businesses:

- in the Company's natural gas marketing business, TC Energy enters into natural gas transportation and storage contracts as well as natural gas purchase and sale agreements. The Company manages exposure on these contracts using financial instruments and hedging activities to offset market price volatility
- in the Company's liquids marketing business, TC Energy enters into pipeline and storage terminal capacity contracts as well as crude oil purchase and sale agreements. The Company fixes a portion of the exposure on these contracts by entering into financial instruments to manage variable price fluctuations that arise from physical liquids transactions
- · in the Company's power businesses, TC Energy manages the exposure to fluctuating commodity prices through long-term contracts and hedging activities including selling and purchasing electricity and natural gas in forward markets
- in the Company's non-regulated natural gas storage business, TC Energy's exposure to seasonal natural gas price spreads is managed with a portfolio of third-party storage capacity contracts and through offsetting purchases and sales of natural gas in forward markets to lock in future positive margins.

Lower natural gas, crude oil and electricity prices could lead to reduced investment in the development, expansion and production of these commodities. A reduction in the supply of these commodities could negatively impact opportunities to expand the Company's asset base and/or re-contract with TC Energy's shippers and customers as contractual agreements expire.

Climate change also presents a potential financial impact to commodity prices and volumes. TC Energy's exposure to climate change risk and resulting policy changes is managed through the Company's business model, which is based on a long-term, low-risk strategy whereby the majority of TC Energy's earnings are underpinned by regulated cost-of-service arrangements and/or long-term contracts. In addition, scenario planning against several demand outlooks and monitoring of key signposts is also considered as part of the Company's long-term corporate strategic planning process.

Interest rate risk

TC Energy utilizes short- and long-term debt to finance its operations which exposes the Company to interest rate risk. TC Energy typically pays fixed rates of interest on its long-term debt and floating rates on short-term debt including its commercial paper programs and amounts drawn on its credit facilities. A small portion of TC Energy's long-term debt bears interest at floating rates. In addition, the Company is exposed to interest rate risk on financial instruments and contractual obligations containing variable interest rate components. The Company actively manages its interest rate risk using interest rate derivatives.

Many of TC Energy's financial instruments and contractual obligations with variable rate components reference U.S. dollar LIBOR, of which certain rate settings have ceased to be published at the end of 2021 with full cessation by mid-2023. Refer to Note 3, Accounting changes, for additional information on Reference Rate Reform.

Foreign exchange risk

Certain of TC Energy's businesses generate all or most of their earnings in U.S. dollars and, since the Company reports its financial results in Canadian dollars, changes in the value of the U.S. dollar against the Canadian dollar can affect its net income. As the Company's U.S. dollar-denominated operations continue to grow, this exposure increases. A portion of this risk is offset by interest expense on U.S. dollar-denominated debt. The balance of the exposure is actively managed on a rolling basis up to three years in advance using foreign exchange derivatives, however, the natural exposure beyond that period remains.

A small portion of the Company's Mexico Natural Gas Pipelines monetary assets and liabilities are peso-denominated, while the functional currency for our Mexico operations is U.S. dollars. These peso-denominated balances are revalued to U.S. dollars and, as a result, changes in the value of the Mexican peso against the U.S. dollar can affect the Company's net income. This exposure is managed using foreign exchange derivatives.

Net investment in foreign operations

The Company hedges a portion of its net investment in foreign operations (on an after-tax basis) with U.S. dollar-denominated debt, cross-currency interest rate swaps, foreign exchange forwards and foreign exchange options as appropriate.

The fair values and notional amounts for the derivatives designated as a net investment hedge were as follows:

at December 31	2021		2020		
(millions of Canadian \$, unless otherwise noted)	Fair Value ^{1,2}	Notional Amount	Fair Value ^{1,2}	Notional Amount	
U.S. dollar foreign exchange options (maturing 2022 to 2023)	(4)	US 3,800	45	US 2,200	
U.S. dollar cross-currency interest rate swaps (maturing 2022 to 2025) ³	23	US 400	23	US 400	
	19	US 4,200	68	US 2,600	

- Fair value equals carrying value.
- No amounts have been excluded from the assessment of hedge effectiveness.
- In 2021, Net income includes net realized gains of \$1 million (2020 gains of \$1 million) related to the interest component of cross-currency swap settlements which are reported within Interest expense.

The notional amounts and fair value of U.S. dollar-denominated debt designated as a net investment hedge were as follows:

at December 31		
(millions of Canadian \$, unless otherwise noted)	2021	2020
Notional amount	30,700 (US 24,200)	27,700 (US 21,800)
Fair value	35,500 (US 28,100)	33,800 (US 26,500)

Counterparty Credit Risk

TC Energy's exposure to counterparty credit risk includes its cash and cash equivalents, accounts receivable and certain contractual recoveries, available-for-sale assets, the fair value of derivative assets and loans receivable.

