



FINANCIAL STATEMENTS & NOTES

CONSOLIDATED FINANCIAL STATEMENTS AND NOTES

Table of Contents

CONSOLIDATED STATEMENT OF FINANCIAL POSITION	76
CONSOLIDATED STATEMENTS OF EARNINGS (LOSS) AND COMPREHENSIVE INCOME (LOSS)	77
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY	78
CONSOLIDATED STATEMENTS OF CASH FLOWS	79
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS	80
1. REPORTING ENTITY	80
2. BASIS OF PREPARATION	80
3. SIGNIFICANT ACCOUNTING POLICIES	83
4. DETERMINATION OF FAIR VALUES	94
5. TRADE RECEIVABLES AND OTHER	96
6. INVENTORY	96
7. PROPERTY, PLANT AND EQUIPMENT	96
8. INTANGIBLE ASSETS AND GOODWILL	97
9. INVESTMENTS IN EQUITY ACCOUNTED INVESTEES	99
10. IMPAIRMENT EXPENSE	105
11. INCOME TAXES	106
12. TRADE PAYABLES AND ACCRUED LIABILITIES	108
13. LEASES	108
14. LONG-TERM DEBT	109
15. DECOMMISSIONING PROVISION	110
16. SHARE CAPITAL	111
17. REVENUE	113
18. OTHER INCOME	114
19. NET FINANCE COSTS	114
20. OPERATING SEGMENTS	115
21. EARNINGS PER COMMON SHARE	117
22. PENSION PLAN	118
23. SHARE-BASED PAYMENTS	120
24. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)	122
25. FINANCIAL INSTRUMENTS	123
26. CAPITAL MANAGEMENT	131
27. GROUP ENTITIES	131
28. RELATED PARTIES	132
29. COMMITMENTS AND CONTINGENCIES	133

MANAGEMENT'S REPORT

The audited consolidated financial statements of Pembina Pipeline Corporation (the "Company" or "Pembina") are the responsibility of Pembina's management. The financial statements have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board, using management's best estimates and judgments, where appropriate.

Management is responsible for the reliability and integrity of the financial statements, the notes to the financial statements and other financial information contained in this report. In the preparation of these financial statements, estimates are sometimes necessary because a precise determination of certain assets and liabilities is dependent on future events. Management believes such estimates have been based on careful judgments and have been properly reflected in the accompanying financial statements.

Management's Assessment of Internal Control over Financial Reporting

Management is responsible for establishing and maintaining disclosure controls and procedures ("DC&P") and internal control over financial reporting, as defined in Rule 13a – 15(e) and 15(d) – 15(e) under the United States *Securities Exchange Act of 1934*, as amended (the "Exchange Act") and National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings*.

Under the supervision and with the participation of the President and Chief Executive Officer ("CEO") and the interim Chief Financial Officer ("CFO"), management has conducted an evaluation of Pembina's internal control over financial reporting based on the framework set forth in Internal Control – Integrated Framework issued in 2013 by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on management's assessment as at December 31, 2021, the CEO and CFO have concluded that Pembina's internal control over financial reporting is effective.

Due to its inherent limitations, internal control over financial reporting is not intended to provide absolute assurance that a misstatement of Pembina's financial statements would be prevented or detected. Further, the evaluation of the effectiveness of internal control over financial reporting was made as at a specific date, and continued effectiveness in future periods is subject to the risks that controls may become inadequate.

The Board of Directors of Pembina (the "Board") is responsible for ensuring management fulfills its responsibilities for financial reporting and internal control. The Board is assisted in exercising its responsibilities through the Audit Committee, which consists of five non-management directors. The Audit Committee meets periodically with management and the internal and external auditors to satisfy itself that management's responsibilities are properly discharged, to review the financial statements and to recommend approval of the financial statements to the Board.

KPMG LLP, the independent auditors, have audited Pembina's consolidated financial statements and the effectiveness of internal control over financial reporting as of December 31, 2021 in accordance with the standards of the Public Company Accounting Oversight Board (United States). The independent auditors have full and unrestricted access to the Audit Committee to discuss their audit and their related findings.

Changes in Internal Control over Financial Reporting

Other than the remediation of the material weakness described below, there has been no change in Pembina's internal control over financial reporting that occurred during the year ended December 31, 2021 that has materially affected, or are reasonably likely to materially affect, Pembina's internal control over financial reporting.

Remediation of Material Weakness

As at September 30, 2021, management identified a material weakness related to controls over contract assessment in its Marketing business. Specifically, the Company did not have controls to identify all contracts where an accounting assessment was required and as a result lacked analysis of all relevant contract terms required to make the assessment in the Marketing business. Because of the deficiency, the Company presented revenue and cost of goods sold for certain crude contracts in the Marketing and New Ventures Division on a gross basis that should have been recorded on a net basis.

Management restated revenue and cost of goods sold for the comparative years ended December 31, 2020 and December 31, 2019 with no impact on earnings, cash flows or financial position. Refer to Note 3 to the Consolidated Financial Statements as at and for the year ended December 31, 2020 for details of the restatement.

Over the course of the fourth quarter of 2021, the Company has remediated the control deficiency by designing and implementing controls associated with enhanced contract analysis and revising the processes to assess accounting implications for complex contracts and to identify contracts requiring consultation with internal experts to assist in the evaluation of technical accounting matters. Management has supervised an evaluation of the remedial measures implemented by the Company in the fourth quarter of 2021. Based on this evaluation, including testing the operating effectiveness of the controls addressing the material weakness, management have concluded that the previously identified material weakness relating to the operating effectiveness of the Company's disclosure controls and procedures and its internal controls over financial reporting has been remediated as at December 31, 2021.

"J. Scott Burrows"

J. Scott Burrows

President and Chief Executive Officer

"Cameron J. Goldade"

Cameron J. Goldade

Interim Chief Financial Officer

February 24, 2022

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of Pembina Pipeline Corporation

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated statements of financial position of Pembina Pipeline Corporation and subsidiaries (the "Company") as of December 31, 2021 and 2020, the related consolidated statements of earnings (loss) and comprehensive income (loss), changes in equity, and cash flows for each of the years then ended, 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 its financial performance and its cash flows for the years then ended, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

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 24, 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 Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a critical audit matter 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 matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Goodwill impairment

As discussed in Note 8 to the consolidated financial statements, the goodwill balance as of December 31, 2021 was \$4,693 million and the carrying amount of goodwill allocated to the Marketing & New Ventures operating segment was \$1,439 million. For the purpose of the impairment test, goodwill has been allocated to the Company's operating segments which represents the lowest level within the Company at which the goodwill is monitored for management purposes. As discussed in Note 3 to the consolidated financial statements, the Company performs goodwill impairment testing on an annual basis and whenever events or changes in circumstances indicate that the carrying value of an operating segment exceeds its recoverable amount. The recoverable amounts were determined using a fair value less costs of disposal approach which is based on a discounted cash flow model.

We identified the assessment of the goodwill impairment for the Marketing & New Ventures operating segment as a critical audit matter. A high degree of subjective auditor judgment was required to evaluate the significant revenue assumptions such as projected commodity volumes and pricing, growth rate ("forecasted cash flow assumptions") and discount rate used in the discounted cash flow model. Changes to those assumptions could have had a significant impact on the Company's assessment of the recoverable amount of the operating segment.

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, including controls related to forecasted cash flow assumptions and the discount rate used in the determination of the recoverable amount. We evaluated the Company's projected commodity pricing assumptions by comparing to publicly available forward price curves. We compared the Company's historical forecasted results to actual results to assess the Company's ability to accurately forecast and to assess the growth rate. We evaluated the Company's forecasted cash flow assumptions by comparing them to actual results. In addition, we involved a valuation professional with specialized skills and knowledge, who assisted in:

- testing the recoverable amount for the operating segment using the operating segment's forecasted cash flow assumptions and discount rate, and comparing the result to the Company's calculated recoverable amount
- evaluating the discount rate used in the valuation for the operating segment by comparing the inputs against publicly available market data for comparable entities and assessing the resulting discount rate
- evaluating the historical and forecasted cash flow multiples implied in the valuation for the operating segment by comparing them against publicly available historical and forecasted cash flow multiples for comparable entities.

KPMG LLP

Chartered Professional Accountants

We have served as the Company's auditor since 1997.

Calgary, Canada
February 24, 2022

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of Pembina Pipeline Corporation

Opinion on Internal Control Over Financial Reporting

We have audited Pembina Pipeline Corporation's (and subsidiaries') (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 has 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 statements of financial position of the Company as of December 31, 2021 and 2020, the related consolidated statements of earnings (loss) and comprehensive income (loss), changes in equity, and cash flows for the years then ended, and the related notes (collectively, the consolidated financial statements), and our report dated February 24, 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 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.

KPMG LLP

Chartered Professional Accountants

Calgary, Canada
February 24, 2022

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

As at December 31		
(\$ millions)	2021	2020
Assets		
Current assets		
Cash and cash equivalents	43	81
Trade receivables and other (Note 5)	812	662
Inventory (Note 6)	376	221
Derivative financial instruments (Note 25)	14	25
	1,245	989
Non-current assets		
Property, plant and equipment (Note 7)	18,193	18,549
Intangible assets and goodwill (Note 8)	6,238	6,340
Investments in equity accounted investees (Note 9)	4,622	4,377
Right-of-use assets (Note 13)	581	651
Finance lease receivable (Note 13)	211	138
Deferred tax assets (Note 11)	257	322
Derivative financial instruments and other assets (Note 28)	109	50
	30,211	30,427
Total assets	31,456	31,416
Liabilities and equity		
Current liabilities		
Trade payables and other (Note 12)	1,063	780
Loans and borrowings (Note 14)	1,000	600
Dividends payable	115	115
Lease liabilities	88	99
Contract liabilities (Note 17)	71	62
Taxes payable	—	56
Derivative financial instruments (Note 25)	53	69
	2,390	1,781
Non-current liabilities		
Loans and borrowings (Note 14)	9,645	10,276
Subordinated hybrid notes (Note 14)	594	—
Lease liabilities	635	675
Decommissioning provision (Note 15)	412	348
Contract liabilities (Note 17)	220	230
Deferred tax liabilities (Note 11)	3,011	2,925
Other liabilities	186	166
	14,703	14,620
Total liabilities	17,093	16,401
Equity		
Attributable to shareholders	14,303	14,955
Attributable to non-controlling interest	60	60
Total equity	14,363	15,015
Total liabilities and equity	31,456	31,416

See accompanying notes to the audited consolidated financial statements

Approved on behalf of the Board of Directors:

"Maureen E. Howe"
Maureen E. Howe
 Director

"Randall J. Findlay"
Randall J. Findlay
 Director

CONSOLIDATED STATEMENTS OF EARNINGS (LOSS) AND COMPREHENSIVE INCOME (LOSS)