The sustained impact of the COVID-19 pandemic and related global energy demand and supply disruption continues to contribute to market uncertainty impacting a number of TC Energy's customers. While the majority of the Company's credit exposure is to large creditworthy entities, TC Energy has increased its monitoring and communication with those counterparties experiencing greater financial pressures.

At times, the Company's counterparties may endure financial challenges resulting from commodity price and market volatility, economic instability and political or regulatory changes. In addition to actively monitoring these situations, there are a number of factors that reduce TC Energy's counterparty credit risk exposure in the event of default, including:

- contractual rights and remedies together with the utilization of contractually-based financial assurances
- current regulatory frameworks governing certain TC Energy operations
- competitive position of the Company's assets and the demand for the Company's services and
- potential recovery of unpaid amounts through bankruptcy and similar proceedings.

The Company reviews financial assets carried at amortized cost for impairment using the lifetime expected loss of the financial asset at initial recognition and throughout the life of the financial asset. TC Energy uses historical credit loss and recovery data, adjusted for management's judgment regarding current economic and credit conditions, along with supportable forecasts to determine any impairment, which is recognized in Plant operating costs and other. At December 31, 2021 and 2020, there were no significant credit losses, no significant credit risk concentrations and no significant amounts past due or impaired.

TC Energy has significant credit and performance exposure to financial institutions because they hold cash deposits and provide committed credit lines and letters of credit that help manage the Company's exposure to counterparties and provide liquidity in commodity, foreign exchange and interest rate derivative markets.

Fair Value of Non-Derivative Financial Instruments

Available-for-sale assets are recorded at fair value which is calculated using quoted market prices where available. Certain non-derivative financial instruments included in Cash and cash equivalents, Accounts receivable, Loans receivable from affiliates, Other current assets, Long-term loans receivable from affiliates, Restricted investments, Other long-term assets, Notes payable, Accounts payable and other, Dividends payable, Accrued interest and Other long-term liabilities have carrying amounts that approximate their fair value due to the nature of the item or the short time to maturity. Each of these instruments are classified in Level II of the fair value hierarchy, except for the Company's LMCI equity securities which are classified in Level I.

Credit risk has been taken into consideration when calculating the fair value of non-derivative financial instruments.

Balance Sheet Presentation of Non-Derivative Financial Instruments

The following table details the fair value of non-derivative financial instruments, excluding those where carrying amounts approximate fair value, and would be classified in Level II of the fair value hierarchy:

at December 31	2021	2021		2020	
(millions of Canadian \$)	Carrying Amount	Fair Value	Carrying Amount	Fair Value	
Long-term debt, including current portion (Note 19)	(38,661)	(45,615)	(36,885)	(46,054)	
Junior subordinated notes (Note 20)	(8,939)	(9,236)	(8,498)	(8,908)	
	(47,600)	(54,851)	(45,383)	(54,962)	

Available-for-Sale Assets Summary

The following tables summarize additional information about the Company's restricted investments that were classified as available-for-sale assets:

at December 31	20	21	2020		
(millions of Canadian \$)	LMCI Restricted Investments	Other Restricted Investments ¹	LMCI Restricted Investments	Other Restricted Investments ¹	
Fair value of fixed income securities ^{2,3}					
Maturing within 1 year	_	26	_	17	
Maturing within 1-5 years	8	107	_	66	
Maturing within 5-10 years	1,150	_	985	_	
Maturing after 10 years	84	_	85	_	
Fair value of equity securities ^{2,4}	817	_	736	_	
	2,059	133	1,806	83	

- Other restricted investments have been set aside to fund insurance claim losses to be paid by the Company's wholly-owned captive insurance subsidiary.
- 2 Available-for-sale assets are recorded at fair value and included in Other current assets and Restricted investments on the Company's Consolidated balance
- 3 Classified in Level II of the fair value hierarchy.
- Classified in Level I of the fair value hierarchy.

year ended December 31	20	2021		2020		2019	
(millions of Canadian \$)	LMCI restricted investments ¹	Other restricted investments ²	LMCI restricted investments ¹	Other restricted investments ²	LMCI restricted investments ¹	Other restricted investments ²	
Net unrealized gains/(losses)	45	(2)	130	1	32	3	
Net realized gains ³	3	_	20	1	60		

- Gains arising from changes in the fair value of LMCI restricted investments impact the subsequent amounts to be collected through tolls to cover future pipeline abandonment costs. As a result, the Company records these gains as regulatory assets.
- Gains and losses on other restricted investments are included in Interest income and other in the Company's Consolidated statement of income.
- Realized gains and losses on the sale of LMCI restricted investments are determined using the average cost basis.

Fair Value of Derivative Instruments

The fair value of foreign exchange and interest rate derivatives has been calculated using the income approach which uses year-end market rates and applies a discounted cash flow valuation model. The fair value of commodity derivatives has been calculated using quoted market prices where available. In the absence of quoted market prices, third-party broker quotes or other valuation techniques have been used. The fair value of options has been calculated using the Black-Scholes pricing model. Credit risk has been taken into consideration when calculating the fair value of derivative instruments. Unrealized gains and losses on derivative instruments are not necessarily representative of the amounts that will be realized on settlement.

In some cases, even though the derivatives are considered to be effective economic hedges, they do not meet the specific criteria for hedge accounting treatment or are not designated as a hedge and are accounted for at fair value with changes in fair value recorded in net income in the period of change. This may expose the Company to increased variability in reported earnings because the fair value of the derivative instruments can fluctuate significantly from period to period.

The recognition of gains and losses on derivatives for Canadian natural gas regulated pipeline exposures is determined through the regulatory process. Gains and losses arising from changes in the fair value of derivatives accounted for as part of RRA, including those that qualify for hedge accounting treatment, are expected to be recovered or refunded through the tolls charged by the Company. As a result, these gains and losses are deferred as regulatory assets or regulatory liabilities and are refunded to or collected from the ratepayers in subsequent years when the derivative settles.

Balance Sheet Presentation of Derivative Instruments

The balance sheet classification of the fair value of derivative instruments was as follows:

at December 31, 2021				Total Fair
	Cash Flow	Net Investment	Held for	Value of Derivative
(millions of Canadian \$)	Hedges	Hedges	Trading	Instruments ¹
Other current assets (Note 7)				
Commodities ²	_	_	122	122
Foreign exchange	_	10	37	47
	_	10	159	169
Other long-term assets (Note 14)				
Commodities ²	_	_	8	8
Foreign exchange	_	32	6	38
Interest rate ³	2	_	_	2
	2	32	14	48
Total Derivative Assets	2	42	173	217
Accounts payable and other (Note 16)				
Commodities ²	(23)	_	(138)	(161)
Foreign exchange	_	(4)	(46)	(50)
Interest rate ³	(10)	_	_	(10)
	(33)	(4)	(184)	(221)
Other long-term liabilities (Note 17)				_
Commodities ²	(4)	_	(6)	(10)
Foreign exchange	_	(19)	(10)	(29)
Interest rate ³	(8)	_	_	(8)
	(12)	(19)	(16)	(47)
Total Derivative Liabilities	(45)	(23)	(200)	(268)
Total Derivatives	(43)	19	(27)	(51)

Fair value equals carrying value.

² Includes purchases and sales of power, natural gas and liquids.

For the year ended December 31, 2021, a \$10 million payment to settle a loss on financial instruments was included in Net cash (used in)/provided by financing activities in the Consolidated statement of cash flows.

The balance sheet classification of the fair value of derivative instruments was as follows:

at December 31, 2020		Net		Total Fair Value of
(millions of Canadian \$)	Cash Flow Hedges	Investment Hedges	Held for Trading	Derivative Instruments ¹
Other current assets (Note 7)				
Commodities ²	_	_	13	13
Foreign exchange	_	47	175	222
	_	47	188	235
Other long-term assets (Note 14)				
Foreign exchange	_	22	19	41
	_	22	19	41
Total Derivative Assets	_	69	207	276
Accounts payable and other (Note 16)				
Commodities ²	(8)	_	(32)	(40)
Foreign exchange	_	(1)	(10)	(11)
Interest rate ³	(21)	_	_	(21)
	(29)	(1)	(42)	(72)
Other long-term liabilities (Note 17)				
Commodities ²	(6)	_	(4)	(10)
Interest rate ³	(49)	_		(49)
	(55)	_	(4)	(59)
Total Derivative Liabilities	(84)	(1)	(46)	(131)
Total Derivatives	(84)	68	161	145

Fair value equals carrying value.

The majority of derivative instruments held for trading have been entered into for risk management purposes and all are subject to the Company's risk management strategies, policies and limits. These include derivatives that have not been designated as hedges or do not qualify for hedge accounting treatment but have been entered into as economic hedges to manage the Company's exposures to market risk.

Notional and Maturity Summary

The maturity and notional amount or quantity outstanding related to the Company's derivative instruments excluding hedges of the net investment in foreign operations was as follows:

at December 31, 2021	Power	Natural Gas	Liquids	Foreign Exchange	Interest Pate
	rower	Natural Gas	Liquius	Exchange	Interest Rate
Purchases ¹	553	104	34	_	_
Sales ¹	1,043	52	38	_	_
Millions of U.S. dollars	_	_	_	6,636	650
Millions of Mexican pesos	_	_	_	5,500	_
Maturity dates	2022-2026	2022-2027	2022	2022-2026	2024-2026

Volumes for power, natural gas and liquids derivatives are in GWh, Bcf and MMBbls, respectively.