For the years ended December 31		
<i>(\$ millions, except per share amounts)</i>	2021	2020
Revenue (Note 17)	8,627	5,953
Cost of sales (Note 20)	6,134	3,883
Loss on commodity-related derivative financial instruments (Note 25)	127	30
Share of profit from equity accounted investees - operations (Note 9)	281	282
Impairment in share of profit from equity accounted investees (Note 9)	—	(314)
Gross profit	2,647	2,008
General and administrative	306	246
Other income (Note 18)	(248)	(18)
Impairment expense (Note 10)	474	1,776
Results from operating activities	2,115	4
Net finance costs (Note 19)	450	420
Earnings (loss) before income tax	1,665	(416)
Current tax expense (Note 11)	286	240
Deferred tax expense (recovery) (Note 11)	137	(340)
Income tax expense (recovery) (Note 11)	423	(100)
Earnings (loss)	1,242	(316)
Other comprehensive income (loss), net of tax (Note 24 & 25)		
Exchange loss on translation of foreign operations	(18)	(117)
Impact of hedging activities	10	31
Re-measurement of defined benefit liability (Note 22)	34	(10)
Total comprehensive income (loss) attributable to shareholders	1,268	(412)
Earnings (loss) attributable to common shareholders, net of preferred share dividends (Note 21)	1,098	(476)
Earnings (loss) per common share – basic (dollars) (Note 21)	2.00	(0.86)
Earnings (loss) per common share – diluted (dollars) (Note 21)	1.99	(0.86)
Weighted average number of common shares (millions)		
Basic	550	550
Diluted	551	550

See accompanying notes to the audited consolidated financial statements

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(\$ millions)	Attributable to Shareholders of the Company					Non-Controlling Interest	Total Equity
	Common Share Capital	Preferred Share Capital	Deficit	AOCI ⁽¹⁾	Total		
December 31, 2020	15,644	2,946	(3,637)	2	14,955	60	15,015
Total comprehensive income							
Earnings	—	—	1,242	—	1,242	—	1,242
Other comprehensive income (Note 24)	—	—	—	26	26	—	26
Total comprehensive income	—	—	1,242	26	1,268	—	1,268
Transactions with shareholders of the Company (Note 16)							
Part VI.1 tax on preferred shares	—	(9)	—	—	(9)	—	(9)
Repurchase of common shares	(13)	—	(4)	—	(17)	—	(17)
Preferred shares redemption	—	(420)	—	—	(420)	—	(420)
Share-based payment transactions	47	—	—	—	47	—	47
Dividends declared – common	—	—	(1,386)	—	(1,386)	—	(1,386)
Dividends declared – preferred	—	—	(135)	—	(135)	—	(135)
Total transactions with shareholders of the Company	34	(429)	(1,525)	—	(1,920)	—	(1,920)
December 31, 2021	15,678	2,517	(3,920)	28	14,303	60	14,363
December 31, 2019	15,539	2,956	(1,785)	98	16,808	60	16,868
Total comprehensive loss							
Loss	—	—	(316)	—	(316)	—	(316)
Other comprehensive loss (Note 24)	—	—	—	(96)	(96)	—	(96)
Total comprehensive loss	—	—	(316)	(96)	(412)	—	(412)
Transactions with shareholders of the Company (Note 16)							
Part VI.1 tax on preferred shares	—	(10)	—	—	(10)	—	(10)
Share-based payment transactions	105	—	—	—	105	—	105
Dividends declared – common	—	—	(1,385)	—	(1,385)	—	(1,385)
Dividends declared – preferred	—	—	(151)	—	(151)	—	(151)
Total transactions with shareholders of the Company	105	(10)	(1,536)	—	(1,441)	—	(1,441)
December 31, 2020	15,644	2,946	(3,637)	2	14,955	60	15,015

⁽¹⁾ Accumulated Other Comprehensive Income (loss) ("AOCI").

See accompanying notes to the audited consolidated financial statements

CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended December 31		
(\$ millions)	2021	2020
Cash provided by (used in)		
Operating activities		
Earnings (loss)	1,242	(316)
Adjustments for:		
Share of profit from equity accounted investees - operations (Note 9)	(281)	(282)
Impairment in share of profit from equity accounted investees (Note 10)	—	314
Distributions from equity accounted investees (Note 9)	461	459
Depreciation and amortization	723	700
Impairment expense (Note 10)	474	1,776
Unrealized (gain) loss on commodity-related derivative financial instruments (Note 25)	(73)	84
Net finance costs (Note 19)	450	420
Net interest paid (Note 19)	(418)	(383)
Income tax expense (recovery) (Note 11)	423	(100)
Taxes paid	(355)	(295)
Share-based compensation expense (Note 23)	100	28
Share-based compensation payment	(32)	(45)
Other	36	(15)
Change in non-cash operating working capital	(100)	(93)
Cash flow from operating activities	2,650	2,252
Financing activities		
Net decrease in bank borrowings (Note 14)	(623)	(567)
Proceeds from issuance of long-term debt, net of issue costs (Note 14)	1,587	1,567
Repayment of long-term debt	(600)	(273)
Repayment of lease liability	(87)	(94)
Exercise of stock options	16	88
Repurchase of common shares (Note 16)	(17)	—
Redemption of preferred shares (Note 16)	(420)	—
Common share dividends paid (Note 16)	(1,386)	(1,380)
Preferred share dividends paid (Note 16)	(135)	(150)
Cash flow used in financing activities	(1,665)	(809)
Investing activities		
Capital expenditures	(658)	(1,029)
Contributions to equity accounted investees (Note 9)	(335)	(202)
Acquisitions (Note 9)	(41)	—
Receipt of finance lease payments	11	9
Interest paid during construction (Note 19)	(25)	(46)
Advances to related parties	(9)	(32)
Changes in non-cash investing working capital and other	18	(183)
Cash flow used in investing activities	(1,039)	(1,483)
Change in cash and cash equivalents	(54)	(40)
Effect of movement in exchange rates on cash held	16	(8)
Cash and cash equivalents, beginning of period	81	129
Cash and cash equivalents, end of period	43	81

See accompanying notes to the audited consolidated financial statements

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. REPORTING ENTITY

Pembina Pipeline Corporation ("Pembina" or the "Company") is a Calgary-based, leading transportation and midstream service provider serving North America's energy industry. The audited consolidated financial statements ("Consolidated Financial Statements") include the accounts of Pembina, its subsidiary companies, partnerships and any investments in associates and joint arrangements as at and for the year ended December 31, 2021.

Pembina owns an integrated network of hydrocarbon liquids and natural gas pipelines, gas gathering and processing facilities, oil and natural gas liquids infrastructure and logistics services, and a growing export terminals business. Pembina's integrated assets and commercial operations along the majority of the hydrocarbon value chain allow it to offer a full spectrum of midstream and marketing services to the energy sector.

2. BASIS OF PREPARATION

The Consolidated Financial Statements are presented in Canadian dollars, Pembina's functional currency, with all values presented in millions, unless otherwise indicated.

The Consolidated Financial Statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). The significant accounting policies applied in preparation of the Consolidated Financial Statements are set out below in Note 3 and have been applied consistently to all periods presented.

Certain insignificant comparative amounts have been reclassified to conform to the presentation adopted in the current year.

The Consolidated Financial Statements were authorized for issue by Pembina's Board of Directors on February 24, 2022.

a. Basis of Measurement

The Consolidated Financial Statements have been prepared on a historical cost basis with some exceptions, as detailed in the accounting policies set out below.

b. Basis of Consolidation

These Consolidated Financial Statements include the results of the Company and its subsidiaries together with its interest in joint arrangements.

i) Subsidiaries

Subsidiaries are entities, including unincorporated entities such as partnerships, controlled by Pembina. The financial results of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases. The accounting policies of subsidiaries are aligned with the policies adopted by Pembina.

Non-controlling interests represent existing outside owned equity interests in a subsidiary. The non-controlling interests were recognized at fair value on the acquisition date and are presented as a separate component of equity. The equity interests bear conditional non-discretionary distributions and will continue to be held as a non-controlling interest in equity at their acquisition date fair value until derecognition, either when the conditions are met for reclassification from equity to financial liabilities, or when the equity interests are cancelled or on a loss of control of the relevant subsidiary.

ii) Joint Arrangements

Joint arrangements represent activities where Pembina has joint control established by a contractual agreement. Joint control requires unanimous consent for the relevant financial and operational decisions. A joint arrangement is either a joint operation, whereby the parties have rights to the assets and obligations for the liabilities, or a joint venture, whereby the parties have rights to the net assets.

For a joint operation, the Consolidated Financial Statements include Pembina's proportionate share of the assets, liabilities, revenues, expenses and cash flows of the arrangement with items of a similar nature on a line-by-line basis, from the date that joint control commences until the date that joint control ceases.

Joint ventures are accounted for using the equity method of accounting and are initially recognized at cost, or fair value if acquired as part of a business combination. Joint ventures are adjusted thereafter for the post-acquisition change in the Company's share of the equity accounted investment's net assets. Pembina's Consolidated Financial Statements include its share of the equity accounted investment's profit or loss and other comprehensive income, or income equal to preferred distributions for certain preferred share interests in equity accounted investees, until the date that joint control ceases. When Pembina's share of losses exceeds its interest in an equity accounted investee, the carrying amount of that interest, including any long-term investments, is reduced to nil, and the recognition of further losses is discontinued except to the extent that Pembina has an obligation or has made payments on behalf of the investee. Distributions from and contributions to investments in equity accounted investees are recognized when received or paid.

Acquisition of an incremental ownership in a joint arrangement where Pembina maintains joint control is recorded at cost or fair value if acquired as part of a business combination. Where Pembina has a partial disposal, including a deemed disposal, of a joint arrangement and maintains joint control, the resulting gains or losses are recorded in earnings at the time of disposal.

iii) Transactions Eliminated on Consolidation

Balances and transactions, and any revenue and expenses arising from transaction with or between subsidiaries are eliminated in preparing the consolidated financial statements. Gains arising from transactions with investments in equity accounted investees are eliminated against the investment to the extent of Pembina's interest in the investee. Losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

iv) Foreign Currency

Transactions in foreign currencies are translated to Pembina's functional currency at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the reporting date are retranslated to Pembina's functional currency at the exchange rate at that date, with exchange differences recognized in earnings.

Non-monetary assets and liabilities denominated in foreign currencies that are measured at fair value are retranslated to the functional currency at the exchange rate at the date that the fair value was determined. Non-monetary items that are measured at historical cost in a foreign currency are translated using the exchange rate at the date of the transaction.

The assets and liabilities of subsidiaries, and investments in equity accounted investees, whose functional currencies are other than Canadian dollars are translated into Canadian dollars at the foreign exchange rate at the balance sheet date, while revenues and expenses of such subsidiaries are translated using average monthly foreign exchange rates, which approximate the foreign exchange rates on the dates of the transactions. Foreign exchange differences arising on translation of subsidiaries and investments in equity accounted investees with a functional currency other than the Canadian dollar are included in other comprehensive income.

c. Use of Estimates and Judgments

The preparation of the Consolidated Financial Statements in conformity with IFRS requires management to make judgments, estimates and assumptions that are based on the facts and circumstances and estimates at the date of the Consolidated Financial Statements and affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Judgments, estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

Ongoing Impact of the COVID-19 Pandemic

Following the World Health Organization declaring the COVID-19 outbreak a pandemic in March 2020, many governments have imposed restrictions on individuals and businesses to contain the spread of the virus, which adversely impacted global commercial activity and significantly increased economic uncertainty. Although restrictions have largely been relaxed and vaccination programs implemented, there continues to be uncertainty and the potential for continued volatility in the global economy as a result of the possible resurgence of the virus, including variants, while the COVID-19 pandemic remains. Management considered these uncertainties when applying judgment to estimates and assumptions in the Consolidated Financial Statements.