Includes purchases and sales of power, natural gas and liquids.

For the year ended December 31, 2020, a \$130 million payment to settle a loss on financial instruments was included in Net cash (used in) / provided by financing activities in the Consolidated statement of cash flows.

at December 31, 2020				Foreign	
	Power	Natural Gas	Liquids	Exchange	Interest Rate
Purchases ¹	185	13	26	_	_
Sales ¹	1,786	14	30	_	_
Millions of U.S. dollars	_	_	_	4,432	1,100
Millions of Mexican pesos	_	_	_	1,700	_
Maturity dates	2021-2025	2021-2027	2021	2021-2022	2022-2026

Volumes for power, natural gas and liquids derivatives are in GWh, Bcf and MMBbls, respectively.

Unrealized and Realized Gains/(Losses) on Derivative Instruments

The following summary does not include hedges of the net investment in foreign operations:

year ended December 31			
(millions of Canadian \$)	2021	2020	2019
Derivative instruments held for trading ¹			
Amount of unrealized gains/(losses) in the year			
Commodities	9	(23)	(111)
Foreign exchange	(203)	126	245
Amount of realized gains/(losses) in the year			
Commodities	287	183	378
Foreign exchange	240	(33)	(70)
Derivative instruments in hedging relationships ²			
Amount of realized (losses)/gains in the year			
Commodities	(44)	6	(6)
Interest rate	(32)	(16)	2

Realized and unrealized gains and losses on held-for-trading derivative instruments used to purchase and sell commodities are included on a net basis in Revenues. Realized and unrealized gains and losses on foreign exchange held-for-trading derivative instruments are included on a net basis in Interest income and other.

Derivatives in cash flow hedging relationships

The components of OCI (Note 24) related to the change in fair value of derivatives in cash flow hedging relationships before tax and including the portion attributable to non-controlling interests were as follows:

year ended December 31			
(millions of Canadian \$, pre-tax)	2021	2020	2019
Change in fair value of derivative instruments recognized in OCI ¹			
Commodities	(35)	(5)	(15)
Interest rate	22	(766)	(63)
	(13)	(771)	(78)

No amounts have been excluded from the assessment of hedge effectiveness. Amounts in parentheses indicate losses recorded to OCI and AOCI.

In 2021, 2020 and 2019, there were no gains or losses included in Net Income relating to discontinued cash flow hedges where it was probable that the anticipated transaction would not occur.

Effect of fair value and cash flow hedging relationships

The following table details amounts presented in the Consolidated statement of income in which the effects of fair value or cash flow hedging relationships were recorded:

year ended December 31			
(millions of Canadian \$)	2021	2020	2019
Fair Value Hedges			
Interest rate contracts ¹			
Hedged items	_	(3)	(19)
Derivatives designated as hedging instruments	_	1	1
Cash Flow Hedges			
Reclassification of losses on derivative instruments from AOCI to net income ^{2,3}			
Interest rate contracts ¹	(46)	(648)	(12)
Commodity contracts ⁴	(22)	(1)	(7)

- Presented within Interest expense in the Consolidated statement of income, except for a loss of \$613 million recorded in May 2020 related to a contractually required derivative instrument used to hedge the interest rate risk associated with project-level financing for the Coastal GasLink construction. This derivative instrument was derecognized as part of the sale of a 65 per cent equity interest in Coastal GasLink LP. The loss was included in Net qain/(loss) on assets sold/held for sale. Refer to Note 28, Acquisitions and dispositions, for additional information.
- Refer to Note 24, Other comprehensive income/(loss) and accumulated other comprehensive loss, for the components of OCI related to derivatives in cash flow hedging relationships including the portion attributable to non-controlling interests.
- There are no amounts recognized in earnings that were excluded from effectiveness testing.
- Presented within Revenues (Power and Storage) in the Consolidated statement of income.

Offsetting of derivative instruments

The Company enters into derivative contracts with the right to offset in the normal course of business as well as in the event of default. TC Energy has no master netting agreements, however, similar contracts are entered into containing rights to offset. The Company has elected to present the fair value of derivative instruments with the right to offset on a gross basis on the Consolidated balance sheet. The following tables show the impact on the presentation of the fair value of derivative instrument assets and liabilities had the Company elected to present these contracts on a net basis:

at December 31, 2021			
(millions of Canadian \$)	Gross Derivative Instruments	Amounts Available for Offset ¹	Net Amounts
Derivative instrument assets			
Commodities	130	(91)	39
Foreign exchange	85	(54)	31
Interest rate	2	(1)	1
	217	(146)	71
Derivative instrument liabilities			
Commodities	(171)	91	(80)
Foreign exchange	(79)	54	(25)
Interest rate	(18)	1	(17)
	(268)	146	(122)

Amounts available for offset do not include cash collateral pledged or received.

at December 31, 2020			
(millions of Canadian \$)	Gross Derivative Instruments	Amounts Available for Offset ¹	Net Amounts
Derivative instrument assets			
Commodities	13	(7)	6
Foreign exchange	263	(11)	252
	276	(18)	258
Derivative instrument liabilities			
Commodities	(50)	7	(43)
Foreign exchange	(11)	11	_
Interest rate	(70)	_	(70)
	(131)	18	(113)

Amounts available for offset do not include cash collateral pledged or received.