The following judgments and estimation uncertainties are those management considers material to the Consolidated Financial Statements:

Judgments

(i) Impairment

Assessment of impairment of non-financial assets is based on management's judgment of whether or not events or changes in circumstances indicate that the carrying value of an asset, investment, cash generating unit ("CGU") or group of CGUs exceeds its recoverable amount. The determination of a CGU is based on management's judgment and is an assessment of the smallest group of assets that generate cash inflows independently of other assets. When an impairment test is performed, the carrying value of a CGU or group of CGUs is compared to its recoverable amount, defined as the greater of fair value less costs of disposal and value in use. As such, the asset composition of a CGU or group of CGUs directly impacts both the carrying value and recoverability of the assets included therein.

(ii) Joint Control Over Joint Arrangements

The determination of joint control requires judgment about the influence Pembina has over the financial and operating decisions of an arrangement and the extent of the benefits it obtains based on the facts and circumstances of the arrangement during the reporting period. Joint control exists when decisions about the relevant activities require the unanimous consent of the parties that control the arrangement collectively. Ownership percentage alone may not be a determinant of joint control.

Estimates

(i) Deferred Taxes

The calculation of the deferred tax asset or liability is based on assumptions about the timing of many taxable events and the enacted or substantively enacted rates anticipated to be applicable to income in the years in which temporary differences are expected to be realized or reversed. Deferred income tax assets are recognized to the extent that it is probable that the deductible temporary differences will be recoverable in future periods, and estimates and judgement are used in assessing the recognition. Estimates including, but not limited to, the timing of reversal and future taxability may differ on actual realization, and may result in an income tax charge or credit in future periods.

(ii) Impairment of Non-Financial Assets

In determining the recoverable amount of a CGU, a group of CGUs or an individual asset, management uses its best estimates of future cash flows, including considerations related to climate change, and assesses discount rates to reflect management's best estimate of a rate that reflects a current market assessment of the time value of money and the specific risks associated with the underlying assets and cash flows.

3. SIGNIFICANT ACCOUNTING POLICIES

a. Cash and Cash Equivalents

Cash and cash equivalents comprise cash balances, call deposits and short-term investments with original maturities of ninety days or less, and are used by Pembina in the management of its short-term commitments.

b. Inventories

Inventories are measured at the lower of cost and net realizable value and consist primarily of crude oil, natural gas liquids ("NGL") and spare parts that are expected to be used within one year of the year-end date. The cost of inventories is determined using the weighted average costing method and includes direct purchase costs and when applicable, costs of production, extraction, fractionation, and transportation. Net realizable value is the estimated selling price in the ordinary course of business less the estimated selling costs. All changes in the value of inventories are reflected in earnings.

c. Financial Instruments

Financial assets and liabilities are offset and the net amount presented in the consolidated statement of financial position when, and only when, Pembina has a legal right to offset the amounts and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

i) Non-Derivative Financial Assets

Pembina initially recognizes loans, receivables, advances to related parties and deposits on the date that they are originated. All other financial assets are recognized on the trade date at which Pembina becomes a party to the contractual provisions of the instrument.

Pembina derecognizes a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. Any interest in transferred financial assets that is created or retained by Pembina is recognized as a separate asset or liability. On derecognition, the difference between the carrying amount of the financial asset and the consideration received is recognized in earnings.

Pembina classifies non-derivative financial assets into the following categories:

Financial Assets at Amortized Cost

A financial asset is classified in this category if the asset is held within a business model whose objective is to collect contractual cash flows on specified dates that are solely payments of principal and interest. At initial recognition, financial assets at amortized cost are recognized at fair value plus directly attributable transaction costs. Subsequent to initial recognition, these financial assets are recorded at amortized cost using the effective interest method less any expected credit losses that will be realized and impairment loss allowances.

Financial Assets at Fair Value Through Other Comprehensive Income

A financial asset is classified in this category if the asset is held within a business model whose objective is met by both collecting contractual cash flows and selling financial assets. Pembina did not have any financial assets classified at fair value through other comprehensive income during the years covered in these financial statements.

Financial Assets at Fair Value Through Earnings

A financial asset is classified in this category if it is not classified as a financial asset at amortized cost or a financial asset at fair value through other comprehensive income, or it is an equity instrument designated as such on initial recognition. At initial recognition, and subsequently, these financial assets are recognized at fair value.

ii) Non-Derivative Financial Liabilities

Pembina initially recognizes financial liabilities on the trade date at which Pembina becomes a party to the contractual provisions of the instrument.

Non-derivative financial liabilities are recognized initially at fair value plus any directly attributable transaction costs. Subsequent to initial recognition these financial liabilities are measured at amortized cost using the effective interest method.

Pembina derecognizes a financial liability when its contractual obligations are discharged, cancelled or expire. On derecognition, the difference between the carrying value of the liability and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognized in earnings.

Pembina records a modification or exchange of an existing liability as a derecognition of the financial liability if the terms are substantially different, resulting in a difference of more than 10 percent when comparing the present value of the remaining cash flows of the existing liability to the present value of the discounted cash flows under the new terms using the original effective interest rate.

If a modification to an existing liability causes a revision to the estimated payments of the liability but is not treated as a derecognition, Pembina adjusts the gross carrying amount of the liability to the present value of the estimated contractual cash flows using the instrument's original effective interest rate, with the difference recorded in earnings.

Pembina's non-derivative financial liabilities are comprised of: bank overdrafts, trade payables and accrued liabilities, taxes payable, dividends payable, loans and borrowings, lease liabilities and other liabilities.

Bank overdrafts that are repayable on demand and form an integral part of Pembina's cash management are included as a component of cash and cash equivalents for the purpose of the consolidated statements of cash flows.

iii) Common Share Capital

Common shares are classified as equity. Incremental costs directly attributable to the issue of common shares and share options are recognized as a deduction from equity, net of any tax effects. When the company repurchases its own common shares, share capital is reduced by the average carrying value of the shares repurchased. The excess of the purchase price over the average carrying value is recognized as an increase in deficit. Shares are cancelled upon repurchase.

iv) Preferred Share Capital

Preferred shares are classified as equity because they bear discretionary dividends and do not contain any obligations to deliver cash or other financial assets. Discretionary dividends are recognized as equity distributions on approval by Pembina's Board of Directors. Incremental costs directly attributable to the issue of preferred shares are recognized as a deduction from equity, net of any tax effects.

v) Derivative Financial Instruments and Hedge Accounting

Pembina holds derivative financial instruments to manage its interest rate, commodity, power costs and foreign exchange risk exposures. Derivatives are recognized initially at fair value. Subsequent to initial recognition, derivatives are measured at fair value with changes recognized immediately in earnings, unless hedge accounting is applied.

Pembina applies hedge accounting to certain financial instruments that qualify for and are designated for hedge accounting treatment. At inception of a designated hedging relationship, formal documentation is prepared and includes the risk management objective and strategy for undertaking the hedge, identification of the hedged item and the hedging instrument, the nature of the risk being hedged and how Pembina will assess the hedging instrument's effectiveness in offsetting the exposure to changes in the hedged item.

For derivatives that are designated and qualified cash flow hedges, the effective portion of changes in fair value is accumulated in other comprehensive income. The amount accumulated is reclassified to earnings in the same period or periods during which the hedged expected future cash flows occur. Any ineffective portion of changes in fair value of hedges are recorded in earnings.

For non-derivative financial liabilities designated as hedging instruments in a hedge of the net investment in foreign operations, the effective portion of foreign exchange gains and losses arising on translation of the financial liability is recognized in other comprehensive income. Any ineffective portion of the foreign exchange gains and losses arising from the translation of the financial liability is recognized immediately in earnings. The amount accumulated in other comprehensive income is reclassified to earnings on disposal of the foreign operation.

Hedge accounting is discontinued prospectively when the hedging relationship no longer qualifies for hedge accounting or the hedging instrument is sold or terminated.

d. Property, Plant and Equipment

i) Recognition and Measurement

Items of property, plant and equipment are measured initially at cost. Thereafter, property, plant and equipment are recorded net of accumulated depreciation and accumulated impairment losses.

Cost includes expenditures that are directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour, any other costs directly attributable to bringing the assets to a working condition for their intended use, estimated decommissioning provisions and borrowing costs on qualifying assets.

Cost may also include any gain or loss realized on foreign currency transactions directly attributable to the purchase or construction of property, plant and equipment. Purchased software that is integral to the functionality of the related equipment is capitalized as part of that equipment.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate components of property, plant and equipment.

The gain or loss on disposal of an item of property, plant and equipment is determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment, and is recognized in earnings.

ii) Subsequent Costs

The cost of replacing a part of an item of property, plant and equipment is recognized in the carrying amount of the item if it is probable that the future economic benefits embodied within the part will flow to Pembina, and its cost can be measured reliably. The carrying amount of the replaced part is derecognized and recorded as depreciation expense. The cost of maintenance and repair expenses of the property, plant and equipment are recognized in earnings as incurred.

iii) Depreciation

Depreciation is based on the cost of an asset less its residual value. Significant components of individual assets are assessed and if a component has a useful life that is different from the remainder of the asset, that component is depreciated separately. Land and linefill are not depreciated.

Depreciation is recognized in earnings over an asset's useful life on a straight line or declining balance basis, which most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset. An asset's useful life is determined as the lower of its physical life and economic life. Estimated useful lives are based on management's assumptions and estimates of the physical useful lives of the assets, the economic lives, which maybe associated with the reserve lives and commodity type of the production area, in addition to the estimated residual value. Useful lives over which costs should be depreciated may be impacted by changes in our strategy, process or operations as a result of climate change initiatives. Depreciation commences once an asset is available for use.

Depreciation methods, useful lives and residual values are reviewed annually and adjusted if appropriate.

e. Intangible Assets

i) Goodwill

Goodwill is measured at cost less accumulated impairment losses.

In respect of investments in equity accounted investees, goodwill is included in the carrying amount of the investment, and an impairment loss on such an investment is allocated to the investment and not to any asset, including goodwill, that forms the carrying amount of the investment in equity accounted investee.

ii) Other Intangible Assets

Other intangible assets acquired individually by Pembina are initially recognized and measured at cost. Thereafter, intangible assets with finite useful lives are recorded net of accumulated amortization and accumulated impairment losses.

iii) Subsequent Expenditures

Subsequent expenditures are capitalized only when they increase the future economic benefits embodied in the specific asset to which they relate. All other expenditures are recognized in earnings as incurred.

iv) Amortization

Amortization is based on the cost of an asset less its residual value.

Amortization is recognized in earnings over the estimated useful lives of intangible assets, other than goodwill, from the date that they are available for use. Amortization is included in cost of sales and general and administrative expense.

Amortization methods, useful lives and residual values are reviewed annually and adjusted if appropriate.

f. Leases

A specific asset is the subject of a lease if the contract conveys the right to control the use of that identified asset for a period of time in exchange for consideration. This determination is made at inception of a contract, and is reassessed when the terms and conditions of the contract are amended.

At inception or on reassessment of a contract that contains a lease component, Pembina allocates contract consideration to the lease and non-lease components on the basis of their relative stand-alone prices. The consideration allocated to the lease components is recognized in accordance with the policies for lessee and lessor leases, as described below. The consideration allocated to non-lease components is recognized in accordance with its nature.

i) Lessee

Leased assets are recognized as right-of-use assets, with corresponding lease liabilities recognized on the statement of financial position at the lease commencement date.

Right-of-use assets are initially recognized at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset and restore the site of an underlying asset to the condition required by the terms of the lease, less any lease incentives received. Right-of-use assets are subsequently measured at cost less any accumulated depreciation and accumulated impairment losses, adjusted for remeasurements of the lease liability. The right-of-use asset is depreciated over the lesser of the asset's useful life and the lease term on a straight-line basis.

The lease liability is initially measured at the present value of the lease payments, discounted using the interest rate implicit in the lease if readily determinable, or at a rate Pembina would be required to pay to borrow over a similar term with a similar security to obtain an asset of a similar value to the right-of-use asset. Lease payments in an optional renewal period are included in the lease liability if Pembina is reasonably certain to exercise such option. In measuring lease liabilities, management makes assessments of the stand-alone selling prices of each lease and non-lease component for the purposes of allocating consideration to each component. Management applies its best estimate with respect to the likelihood of renewal, extension and termination option exercising in determining the lease term. The lease liability is subsequently increased by interest expense on the lease liability and decreased by lease payments made. Interest expense is recorded in earnings at an amount that represents a constant periodic rate of interest on the remaining balance of the lease liability.

The lease liability is remeasured when there is a change in future lease payments arising from a change in an index or rate, a change in the estimated guaranteed residual value to be paid, or a change in the assessment of whether a purchase option, extension option or termination option is reasonably certain to be exercised. A corresponding adjustment is made to the right of use asset when a liability is remeasured, or the adjustment is recorded in earnings if the right of use asset has been reduced to zero.

Pembina has elected to apply the recognition exemptions for short-term and low value leases. Pembina recognizes lease payments associated with these leases as an expense on a straight-line basis over the lease term.

ii) Lessor

Lessor leases are classified as either operating leases or finance leases according to the substance of the contract. Leases transferring substantially all of the risks incidental to asset ownership are classified as finance leases, while all other leases are classified as operating leases. Subleases are classified as either operating or finance leases in reference to the right-of-use asset arising from the head lease.

Assets under finance lease are recognized in finance lease receivables at the value of the net investment in the lease. The net investment in the lease is measured at the net present value of the future lease payments and the unguaranteed residual values of the underlying assets, discounted using the interest rate implicit in the lease. Finance income is recognized over the lease term in a pattern reflecting a consistent rate of return on the finance lease receivable. Finance lease income generated from physical assets in the normal course of operations is recorded as a component of revenue. All other finance lease income is recorded in net finance costs.

Lease payments from operating leases are recognized in revenue on either a straight-line basis or a systematic basis representative of the pattern of economic benefit transfer.

g. Impairment

i) Non-Derivative Financial Assets

Impairment of financial assets carried at amortized cost is assessed using the lifetime expected credit loss of the financial asset at initial recognition and throughout the life of the financial asset, except where credit risk has not increased significantly since initial recognition, in which case impairment is assessed at the 12 month expected credit loss of the financial asset at the reporting date.

Impairment losses are recognized in earnings and reflected as a reduction in the related financial asset.

ii) Non-Financial Assets

The carrying amounts of Pembina's non-financial assets, other than: inventory, assets arising from employee benefits and deferred tax assets, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, the asset's recoverable amount is estimated.

For goodwill and intangible assets that have indefinite useful lives or that are not yet available for use, the recoverable amount is estimated annually in connection with the annual goodwill impairment test.

For the purpose of impairment testing, assets that cannot be tested individually are grouped together into CGUs, the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets. CGUs may incorporate integrated assets from multiple operating segments. For the purpose of goodwill impairment testing, CGUs are aggregated to the operating segment level, which reflects the lowest level at which goodwill is monitored for management purposes. Goodwill acquired in a business combination is allocated to CGUs or groups of CGUs that are expected to benefit from the synergies of the combination.

An impairment loss is recognized if the carrying amount of an asset, CGU or group of CGUs exceeds its estimated recoverable amount.

The recoverable amount of an asset, CGU or group of CGUs is the greater of its value in use and its fair value less costs of disposal. In assessing the recoverable amount, the estimated future cash flows are discounted to their present value using a discount rate that reflects current market assessments of the time value of money and the risks specific to the asset, CGU or group of CGUs.

Pembina's corporate assets do not generate separate cash inflows and are utilized by more than one CGU. Corporate assets are allocated to CGUs on a reasonable and consistent basis and tested for impairment as part of the testing of the CGU to which the corporate asset is allocated. If there is an indication that a corporate asset may be impaired, then the recoverable amount is determined for the CGU to which the corporate asset has been allocated.

Impairment losses are recognized in earnings. Impairment losses recognized in respect of a CGU (group of CGUs) are allocated first to reduce the carrying amount of any goodwill allocated to the CGU (group of CGUs), and then to reduce the carrying amounts of the other assets in the CGU (group of CGUs) on a pro rata basis.

An impairment loss in respect of goodwill is not reversed. In respect of other assets, impairment losses recognized in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

Goodwill that forms part of the carrying amount of an investment in an equity accounted investee is not recognized separately, and therefore is not tested for impairment separately. Instead, the entire amount of the investment is tested for impairment as a single asset when there is objective evidence that the equity accounted investee may be impaired, unless the equity accounted investee does not generate cash flows that are largely independent of those from other assets of the entity in which case it is combined in a CGU with the related assets.

h. Employee Benefits

i) Defined Contribution Plans

A defined contribution plan is a post-employment benefit plan under which an entity pays fixed contributions into a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution pension plans are recognized as an employee benefit expense in earnings in the periods during which services are rendered by employees. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in future payments is available.

ii) Defined Benefit Pension Plans

A defined benefit pension plan is a post-employment benefit plan other than a defined contribution plan. Pembina's net obligation in respect of defined benefit pension plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods, discounted to determine its present value, less the fair value of any plan assets. The discount rate used to determine the present value is established by referencing market yields on high-quality corporate bonds on the measurement date with cash flows that match the timing and amount of expected benefits.

The calculation is performed, at a minimum, every three years by a qualified actuary using the actuarial cost method. The actuarial valuation is prepared using management's best estimates with respect to longevity, discount and inflation rates, compensation increases, market returns on plan assets, retirement and termination rates. When the calculation results in a benefit to Pembina, the recognized asset is limited to the present value of economic benefits available in the form of future expenses payable from the plan, any future refunds from the plan or reductions in future contributions to the plan. To calculate the present value of economic benefits, consideration is given to any minimum funding requirements that apply to any plan in Pembina. An economic benefit is available to Pembina if it is realizable during the life of the plan or on settlement of the plan liabilities.

When the benefits of a plan are improved, the portion of the increased benefit relating to past service by employees is recognized in earnings immediately.

Pembina recognizes all actuarial gains and losses arising from defined benefit plans in other comprehensive income and expenses related to defined benefit plans in earnings.

Pembina recognizes gains or losses on the termination or settlement of a defined benefit plan when the termination or settlement occurs. The gain or loss on termination comprises any resulting change in the fair value of plan assets, change in the present value of defined benefit obligation and any related actuarial gains or losses and past service cost that had not previously been recognized.

iii) Short-Term Employee Benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided.

A liability is recognized for the amount expected to be paid if Pembina has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee, and the obligation can be estimated reliably.

iv) Share-Based Payment Transactions

For equity settled share-based payment plans, the fair value of the share-based payment at grant date is recognized as an expense, with a corresponding increase in equity, over the period that the employees unconditionally become entitled to the awards. The amount recognized as an expense is adjusted to reflect the number of awards for which the related service and non-market vesting conditions are expected to be met, such that the amount ultimately recognized as an expense is based on the number of awards that meet the related service conditions at the vesting date.

For cash settled share-based payment plans, the fair value of the amount payable to employees is recognized as an expense with a corresponding increase in liabilities, over the period that the employees unconditionally become entitled to payment. The liability is remeasured at each reporting date and at settlement date. Any changes in the fair value of the liability are recognized as an expense in earnings.

i. Provisions

A provision is recognized if, as a result of a past event, Pembina has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic resources will be required to settle the obligation. With regards to these potential obligations, Pembina considers environmental laws, regulations and interpretations by regulatory authorities in determining expected cash flows. Updates to those laws and regulations, including those related to climate change, could impact the estimate. Provisions are measured at each reporting date based on the best estimate of the settlement amount. Where the effect of the time value of money is material, provisions are discounted at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount rate is recognized as accretion in finance costs.

i) Decommissioning Provision

Pembina's activities give rise to certain dismantling, decommissioning, environmental reclamation and remediation obligations at the end of an asset's economic life. A provision is made for the estimated cost of site restoration and capitalized as part of the cost of the underlying asset to which the provision relates. Based on the long-term nature of the decommissioning provision, the most significant uncertainties in estimating the provision are the determination of whether a present obligation exists, the discount and inflation rates used, the costs that will be incurred, the timing of when these costs will occur and the impact of climate change.

Decommissioning obligations are measured at the present value, based on a credit-adjusted risk-free rate, of management's best estimate of what is reasonably expected to be incurred to settle the obligation at the end of an asset's economic life. Subsequent to the initial measurement, the obligation is adjusted at the end of each period to reflect the passage of time, changes in the credit-adjusted risk-free rate and changes in the estimated future cash flows underlying the obligation. The increase in the provision due to the passage of time is recognized as accretion in finance costs whereas increases or decreases due to changes in the estimated future cash flows or credit adjusted risk-free rate are added to or deducted from the cost of the related asset.

j. Revenue

i) Take-or-Pay

Pembina provides transportation, gas processing, fractionation, terminalling, and storage services under take-or-pay contracts. In a take-or-pay contract, Pembina is entitled to a minimum fee for the firm service promised to a customer over the contract period, regardless of actual volumes transported, processed, terminalled, or stored. This minimum fee can be represented as a set fee for an annual minimum volume, or an annual minimum revenue requirement. In addition, these contracts may include variable consideration for operating costs that are flow through to the customer. In estimating the contract value, management makes assessments as to whether variable consideration is constrained or not reasonably estimable, such that an amount or portion of an amount cannot be included in the estimate of the contract value. Managements estimates of the likelihood of a customer's ability to use outstanding make-up rights may impact the timing of revenue recognition. In addition, in determining the amount of consideration to be allocated to performance obligations that are not sold on a stand-alone basis, management estimates the stand-alone selling price of each performance obligation under the contract, taking into consideration the location and volume of goods and services being provided, the market environment and customer specific considerations.