With respect to the derivative instruments presented above, the Company provided cash collateral of \$144 million and letters of credit of \$130 million at December 31, 2021 (2020 - \$54 million and \$15 million, respectively) to its counterparties. At December 31, 2021, the Company held no cash collateral and a \$6 million balance in letters of credit (2020 - nil and nil, respectively) from counterparties on asset exposures.

Credit-risk-related contingent features of derivative instruments

Derivative contracts entered into to manage market risk often contain financial assurance provisions that allow parties to the contracts to manage credit risk. These provisions may require collateral to be provided if a credit-risk-related contingent event occurs, such as a downgrade in the Company's credit rating to non-investment grade. The Company may also need to provide collateral if the fair value of its derivative financial instruments exceeds pre-defined exposure limits.

Based on contracts in place and market prices at December 31, 2021, the aggregate fair value of all derivative instruments with credit-risk-related contingent features that were in a net liability position was \$5 million (2020 - \$4 million), for which the Company has provided no collateral in the normal course of business. If the credit-risk-related contingent features in these agreements were triggered on December 31, 2021, the Company would have been required to provide collateral equal to the fair value of the related derivative instruments discussed above. Collateral may also need to be provided should the fair value of derivative instruments exceed pre-defined contractual exposure limit thresholds.

The Company has sufficient liquidity in the form of cash and undrawn committed revolving credit facilities to meet these contingent obligations should they arise.

Fair Value Hierarchy

The Company's financial assets and liabilities recorded at fair value have been categorized into three categories based on a fair value hierarchy.

Levels	How fair value has been determined
Level I	Quoted prices in active markets for identical assets and liabilities that the Company has the ability to access at the measurement date. An active market is a market in which frequency and volume of transactions provides pricing information on an ongoing basis.
Level II	This category includes interest rate and foreign exchange derivative assets and liabilities where fair value is determined using the income approach and commodity derivatives where fair value is determined using the market approach.
	Inputs include published exchange rates, interest rates, interest rate swap curves, yield curves and broker quotes from external data service providers.
Level III	This category mainly includes long-dated commodity transactions in certain markets where liquidity is low and the Company uses the most observable inputs available or, if not available, long-term broker quotes to estimate the fair value for these transactions.
	There is uncertainty caused by using unobservable market data which may not accurately reflect possible future changes in fair value.

The fair value of the Company's derivative assets and liabilities measured on a recurring basis, including both current and non-current portions, were categorized as follows:

at December 31, 2021 (millions of Canadian \$)	Quoted Prices in Active Markets (Level I)	Significant Other Observable Inputs (Level II) ¹	Significant Unobservable Inputs (Level III) ¹	Total
Derivative instrument assets				
Commodities	39	91	_	130
Foreign exchange	_	85	_	85
Interest rate	_	2	_	2
Derivative instrument liabilities				
Commodities	(49)	(116)	(6)	(171)
Foreign exchange	_	(79)	_	(79)
Interest rate	_	(18)	_	(18)
	(10)	(35)	(6)	(51)

There were no transfers from Level II to Level III for the year ended December 31, 2021.

at December 31, 2020 (millions of Canadian \$)	Quoted Prices in Active Markets (Level I)	Significant Other Observable Inputs (Level II) ¹	Significant Unobservable Inputs (Level III) ¹	Total
Derivative instrument assets				
Commodities	3	10	_	13
Foreign exchange	_	263	_	263
Derivative instrument liabilities				
Commodities	(15)	(31)	(4)	(50)
Foreign exchange	_	(11)	_	(11)
Interest rate	_	(70)	_	(70)
	(12)	161	(4)	145

There were no transfers from Level II to Level III for the year ended December 31, 2020.

The following table presents the net change in fair value of derivative assets and liabilities classified in Level III of the fair value hierarchy:

(millions of Canadian \$, pre-tax)	2021	2020
Balance at beginning of year	(4)	(7)
Total (losses)/gains included in Net income	(3)	3
Settlements	1	
Balance at end of year ¹	(6)	(4)

Revenues include unrealized losses of \$3 million attributed to derivatives in the Level III category that were still held at December 31, 2021 (2020 – unrealized gains of \$3 million).

27. CHANGES IN OPERATING WORKING CAPITAL

year ended December 31			
(millions of Canadian \$)	2021	2020	2019
(Increase)/decrease in Accounts receivable	(925)	129	31
Increase in Inventories	(93)	(55)	(42)
Increase in Other current assets	(141)	(221)	(15)
Increase/(decrease) in Accounts payable and other	890	(162)	352
Decrease in Accrued interest	(18)	(18)	(33)
(Increase)/Decrease in Operating Working Capital	(287)	(327)	293

28. ACQUISITIONS AND DISPOSITIONS

Canadian Natural Gas Pipelines

Coastal GasLink LP

In May 2020, TC Energy completed the sale of a 65 per cent equity interest in Coastal GasLink LP to third parties for net proceeds of \$656 million before post-closing adjustments resulting in a pre-tax gain of \$364 million (\$402 million after tax). The pre-tax gain included \$231 million related to the required remeasurement of the Company's retained 35 per cent equity interest to fair value which was based on the proceeds realized for the 65 per cent equity interest, and also incorporated the reclassification from AOCI to income of the fair value of a derivative instrument used to hedge the interest rate risk associated with project-level financing for the Coastal GasLink construction. The \$402 million after-tax gain also reflected the utilization of previously unrecognized tax loss benefits. The pre-tax gain was included in Net gain/(loss) on assets sold/held for sale in the Consolidated statement of income. As part of this transaction, TC Energy was contracted by Coastal GasLink LP to construct and operate the pipeline. TC Energy uses the equity method to account for its remaining 35 per cent equity interest in the Company's consolidated financial statements.

Immediately preceding the equity sale, Coastal GasLink LP drew down \$1.6 billion on the secured long-term project financing credit facilities, of which approximately \$1.5 billion was paid to TC Energy.

U.S. Natural Gas Pipelines

Columbia Midstream Assets

In August 2019, TC Energy completed the sale of certain Columbia Midstream assets to a third party for approximately US\$1.3 billion before post-closing adjustments.

The Company recorded a pre-tax gain on sale of \$21 million (\$152 million after-tax loss) including the impact of \$4 million of foreign currency translation gains that were reclassified from AOCI to net income and the release of \$595 million of Columbia goodwill allocated to these assets that was not deductible for income tax purposes. The pre-tax gain was included in Net gain/(loss) on assets sold/held for sale in the Consolidated statement of income. This sale did not include any interest in Columbia Energy Ventures Company, the Company's minerals business in the Appalachian basin.

In 2020, upon finalizing its 2019 annual tax returns for its U.S. operations, the Company recorded an \$18 million income tax recovery related to the sale.

Columbia Pipeline Group, Inc.

At the time of the July 2016 acquisition of Columbia, certain Columbia shareholders dissented from the transaction and did not tender their shares. In October 2019, TC Energy made a payment to the dissenting Columbia shareholders in the amount of \$373 million (US\$284 million), representing the appraised value of their shares pursuant to a court decision, which affirmed the original Columbia share purchase price of US\$25.50 per share plus accrued interest.

Liquids Pipelines

Northern Courier

In July 2019, TC Energy completed the sale of an 85 per cent equity interest in Northern Courier pipeline to a third party for gross proceeds of \$144 million before post-closing adjustments resulting in a pre-tax gain of \$69 million after recording the Company's remaining 15 per cent interest at fair value. The pre-tax gain was included in Net gain/(loss) on assets sold/held for sale in the Consolidated statement of income. On an after-tax basis, the gain of \$115 million reflected the utilization of previously unrecognized tax loss benefits. Preceding the equity sale, Northern Courier pipeline issued \$1.0 billion of long-term, non-recourse debt with all proceeds paid to TC Energy.

On November 30, 2021, TC Energy completed the sale of its remaining 15 per cent equity interest in Northern Courier to a third party for gross proceeds of approximately \$35 million resulting in a pre-tax gain of \$13 million (\$19 million after tax). The pre-tax gain was included in Net gain/(loss) on assets sold/held for sale in the Consolidated statement of income.

Power and Storage

TransCanada Turbines Ltd.

In November 2020, TC Energy acquired the remaining 50 per cent ownership interest in TransCanada Turbines Ltd. (TC Turbines) for cash consideration of US\$67 million. TC Turbines provides industrial gas turbine maintenance, parts, repair and overhaul services. The acquisition was accounted for as a business combination and the evaluation of assigned fair value of acquired assets and liabilities did not result in recognition of goodwill. TC Energy previously accounted for its 50 per cent interest in TC Turbines as an equity investment but commenced full consolidation of TC Turbines as of the date of acquisition, which did not have a material impact on Revenues and Net income of the Company. In addition, the pro forma incremental impact on the Company's Revenues and Net income for each of the periods presented was not material.