Pembina satisfies its performance obligations and recognizes revenue for services under take-or-pay commitments when volumes are transported, processed, terminalled, or stored. Make-up rights may arise when a customer does not fulfill their minimum volume commitment in a certain period, but is allowed to use the delivery of past or future volumes to meet this commitment. These make-up rights are subject to expiry and have varying conditions associated with them. When contract terms allow a customer to exercise their make-up rights using firm volume commitments, revenue is not recognized until these make-up rights are used, expire, or management determines that it is remote that they will be utilized. If Pembina bills a customer for unused service in an earlier period and the customer utilizes available make-up rights, Pembina records a refund liability for the amount to be returned to the customer through an annual adjustment process. For contracts where no make-up rights exist, revenue is recognized to take-or-pay levels once Pembina has an enforceable right to payment for the take-or-pay volumes. Make-up rights generally expire within a contract year, and a majority of the related contract years follow the calendar year.

When customers are transporting, processing, terminalling, or storing volumes below their take-or-pay commitments early in a contract year, and the customer has the right to exercise make up rights against future firm volume commitments, the timing of revenue recognition may not be even throughout the year. Where Pembina has a right to invoice to take-or-pay levels throughout the contract year, revenue is deferred and a contract liability is recorded for the volumes invoiced that were not utilized by the customer. Once the customer has used its make-up rights or it is determined to be remote that a customer will use them, the previously deferred revenue is recognized. In these instances, there will be a deferral of revenue in early quarters of the year, with subsequent recognition occurring in later quarters although there is no impact on cash flows.

For certain arrangements where the customer does not have make-up rights, where the make-up rights have been determined to be insignificant, and for cost of service agreements, revenue is recognized using the practical expedient to recognize revenue in an amount equal to Pembina's right to invoice. For these arrangements, the consideration Pembina is entitled to invoice in each period is representative of the value provided to the customer.

When up-front payments or non-cash consideration is received in exchange for future services to be performed, revenue is deferred as a contract liability and recognized over the period the performance obligation is expected to be satisfied. Non-cash consideration is measured at the fair value of the non-cash consideration received.

ii) Fee-for-Service

Fee-for-service revenue includes firm contracted revenue that are not subject to take-or-pay commitments and interruptible revenue. Pembina satisfies its performance obligations for transportation, gas processing, fractionation, terminalling, and storage as volumes of product are transported, processed, fractionated, terminalled, or stored. Revenue is based on a contracted fee and consideration is variable with respect to volumes. Payment is due in the month following Pembina's provision of service.

iii) Product Sales

Pembina satisfies its performance obligation on product sales at the time control of product is transferred to the customer. Control of product is not necessarily held by the party with legal title, but by the party with the rights to the remaining economic benefits of the commodity being transferred. Certain commodity buy/sell arrangements where control of the product has not transferred to Pembina are recognized on a net basis in revenue.

For product sales, revenue is recognized using the practical expedient to recognize revenue in an amount equal to Pembina's right to invoice as the consideration Pembina is entitled to invoice in each period is representative of the value provided to the customer.

k. Government Grants

Government grants are recognized in earnings as other income on a systematic basis over the periods in which Pembina recognizes expenses for the related costs for which the grant is intended to compensate. Government grants are recognized only when there is reasonable assurance that Pembina will comply with the conditions attached to the grant, and the grant will be received. Government grants received during 2020 associated with the Canadian Emergency Wage Subsidy ("CEWS") were recognized in other income.

l. Finance Income and Finance Costs

Finance income comprises interest income on funds deposited and invested, finance lease receivables, advances to related parties, gains on non-commodity-related derivatives measured at fair value through earnings and foreign exchange gains. Interest income is recognized as it accrues in earnings, using the effective interest rate method.

Finance costs comprise interest expense on loans and borrowings and lease liabilities, accretion on provisions, losses on disposal of available for sale financial assets, losses on non-commodity-related derivatives and foreign exchange losses.

Borrowing costs that are not directly attributable to the acquisition or construction of a qualifying asset are recognized in earnings using the effective interest rate method.

m. Income Tax

Income tax expense comprises current and deferred tax. Current and deferred taxes are recognized in earnings except to the extent that they relate to a business combination, or items are recognized directly in equity or in other comprehensive income.

Current tax is the expected tax payable or receivable on the taxable income or loss for the period, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognized for:

- temporary differences on the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable earnings;
- temporary differences relating to investments in subsidiaries and joint arrangements to the extent that it is probable that they will not reverse in the foreseeable future; and
- taxable temporary differences arising on the initial recognition of goodwill.

The measurement of deferred tax reflects the tax consequences that would follow the manner in which Pembina expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date.

Deferred tax assets and liabilities are offset only if there is a legally enforceable right to offset, and they relate to income taxes levied by the same taxation authority on either: i) the same taxable entity; or ii) different tax entities where the intent is to settle current tax liabilities and assets on a net basis, or where tax liabilities and assets will be realized simultaneously in each future period.

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

In determining the amount of current and deferred tax, Pembina takes into account income tax exposures and whether additional taxes and interest may be due. This assessment relies on estimates and assumptions and may involve a series of judgments about future events. New information may become available that causes Pembina to change its judgment regarding the adequacy of existing tax liabilities, such changes to tax liabilities will impact tax expense in the period that such a determination is made.

n. Earnings Per Common Share

Pembina presents basic and diluted earnings per common share ("EPS") data for its common shares. Basic EPS is calculated by dividing the earnings attributable to common shareholders of Pembina by the weighted average number of common shares outstanding during the period. To calculate earnings attributable to common shareholders, earnings are adjusted for accumulated preferred dividends. Diluted EPS is determined by adjusting the earnings attributable to common shareholders and the weighted average number of common shares outstanding, for the effects of all potentially dilutive common shares, which comprise share options granted to employees. Only outstanding share options that will have a dilutive effect are included in fully diluted calculations.

The dilutive effect of share options is determined whereby outstanding share options at the end of the period are assumed to have been converted at the beginning of the period or at the time issued if issued during the year. Amounts charged to earnings relating to the outstanding share options are added back to earnings for the diluted calculations. The shares issued upon conversion are included in the denominator of per share basic calculations for the date of issue.

o. Segment Reporting

An operating segment is a component of Pembina that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with any of the Company's other components. All operating segments' operating results are reviewed regularly by Pembina's President and Chief Executive Officer ("CEO"), interim Chief Financial Officer ("CFO") and other Senior Vice Presidents ("SVPs") to make decisions about resources to be allocated to the segment and assess its performance, and for which discrete financial information is available.

Segment results that are reported to the CEO, CFO and other SVPs include items directly attributable to a segment as well as those that can be allocated on a reasonable basis.

p. New Standards and Interpretations Not Yet Adopted

The IASB has issued a standard and amendments to existing standards that are effective for periods on or after January 1, 2022, with early application permitted. Assessment of the impacts of these standards is ongoing, however, no material impacts on Pembina's Consolidated Financial Statements have been identified.

- Onerous Contracts - Cost of Fulfilling a Contract (Amendments to IAS 37);
- Updating a Reference to the Conceptual Framework (Amendments to IFRS 3);
- Annual Improvements to IFRS Standards 2018-2020;
- Disclosure Initiative – Accounting Policies (Amendments to IAS 1);
- Definition of Accounting Estimates (Amendments to IAS 8);
- Classification of Liabilities as Current or Non-Current (Amendments to IAS 1); and
- IFRS 17: Insurance Contracts.

4. DETERMINATION OF FAIR VALUES

A number of Pembina's accounting policies and disclosures require the determination of fair value, for both financial and non-financial assets and liabilities. When measuring fair value, Pembina uses observable market data to the extent possible. Fair value measurements are categorized into levels in a fair value hierarchy based on the degree to which inputs are observable and significant.

Level 1: Unadjusted quoted prices are available in active markets for identical assets or liabilities as the reporting date.

Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

Level 3: Inputs for the asset or liability that are not based on observable market data (unobservable inputs). Level 3 valuations use unobservable inputs, such as a financial forecast developed using the entity's own data for expected cash flows and risk adjusted discount rates, to measure fair value to the extent that relevant observable inputs are not available. The unobservable inputs reflect the assumptions that market participants would use when pricing the asset or liability, including assumptions about risk. In developing unobservable inputs, the entity's own data is used and adjusted for reasonably available information that would be used by other market participants.

For level 2 valued financial instruments, management makes assumptions and estimates value based on observable inputs such as quoted forward prices, time value and volatility factors. For level 3 valued financial instruments, management uses estimates of financial forecasts, expected cash flows and risk adjusted discount rates to measure fair value.

Ongoing Impact of the COVID-19 Pandemic

Measuring fair values using significant unobservable inputs has become more challenging in the current environment, where events and conditions related to the COVID-19 pandemic are driving significant disruption of business operations and a significant increase in economic uncertainty. Management applied its judgment in determining the impact of the significant uncertainties created by these events and conditions on the assessed fair values of assets and liabilities in the Consolidated Financial Statements.

Fair values have been determined for measurement and/or disclosure purposes based on the following methods. When applicable, further information about the assumptions made in determining fair values is disclosed in the notes specific to that asset or liability.

i) Property, Plant and Equipment

The fair value of property, plant and equipment recognized as a result of a business combination or transferred from a customer is based on market values when available, income approach and depreciated replacement cost when appropriate. Depreciated replacement cost reflects adjustments for physical deterioration as well as functional and economic obsolescence.

When the recoverable value of an item of property, plant and equipment is estimated for impairment purposes, fair value is determined using comparable market transactions if available, or using a combination of internal and external estimates of the value that the assets could be sold for in an orderly manner.

ii) Equity Investments

When the recoverable value of the Company's equity investments is estimated for impairment purposes, fair value is determined using comparable market transactions if available, or using estimates of the discounted cash flows a market participant would expect to derive from the use and eventual sale of the investments.

iii) Derivative Financial Instruments

Pembina's derivative financial instrument fair value measurements are categorized in Level 2 and Level 3 of the fair value hierarchy. Further information about the methods used and assumptions made in determining fair values is disclosed in Note 25 to the Consolidated Financial Statements.

Fair values reflect the credit risk of the instrument and include adjustments to take account of the credit risk of the company, entity and counterparty when appropriate.

iv) Non-Derivative Financial Assets and Liabilities

The fair value of non-derivative financial assets and liabilities is determined on initial recognition, on a recurring basis, or for disclosure purposes. Fair values of financial assets at amortized cost are calculated based on the present value of estimated future principal and interest cash flows, discounted at the market rate of interest at the reporting date. Fair values of financial assets held at fair value are calculated using a probability-weighted income approach based on current market expectations for future cash flows. For other financial liabilities where market rates are not readily available, a risk adjusted market rate is used which incorporates the nature of the instrument as well as the risk associated with the underlying cash payments.

vi) Share-Based Compensation Transactions

The fair value of employee share options is measured using the Black-Scholes formula on grant date. Measurement inputs include share price on measurement date, exercise price of the instrument, expected volatility (based on weighted average historic volatility adjusted for changes expected due to publicly available information), weighted average expected life of the instruments (based on historical experience and general option holder behaviour), expected dividends, expected forfeitures and the risk-free interest rate (based on government bonds). Service and non-market performance conditions attached to the transactions are not taken into account in determining fair value.