Ontario Natural Gas-fired Power Plants

In April 2020, the Company completed the sale of the Halton Hills and Napanee power plants as well as its 50 per cent interest in Portlands Energy Centre to a subsidiary of Ontario Power Generation Inc. for net proceeds of approximately \$2.8 billion before post-closing adjustments. The total pre-tax loss of \$676 million (\$470 million after tax) on this transaction included losses accrued during 2019 while classified as an asset held for sale and a 2021 post-close adjustment and also reflected utilization of previously unrecognized tax loss benefits. The pre-tax loss was included in Net gain/(loss) on assets sold/held for sale for sale in the Consolidated statement of income. This loss may be amended in the future upon the settlement of existing insurance claims.

Coolidge Generating Station

In May 2019, the Company completed the sale of its Coolidge generating station in Arizona to Salt River Project Agriculture Improvement and Power District (SRP), the PPA counterparty, as per the terms of SRP's contractual right of first refusal, for proceeds of US\$448 million before post-closing adjustments. As a result, the Company recorded a pre-tax gain on sale of \$68 million (\$54 million after tax) including the impact of \$9 million of foreign currency translation gains which were reclassified from AOCI to net income. The pre-tax gain was included in Net gain/(loss) on assets sold/held for sale in the Consolidated statement of income.

29. COMMITMENTS, CONTINGENCIES AND GUARANTEES

Commitments

TC Energy and its affiliates have long-term natural gas transportation and natural gas purchase arrangements as well as other purchase obligations, all of which are transacted at market prices and in the normal course of business. Purchases under these contracts in 2021 were \$239 million (2020 - \$224 million; 2019 - \$236 million).

The Company has entered into PPAs with solar and wind-power generating facilities ranging from eight to 15 years, that require the purchase of 100 per cent of the generated energy and associated environmental attributes. Future payments cannot be reasonably estimated as they are dependent on the amount of energy generated.

Capital expenditure commitments include obligations related to the construction of growth projects and are based on the projects proceeding as planned. Changes to these projects, including cancellation, would reduce or possibly eliminate these commitments as a result of cost mitigation efforts. At December 31, 2021, TC Energy had the following capital expenditure commitments:

- approximately \$1.5 billion for its Canadian natural gas pipelines, primarily related to construction costs associated with NGTL System expansion projects
- approximately \$0.1 billion for its U.S. natural gas pipelines, primarily related to construction costs associated with ANR and Columbia Gas pipeline projects
- approximately \$0.1 billion for its Mexico natural gas pipelines, primarily related to construction of the Tula and Villa de Reyes pipelines
- approximately \$0.1 billion for its Liquids pipelines, primarily related to capital projects in the U.S. Gulf Coast
- approximately \$0.1 billion for its Power and Storage business, primarily related to the Company's proportionate share of commitments for Bruce Power's life extension program.

Contingencies

TC Energy is subject to laws and regulations governing environmental quality and pollution control. As at December 31, 2021, the Company had accrued approximately \$30 million (2020 - \$24 million) related to operating facilities, which represents the present value of the estimated future amount it expects to spend to remediate the sites. However, additional liabilities may be incurred as assessments take place and remediation efforts continue.

TC Energy and its subsidiaries are subject to various legal proceedings, arbitrations and actions arising in the normal course of business. The amounts involved in such proceedings are not reasonably estimable as the final outcome of such legal proceedings cannot be predicted with certainty. It is the opinion of management that the ultimate resolution of such proceedings and actions, excluding the legal proceeding related to Keystone XL described below, will not have a material impact on the Company's consolidated financial position or results of operations.

On November 22, 2021, TC Energy filed a Request for Arbitration to formally initiate a legacy North American Free Trade Agreement (NAFTA) claim to recover economic damages resulting from the revocation of the Presidential Permit for the Keystone XL pipeline project. The Company will be seeking to recover more than US\$15 billion in damages as a result of the U.S. Government's breach of its NAFTA obligations. This claim is in a preliminary stage and the timing of outcome is unknown at present.

Guarantees

On November 30, 2021, TC Energy completed the sale of its remaining 15 per cent equity interest in the Northern Courier pipeline and subsequently released all associated guarantees. Refer to Note 28, Acquisitions and dispositions, for additional information. As part of its role as operator of the Northern Courier pipeline prior to the sale, TC Energy had quaranteed the financial performance of the pipeline related to delivery and terminalling of bitumen and diluent and contingent financial obligations under sub-lease agreements.

TC Energy and its partner on the Sur de Texas pipeline, IEnova, have jointly guaranteed the financial performance of the entity which owns the pipeline. Such agreements include a guarantee and a letter of credit which are primarily related to the delivery of natural gas.

TC Energy and its joint venture partner on Bruce Power, BPC Generation Infrastructure Trust, have each severally guaranteed certain contingent financial obligations of Bruce Power related to a lease agreement.