The fair value of the long-term share unit award incentive plan and associated distribution units are measured based on the volume-weighted average price of Pembina's shares for 20 days ending December 31, 2021.

5. TRADE RECEIVABLES AND OTHER

As at December 31 <i>(\$ millions)</i>	2021	2020
Trade receivables from customers	750	578
Other receivables	30	60
Prepayments	32	24
Total trade receivables and other	812	662

6. INVENTORY

As at December 31 <i>(\$ millions)</i>	2021	2020
Crude oil and NGL	276	127
Materials, supplies and other	100	94
Total inventory	376	221

7. PROPERTY, PLANT AND EQUIPMENT

<i>(\$ millions)</i>	Land and Land Rights	Pipelines	Facilities and Equipment	Cavern Storage and Other	Assets Under Construction ⁽¹⁾	Total
Cost						
Balance at December 31, 2019	440	8,790	8,333	1,937	1,493	20,993
Additions and transfers	8	454	622	57	(40)	1,101
Impairment (Note 10)	(17)	—	—	—	(340)	(357)
Change in decommissioning provision	—	(10)	(17)	16	—	(11)
Foreign exchange adjustments	(2)	(18)	(9)	(1)	(7)	(37)
Disposals and other	—	(10)	(22)	(16)	3	(45)
Balance at December 31, 2020	429	9,206	8,907	1,993	1,109	21,644
Additions and transfers	28	92	469	144	(177)	556
Change in decommissioning provision	—	8	25	6	—	39
Disposals and other	(1)	(22)	(19)	(59)	(17)	(118)
Foreign exchange	—	(5)	2	—	—	(3)
Balance at December 31, 2021	456	9,279	9,384	2,084	915	22,118
Depreciation						
Balance at December 31, 2019	16	1,365	967	283	—	2,631
Depreciation	5	187	156	135	—	483
Disposals and other	—	(5)	(5)	(9)	—	(19)
Balance at December 31, 2020	21	1,547	1,118	409	—	3,095
Depreciation	5	192	232	82	—	511
Impairment (Note 10)	—	283	85	12	—	380
Disposals and other	—	(7)	(14)	(40)	—	(61)
Balance at December 31, 2021	26	2,015	1,421	463	—	3,925
Carrying amounts						
Balance at December 31, 2020	408	7,659	7,789	1,584	1,109	18,549
Balance at December 31, 2021	430	7,264	7,963	1,621	915	18,193
Assets subject to operating leases						
December 31, 2020	8	300	496	170	—	974
December 31, 2021	8	297	466	163	—	934

⁽¹⁾ At December 31, 2021, the movement in Assets Under Construction includes \$90 million in assets transferred to net investment lease.

Property, Plant and Equipment Under Construction

For the year ended December 31, 2021, included in additions and transfers are capitalized borrowing costs related to the construction of new pipelines or facilities amounting to \$25 million (2020: \$46 million), with capitalization rates ranging from 3.60 percent to 3.81 percent (2020: 3.63 percent to 3.91 percent).

Depreciation

Pipeline assets, facilities and equipment are depreciated using the straight-line method over three to 75 years with the majority of assets depreciated over 40 years. Cavern storage and other assets are depreciated using the straight-line method over three to 40 years with the majority of assets depreciated over 40 years. These rates are established to depreciate remaining net book value over the shorter of their useful lives or economic lives.

8. INTANGIBLE ASSETS AND GOODWILL

(\$ millions)	Intangible Assets				Total Goodwill & Intangible Assets
	Goodwill	Purchase and Sale Contracts and Other	Customer Relationships ⁽¹⁾	Total	
Cost					
Balance at December 31, 2019	4,699	240	1,881	2,121	6,820
Additions and other	—	22	—	22	22
Foreign exchange adjustments	(5)	(1)	(12)	(13)	(18)
Balance at December 31, 2020	4,694	261	1,869	2,130	6,824
Additions	—	26	—	26	26
Disposals and other	(1)	1	(8)	(7)	(8)
Balance at December 31, 2021	4,693	288	1,861	2,149	6,842
Amortization					
Balance at December 31, 2019	—	174	202	376	376
Amortization	—	6	102	108	108
Balance at December 31, 2020	—	180	304	484	484
Amortization	—	7	93	100	100
Impairment (Note 10)	—	1	23	24	24
Disposals and other	—	1	(5)	(4)	(4)
Balance at December 31, 2021	—	189	415	604	604
Carrying amounts					
Balance at December 31, 2020	4,694	81	1,565	1,646	6,340
Balance at December 31, 2021	4,693	99	1,446	1,545	6,238

⁽¹⁾ The net book value includes purchase price allocations associated with the acquisition of Kinder Morgan on December 16, 2019 of \$1.1 billion that have definite lives. The remaining lives of these allocations varies from 14-36 years.

Intangible assets have a finite useful life and are amortized using the straight-line method over 8 to 40 years.

The aggregate carrying amount of goodwill allocated to each operating segment is as follows:

As at December 31	2021	2020
(\$ millions)		
Pipelines	2,714	2,713
Facilities	540	541
Marketing & New Ventures	1,439	1,440
Total goodwill	4,693	4,694

Goodwill Impairment Testing

For the purpose of impairment testing, goodwill is allocated to Pembina's operating segments which represent the lowest level within Pembina at which goodwill is monitored for management purposes. Consistent with prior year, impairment testing for goodwill is performed in the fourth quarter.

The recoverable amount was determined using a fair value less costs of disposal approach by discounting each operating segment's expected future cash flows (Level 3). The key assumptions that influence the calculation of the recoverable amounts include:

- Cash flows for the first five years are projected based on past experience, actual operating results and the business plan approved by management. Cash flows for Pipelines and Facilities incorporate assumptions regarding contracted volumes and rates, which are based on market expectations. In addition, revenue and cost of product projections for Marketing & New Ventures incorporate assumptions regarding commodity volumes and pricing, which are sensitive to changes in the commodity price environment.
- Cash flows for the remaining years of the useful lives of the assets within each operating segment are extrapolated for periods up to 75 years (2020: 75 years) using a long-term growth rate, except where contracted, long-term cash flows indicate that no growth rate should be applied or a specific reduction in cash flows was more appropriate.
- After-tax discount rates were applied in determining the recoverable amount of operating segments. Discount rates were estimated based on past experience, the risk free rate and average cost of debt, targeted debt to equity ratio, in addition to estimates of the specific operating segment's equity risk premium, size premium, projection risk and betas.

For each operating segment, key assumptions and discount rate sensitivity are presented below:

As at December 31, 2021 (Percent)	Operating Segments		
	Pipelines	Facilities	Marketing & New Ventures
Key assumptions used			
After-tax discount rate	6.5	6.4	8.9
Long-term growth rate	1.3	1.8	1.9
Incremental change in rates that would result in carrying value equal to recoverable amount			
Increase in after-tax discount rate	2.9	4.1	2.5

9. INVESTMENTS IN EQUITY ACCOUNTED INVESTEEES

(\$ millions)	Ownership Interest at December 31 (percent)		Share of Profit (Loss) from Equity Investments		Investment in Equity Accounted Investees at December 31	
			For the years ended December 31			
	2021	2020	2021	2020	2021	2020
Alliance	50	50	111	105	2,686	2,498
Aux Sable	42.7 - 50	42.7 - 50	77	—	377	401
Ruby ⁽¹⁾	—	—	12	122	—	—
Veresen Midstream	45	45	77	50	1,349	1,374
CKPC ⁽²⁾	50	50	—	(314)	—	—
Cedar LNG	49.9	—	—	—	130	—
Other	50 - 75	50 - 75	4	5	80	104
Total			281	(32)	4,622	4,377

⁽¹⁾ Pembina owns a 50 percent convertible, cumulative preferred interest in Ruby.

⁽²⁾ Includes nil (2020: \$314 million) impairment in share of profit from equity accounted investees.

Investments in equity accounted investees include the unamortized excess of the purchase price over the underlying net book value of the investee's assets and liabilities at the purchase date, which is comprised of \$223 million (2020: \$98 million) Goodwill, \$2.7 billion (2020: \$2.8 billion) in property, plant and equipment and intangibles and nil in long-term debt (2020: \$33 million). In 2021, the long-term debt purchase price adjustment was fully amortized as an equity accounted investee redeemed its outstanding debt and entered into a new financing arrangement.

Pembina has U.S. \$1.3 billion in Investments in Equity Accounted Investees that is held by entities whose functional currency is the U.S. dollar. The resulting foreign exchange loss for the year ended December 31, 2021 of \$11 million (2020: \$51 million loss) has been included in Other Comprehensive Income.

Cedar LNG Acquisition

On June 4, 2021, Pembina acquired a 49.9 percent interest in a joint venture with the Haisla Nation to develop the Cedar LNG Project, a LNG facility located on the coast of British Columbia within the Douglas Channel on Haisla-owned land. The purchase price of \$125 million was allocated to goodwill as the net fair value of the identifiable assets and liabilities is nil. Pembina's investment of \$130 million at December 31, 2021 includes \$70 million of accrued contingent consideration payable on achievement of certain conditions. Under the terms of the agreements, Pembina has commitments to make additional payments on a positive final investment decision as well as contributions to fund development costs and annual operating budgets.

Impairment of Equity Accounted Investees

During 2021, Pembina recognized U.S. \$8 million in impairment associated with an advance made to Ruby in January of 2021 and during June 2021, Pembina recognized an impairment charge of \$22 million on its interest in Fort Corp. The impairment charge was the result of an assessment triggered by a reduction in the contracted capacity by a key customer on certain Fort Corp assets.

In December 2020, Pembina recognized an impairment on its 50 percent convertible, cumulative preferred interest in Ruby and within its investment in CKPC. Refer to Note 10 for further information on impairments.

Distributions and Contributions

The following table summarizes distributions from and contributions to Pembina's investments in equity accounted investees:

For the years ended December 31 (\$ millions)	Distributions		Contributions	
	2021	2020	2021	2020
Alliance	212	217	299	—
Aux Sable	100	19	2	3
Ruby	13	122	—	—
Veresen Midstream	131	97	29	69
CKPC	—	—	—	152
Cedar LNG	—	—	5	—
Other	5	4	—	—
Total	461	459	335	224

Distributions received from equity investments are included in operating activities in the Consolidated Statement of Cash Flows. Distributions from Alliance and Veresen Midstream are subject to satisfying certain financing conditions including complying with financial covenants.

Contributions made to investments in equity accounted investees are included in investing activities in the Consolidated Statement of Cash Flows. Contributions for 2020 include a \$22 million non-cash financial guarantee liability associated with CKPC's credit facility.

Financing Activities

On April 19, 2021, Ruby fully repaid the \$16 million outstanding on its term loan.

A wholly-owned subsidiary of Ruby has debt obligations in the form of non-recourse, asset level financing. Specifically, the subsidiary has U.S. \$475 million of senior notes outstanding, which come due April 1, 2022. Pembina presently does not expect the subsidiary to have adequate funds on hand to retire the senior notes when they come due. Management is currently evaluating options to satisfy this debt upon maturity.

On December 10, 2021, Alliance redeemed all of its issued and outstanding senior notes, for a total of \$367 million and U.S. \$175 million.

On December 10, 2021, Alliance issued a new syndicated unsecured credit agreement comprising of a \$315 million non-revolving term loan facility, a \$30 million revolving facility, a U.S. \$250 million non-revolving term loan facility and a U.S. \$30 million revolving facility. The credit facilities have a maturity date of December 10, 2024.

Summarized Financial Information

Financial information for Pembina's equity accounted investees (presented at 100 percent) is presented in the following tables and is prepared under the financial reporting framework adopted by each equity accounted investee (U.S. GAAP except for CKPC and Cedar). Differences between the equity accounted investee's earnings (loss) and earnings (loss) attributable to Pembina relate to the different accounting standards applied and amortization of the excess of the purchase price over the underlying net book value of the investee's assets and liabilities at the purchase date, with the exception of Ruby which Pembina owns a 50 percent convertible, cumulative preferred interest and recognizes its share of earnings based on its distribution.

Alliance

For the years ended December 31 <i>(\$ millions)</i>	2021	2020
Earnings and Comprehensive Income		
Revenue	905	840
Expenses	(353)	(296)
Depreciation and amortization	(138)	(141)
Finance costs and other ⁽¹⁾⁽²⁾	(115)	(61)
Earnings	299	342
Earnings attributable to Pembina	111	105

⁽¹⁾ Includes interest income of nil (2020:\$2 million).

⁽²⁾ Includes interest expense of \$118 million (2020: \$66 million).

As at December 31 <i>(\$ millions)</i>	2021	2020
Statements of Financial Position		
Current assets ⁽¹⁾	264	122
Non-current assets	1,690	1,816
Current liabilities ⁽²⁾	67	206
Non-current liabilities ⁽³⁾	814	1,121

⁽¹⁾ Includes cash and cash equivalents of \$168 million (2020:\$25 million).

⁽²⁾ Includes trade, other payables and provisions of \$48 million (2020: \$71 million).

⁽³⁾ Includes trade, other payables and provisions of \$9 million (2020:\$128 million).

Aux Sable

For the years ended December 31 <i>(\$ millions)</i>	2021	2020
Earnings and Comprehensive Income (Loss)		
Revenue	1,967	1,059
Expenses	(1,747)	(1,019)
Depreciation and amortization	(43)	(49)
Earnings (loss)	177	(9)
Earnings attributable to Pembina	77	—

As at December 31 <i>(\$ millions)</i>	2021	2020
Statements of Financial Position		
Current assets ⁽¹⁾	196	162
Non-current assets	707	757
Current liabilities ⁽²⁾	143	107
Non-current liabilities ⁽³⁾	164	155

⁽¹⁾ Includes cash and cash equivalents of \$24 million (2020: \$50 million).

⁽²⁾ Includes trade, other payables and provisions of \$98 million (2020: \$103 million).

⁽³⁾ Includes trade, other payables and provisions of \$5 million (2020: \$5 million).

Ruby

For the years ended December 31 <i>(\$ millions)</i>	2021	2020
Earnings and Comprehensive Income (Loss)		
Revenue	286	432
Expenses	(8)	(29)
Depreciation and amortization	(26)	(143)
Impairment	—	(2,953)
Finance costs and other ⁽¹⁾	(21)	(130)
Earnings (loss)	231	(2,823)
Earnings attributable to Pembina	12	122

⁽¹⁾ Includes interest expense of \$79 million (2020: \$104 million).

As at December 31 <i>(\$ millions)</i>	2021	2020
Statements of Financial Position		
Current assets ⁽¹⁾	137	50
Non-current assets	662	688
Current liabilities ⁽²⁾	622	77
Non-current liabilities ⁽³⁾	302	928

⁽¹⁾ Includes cash and cash equivalents of \$113 million (2020: \$6 million).

⁽²⁾ Includes trade, other payables and provisions of \$1 million (2020: \$2 million).

⁽³⁾ Includes trade, other payables and provisions of \$296 million (2020: \$278 million).

Veresen Midstream

For the years ended December 31 <i>(\$ millions)</i>	2021	2020
Earnings and Comprehensive Income		
Revenue ⁽⁴⁾	661	565
Expenses	(216)	(177)
Depreciation and amortization ⁽⁴⁾	(191)	(177)
Finance costs and other ⁽¹⁾	(67)	(84)
Earnings	187	127
Earnings attributable to Pembina	77	50

⁽¹⁾ Includes interest expense of \$71 million (2020: \$80 million).

As at December 31 <i>(\$ millions)</i>	2021	2020
Statements of Financial Position		
Current assets ⁽¹⁾	211	167
Non-current assets ⁽⁴⁾	4,605	4,671
Current liabilities ⁽²⁾⁽⁴⁾	147	114
Non-current liabilities ⁽³⁾⁽⁴⁾	2,674	2,689

⁽¹⁾ Includes cash and cash equivalents of \$1 million (2020: nil).

⁽²⁾ Includes trade, other payables and provisions of \$63 million (2020: \$80 million).

⁽³⁾ Includes trade, other payables and provisions of \$61 million (2020: \$56 million).

⁽⁴⁾ Prior year information has been restated.

CKPC

For the years ended December 31 <i>(\$ millions)</i>	2021	2020
Earnings (Loss) and Comprehensive Income (Loss)		
Expenses	(6)	(4)
Impairment	—	(589)
Finance costs ⁽¹⁾	(1)	(33)
Earnings (loss)	(7)	(626)
Earnings (loss) attributable to Pembina	—	(314)

⁽¹⁾ Includes interest income of nil (2020: \$1 million).

As at December 31 <i>(\$ millions)</i>	2021	2020
Statements of Financial Position		
Current assets ⁽¹⁾	33	83
Non-current assets	—	—
Current liabilities ⁽²⁾	57	99
Non-current liabilities ⁽³⁾	10	11

⁽¹⁾ Includes cash and cash equivalents of \$29 million (2020: \$75 million).

⁽²⁾ Includes trade, other payables and provisions of \$57 million (2020: \$99 million).

⁽³⁾ Includes trade, other payables and provisions of \$10 million (2020: \$11 million).

Cedar LNG

Cedar LNG was formed in June 2021 and has not yet commenced operations and therefore has not recognized material revenues or expenses.

As at December 31 <i>(\$ millions)</i>	2021	2020
Statements of Financial Position		
Current assets	2	—
Non-current assets	50	—
Current liabilities ⁽¹⁾	6	—
Non-current liabilities ⁽²⁾	36	—

⁽¹⁾ Includes trade, other payables and provisions of \$3 million (2020: nil).

⁽²⁾ Includes trade, other payables and provisions of \$34 million (2020: nil).

Other

For the years ended December 31 <i>(\$ millions)</i>	2021	2020
Earnings and Comprehensive Income		
Revenue	57	51
Expenses	(23)	(16)
Depreciation and amortization	(15)	(16)
Finance costs and other ⁽¹⁾	—	(5)
Earnings	19	14
Earnings attributable to Pembina	4	5

⁽¹⁾ Includes interest expense of \$1 million (2020: \$2 million).

As at December 31 <i>(\$ millions)</i>	2021	2020
Statements of Financial Position		
Current assets ⁽¹⁾	6	6
Non-current assets	104	117
Current liabilities ⁽²⁾	25	25
Non-current liabilities ⁽³⁾	42	64

⁽¹⁾ Includes cash and cash equivalents of \$1 million (2020: \$1 million).

⁽²⁾ Includes trade, other payables and provisions of \$4 million (2020: \$3 million).

⁽³⁾ Includes trade, other payables and provisions of \$1 million (2020: \$1 million).

10. IMPAIRMENTS

For the year ended December 31, 2021 (\$ millions)	Property, Plant & Equipment (Note 7)	Intangible Assets and Goodwill (Note 8)	Right-of-use Assets (Note 13)	Equity Accounted Investees (Note 9)	Other	Total Impairment Expense
Oil Sands Assets	368	24	27	—	5	424
Other	12	—	—	22	16	50
Total impairments	380	24	27	22	21	474

During the year ended December 31, 2021, Pembina recognized an impairment charge of \$474 million (\$361 million net of tax), of which \$424 million related to the impairment of the Nipisi and Mitsue Pipeline systems and the Edmonton South Rail Terminal as a result of contract expirations. The remaining charge related to partial impairments of equity accounted investees, discussed in Note 9.

For the year ended December 31, 2020 (\$ millions)	Property, Plant & Equipment (Note 7)	Equity Accounted Investees (Note 9)	Other	Total Impairment Expense
Jordan Cove	344	—	5	349
Investment in Ruby	—	1,257	139	1,396
Investment in CKPC	—	323	(2)	321
Other	13	11	—	24
Total impairments	357	1,591	142	2,090
Recognized through impairment in share of profit from equity accounted investees				314
Recognized as impairment expense				1,776
Total				2,090

Jordan Cove

In December 2020, as a result of increased regulatory and political uncertainty, Pembina recognized an impairment on the assets associated with Jordan Cove. The impairment charge of \$349 million (\$258 million net of tax) includes all previously capitalized amounts related to Jordan Cove, except for land with a recoverable carrying amount of \$21 million which approximates its fair value (Level 3).

Ruby

In December 2020, Pembina recognized an impairment for the full amount of its convertible, cumulative preferred interest in Ruby (\$1.3 billion) and its associated related party advance (\$139 million). The total impairment charge of \$1.4 billion (\$1.0 billion net of tax) was the result of an assessment triggered by upcoming contract expirations in mid-2021 with existing tariff rates well in excess of prevailing interruptible tariff rates, along with declining Rockies basin fundamentals and reduced expected future volumes resulting from the uncertainty with Jordan Cove. The recoverable amount of Ruby was determined using a value in use approach by discounting expected cash flows resulting from Pembina's convertible, cumulative preferred share interest. Key assumptions that influenced the calculation of the recoverable amount include no future volumes associated with Jordan Cove, incremental future contracted volumes and tolls. Pembina applied a discount rate of 8 percent (2019: 8 percent) in calculating the recoverable amount, which was determined using comparable preferred share yields adjusted for the specific risk profile of the investment.