The Company and its partners in certain other jointly-owned entities have either (i) jointly and severally, (ii) jointly or (iii) severally quaranteed the financial performance of these entities. Such agreements include quarantees and letters of credit which are primarily related to construction services and the payment of liabilities. For certain of these entities, any payments made by TC Energy under these guarantees in excess of its ownership interest are to be reimbursed by its partners.

The carrying value of these guarantees has been recorded in Other long-term liabilities on the Consolidated balance sheet. Information regarding the Company's guarantees were as follows:

at December 31		2021		202	20
(millions of Canadian \$)	Term	Potential Exposure ¹	Carrying Value	Potential Exposure ¹	Carrying Value
Sur de Texas	to 2043	93	_	100	_
Bruce Power	to 2023	88	_	88	_
Other jointly-owned entities	to 2043	80	4	78	4
Northern Courier pipeline ²		_	_	300	26
		261	4	566	30

TC Energy's share of the potential estimated current or contingent exposure.

On November 30, 2021, TC Energy completed the sale of its remaining 15 per cent equity interest in the Northern Courier pipeline and subsequently released all associated guarantees. Refer to Note 28, Acquisitions and dispositions, for additional information.

30. VARIABLE INTEREST ENTITIES

A VIE is a legal entity that does not have sufficient equity at risk to finance its activities without additional subordinated financial support or is structured such that equity investors lack the ability to make significant decisions relating to the entity's operations through voting rights or do not substantively participate in the gains and losses of the entity.

In the normal course of business, the Company consolidates VIEs in which it has a variable interest and for which it is considered to be the primary beneficiary. VIEs in which the Company has a variable interest but is not the primary beneficiary are considered non-consolidated VIEs and are accounted for as equity investments.

Consolidated VIEs

The Company's consolidated VIEs consist of legal entities where the Company is the primary beneficiary. As the primary beneficiary, the Company has the power, through voting or similar rights, to direct the activities of the VIE that most significantly impact economic performance including purchasing or selling significant assets; maintenance and operations of assets; incurring additional indebtedness; or determining the strategic operating direction of the entity. In addition, the Company has the obligation to absorb losses or the right to receive benefits from the consolidated VIE that could potentially be significant to the VIE.

A significant portion of the Company's assets are held through VIEs in which the Company holds a 100 per cent voting interest, the VIE meets the definition of a business and the VIE's assets can be used for general corporate purposes. The consolidated VIEs whose assets cannot be used for purposes other than for the settlement of the VIE's obligations, or are not considered a business, were as follows:

at December 31		
(millions of Canadian \$)	2021	2020
ASSETS		
Current Assets		
Cash and cash equivalents	72	254
Accounts receivable	70	61
Inventories	28	26
Other current assets	13	11
	183	352
Plant, Property and Equipment	3,672	3,325
Equity Investments	890	714
Goodwill	421	424
Other Long-Term Assets	<u> </u>	8
	5,166	4,823
LIABILITIES		
Current Liabilities		
Accounts payable and other	232	109
Redeemable non-controlling interest	_	633
Accrued interest	17	21
Current portion of long-term debt	29	579
	278	1,342
Regulatory Liabilities	66	60
Other Long-Term Liabilities	1	11
Deferred Income Tax Liabilities	13	12
Long-Term Debt	2,025	2,468
	2,383	3,893

At December 31, 2020, certain consolidated VIEs had a redeemable non-controlling interest that ranked above the Company's equity interest. Refer to Note 6, Keystone XL, for additional information.

Non-Consolidated VIEs

The Company's non-consolidated VIEs consist of legal entities where the Company is not the primary beneficiary as it does not have the power to direct the activities that most significantly impact the economic performance of these VIEs or where this power is shared with third parties. The Company contributes capital to these VIEs and receives ownership interests that provide it with residual claims on assets after liabilities are paid.

The carrying value of these VIEs and the maximum exposure to loss as a result of the Company's involvement with these VIEs were as follows:

at December 31		
(millions of Canadian \$)	2021	2020
Balance sheet		
Loan receivable from affiliate (Note 11)	1	_
Equity investments		
Bruce Power	4,493	3,306
Pipeline equity investments and other ¹	1,605	1,371
Long-term loan receivable from affiliate (Note 11)	238	_
Off-balance sheet ²		
Coastal GasLink ³	3,037	1,107
Bruce Power	974	1,183
Pipeline equity investments ¹	171	399
Maximum exposure to loss	10,519	7,366

On November 30, 2021, TC Energy sold its remaining 15 per cent equity interest in Northern Courier. Refer to Note 28, Acquisitions and dispositions, for

Includes maximum potential exposure to guarantees and future funding commitments.

Represents the total capacity of \$3,275 million committed under a subordinated loan agreement with Coastal GasLink LP less the \$238 million balance outstanding under this loan agreement as at December 31, 2021. Refer to Note 11, Loans receivable from affiliates, for additional information.