CKPC

On December 14, 2020, Pembina announced that it, along with its joint venture partner in CKPC, would be indefinitely suspending execution of the integrated propane dehydration plant and polypropylene upgrading facility project. The suspension is the result of the significant risks arising from the ongoing COVID-19 pandemic, most notably with respect to costs under the lump sum contract for construction of the PDH plant, which was terminated in April 2021. As a result of the suspension, Pembina recognized an impairment for the full amount of its investment in CKPC, resulting in a total impairment charge of \$323 million (\$252 million net of tax) which includes Pembina's share of CKPC's loss resulting from an impairment charge recognized in the joint venture of \$314 million plus an incremental impairment of the remaining investment value, based on a fair value less costs of disposal approach which determined the recoverable amount of the investment to be nil (Level 3).

11. INCOME TAXES

The movements of the components of the deferred tax assets and deferred tax liabilities are as follows:

(\$ millions)	Balance at December 31, 2020	Recognized in Earnings (Loss)	Recognized in Other Comprehensive Loss	Equity	Other	Balance at December 31, 2021
Deferred income tax assets						
Derivative financial instruments	4	(20)	—	—	—	(16)
Employee benefits	11	2	(11)	—	—	2
Share-based payments	14	10	—	—	—	24
Provisions	83	17	—	—	—	100
Benefit of loss carryforwards	275	110	—	—	—	385
Other deductible temporary differences	51	(41)	—	—	(3)	7
Deferred income tax liabilities						
Property, plant and equipment	2,091	159	—	—	—	2,250
Intangible assets	260	(9)	—	—	—	251
Investments in equity accounted investees	692	17	—	—	—	709
Taxable limited partnership income deferral	(2)	48	—	—	—	46
Total net deferred tax liabilities ⁽¹⁾	2,603	137	11	—	3	2,754

(\$ millions)	Balance at December 31, 2019	Recognized in Earnings (Loss)	Recognized in Other Comprehensive Income (Loss)	Equity	Other	Balance at December 31, 2020
Deferred income tax assets						
Derivative financial instruments	(13)	21	(4)	—	—	4
Employee benefits	9	(2)	4	—	—	11
Share-based payments	24	(10)	—	—	—	14
Provisions	79	4	—	—	—	83
Benefit of loss carryforwards	400	(125)	—	—	—	275
Other deductible temporary differences	52	16	—	(2)	—	66
Deferred income tax liabilities						
Property, plant and equipment	2,036	55	—	—	—	2,091
Intangible assets	263	(3)	—	—	—	260
Investments in equity accounted investees	1,109	(417)	—	—	—	692
Taxable limited partnership income deferral	101	(103)	—	—	—	(2)
Other taxable temporary differences	(13)	32	—	—	(4)	15
Total net deferred tax liabilities ⁽¹⁾	2,945	(340)	—	2	(4)	2,603

⁽¹⁾ Comprised of deferred tax liabilities of \$3.0 billion (2020: \$2.9 billion) net of deferred tax assets of \$257 million (2020: \$322 million).

Reconciliation of Effective Tax Rate

For the years ended December 31 <i>(\$ millions, except as noted)</i>	2021	2020
Earnings (loss) before income tax	1,665	(416)
Canadian statutory tax rate <i>(percent)</i>	23.3	24.6
Income tax at statutory rate	388	(102)
Tax rate changes and foreign rate differential	(19)	(5)
Changes in estimate and other	21	(5)
Permanent items	12	12
Unrecognized tax attribute	21	—
Income tax expense (recovery)	423	(100)

Income Tax Expense

For the years ended December 31 <i>(\$ millions)</i>	2021	2020
Current tax expense	286	240
Deferred tax expense		
Origination and reversal of temporary differences	235	(485)
Tax rate changes on deferred tax balances	14	32
(Increase) decrease in tax loss carry forward	(112)	113
Total deferred tax expense (recovery)	137	(340)
Total income tax expense (recovery)	423	(100)

Deferred Tax Items Recovered Directly in Equity

For the years ended December 31 <i>(\$ millions)</i>	2021	2020
Share issue costs	—	(2)
Other comprehensive income (loss) <i>(Note 24)</i> :		
Change in fair value of net investment hedges	—	(4)
Remeasurements of defined benefit (asset) liability	(11)	4
Deferred tax items recovered directly in equity	(11)	(2)

Pembina has temporary differences associated with its investments in subsidiaries. At December 31, 2021, Pembina has not recorded a deferred tax asset or liability for these temporary differences (2020: nil) as Pembina controls the timing of the reversal and it is not probable that the temporary differences will reverse in the foreseeable future.

At December 31, 2021, Pembina had U.S. \$1.1 billion (2020: U.S. \$758 million) of U.S. tax losses that do not expire and \$42 million (2020: \$43 million) of Canadian tax losses that will expire after 2036. Pembina has determined that it is probable that future taxable profits will be sufficient to utilize these losses. The amount of unrecognized deferred tax asset as at December 31, 2021 was \$21 million (2020: nil).

12. TRADE PAYABLES AND OTHER

As at December 31		
<i>(\$ millions)</i>		
	2021	2020
Trade payables	652	434
Other payables & accrued liabilities	411	346
Total trade payables and other	1,063	780

13. LEASES

Lessee Leases

Pembina enters into arrangements to secure access to assets necessary for operating the business. Leased (right-of-use) assets include terminals, rail, buildings, land and other assets. Total cash outflows related to leases were \$127 million for the year ended December 31, 2021 (2020: \$131 million).

Right-of-Use Assets

<i>(\$ millions)</i>	Terminals	Rail	Buildings	Land & Other	Total
Balance at January 1, 2020	225	238	118	110	691
Additions	—	24	22	—	46
Depreciation	(12)	(41)	(19)	(14)	(86)
Balance at December 31, 2020	213	221	121	96	651
Additions and adjustments	2	1	40	18	61
Disposals and other	—	(4)	—	(9)	(13)
Depreciation	(20)	(41)	(18)	(12)	(91)
Impairment	(27)	—	—	—	(27)
Balance at December 31, 2021	168	177	143	93	581

Lessor Leases

Pembina has entered into contracts for the use of its assets that have resulted in lease treatment for accounting purposes. Assets under operating leases include pipelines, terminals and storage assets. See Note 7 for carrying value of property, plant and equipment under operating leases. Assets under finance leases include pipelines, terminals, storage assets and office sub-leases.

Maturity of Lease Receivables

As at December 31	2021		2020	
	Operating Leases	Finance Leases	Operating Leases	Finance Leases
<i>(\$ millions)</i>				
Less than one year	146	31	146	23
One to two years	140	31	142	23
Two to three years	121	31	139	22
Three to four years	109	32	121	22
Four to five years	108	31	109	22
More than five years	725	319	874	224
Total undiscounted lease receipts	1,349	475	1,531	336
Unearned finance income on lease receipts		(270)		(199)
Discounted unguaranteed residual value		15		8
Finance lease receivable		220		145
Less current portion ⁽¹⁾		(9)		(7)
Total non-current		211		138

⁽¹⁾ Included in trade receivables and other on the Consolidated Statement of Financial Position.

14. LONG-TERM DEBT

This note provides information about the contractual terms of Pembina's interest-bearing long-term debt, which are measured at amortized cost.

Carrying Value, Terms and Conditions, and Debt Maturity Schedule

(\$ millions)	Authorized at December 31, 2021	Nominal Interest Rate	Year of Maturity	Carrying Value	
				December 31, 2021	December 31, 2020
Loans and borrowings					
Senior unsecured credit facilities ⁽¹⁾⁽³⁾⁽⁴⁾	3,336	1.20 ⁽²⁾	Various ⁽¹⁾	907	1,530
Senior unsecured medium-term notes series 1	—	4.89	2021	—	250
Senior unsecured medium-term notes series 2	450	3.77	2022	450	449
Senior unsecured medium-term notes series 3	450	4.75	2043	447	447
Senior unsecured medium-term notes series 4	600	4.81	2044	597	597
Senior unsecured medium-term notes series 5	450	3.54	2025	449	449
Senior unsecured medium-term notes series 6	500	4.24	2027	499	498
Senior unsecured medium-term notes series 7	600	3.71	2026	602	603
Senior unsecured medium-term notes series 8	650	2.99	2024	648	647
Senior unsecured medium-term notes series 9	550	4.74	2047	542	542
Senior unsecured medium-term notes series 10	650	4.02	2028	660	661
Senior unsecured medium-term notes series 11	800	4.75	2048	841	842
Senior unsecured medium-term notes series 12	650	3.62	2029	654	654
Senior unsecured medium-term notes series 13	700	4.54	2049	712	713
Senior unsecured medium-term notes series 14	600	2.56	2023	599	599
Senior unsecured medium-term notes series 15	600	3.31	2030	597	597
Senior unsecured medium-term notes series 16	400	4.67	2050	397	397
Senior unsecured medium-term notes series 17	500	3.53	2031	497	—
Senior unsecured medium-term notes series 18	500	4.49	2051	497	—
Senior unsecured medium-term notes series 3A	50	5.05	2022	50	51
Senior unsecured medium-term notes series 5A	—	3.43	2021	—	350
Total loans and borrowings				10,645	10,876
Less current portion loans and borrowings				(1,000)	(600)
Total non-current loans and borrowings				9,645	10,276
Subordinated hybrid notes					
Subordinated notes, series 1	600	4.80	2081	594	—

⁽¹⁾ Pembina's unsecured credit facilities include a \$2.5 billion revolving facility that matures in June 2026, a \$500 million non-revolving term loan that matures in August 2022, a U.S. \$250 million non-revolving term loan that matures in May 2025 and a \$20 million operating facility that matures in May 2022, which is typically renewed on an annual basis.

⁽²⁾ The nominal interest rate is the weighted average of all drawn credit facilities based on Pembina's credit rating at December 31, 2021. Borrowings under the credit facilities bear interest at prime, Bankers' Acceptance, or LIBOR rates, plus applicable margins.

⁽³⁾ Includes U.S. \$250 million variable rate debt outstanding at December 31, 2021 (December 31, 2020: U.S. \$250 million).

⁽⁴⁾ The U.S. dollar denominated non-revolving term loan is designated as a hedge of the Company's net investment in selected foreign operations with a U.S. dollar functional currency. Refer to Note 25 for foreign exchange risk management.

On January 25, 2021, Pembina closed a \$600 million offering of Fixed-to-Fixed Rate Subordinated Hybrid Notes (the "Series 1 Subordinated Notes"). The Series 1 Subordinated Notes have a fixed 4.80 percent interest rate, payable semi-annually, which resets on January 25, 2031, and on every fifth anniversary thereafter, based on the five-year Government of Canada yield plus: (i) 4.17 percent for the period from, and including, January 25, 2031 to, but excluding January 25, 2051; and (ii) 4.92 percent for the period from, and including, January 25, 2051 to, but excluding January 25, 2081. The Series 1 Subordinated Notes are subject to optional redemption by Pembina from October 25, 2030 to January 25, 2031 and on any interest payment date or any interest reset date, as applicable. Pembina may also redeem the Series 1 Subordinated Notes in certain other limited circumstances. Following the occurrence of certain bankruptcy or insolvency events in respect of Pembina, subject to certain exceptions, the Series 2021-A Class A Preferred Shares (as defined below) will be delivered to the holders of the Series 1 Subordinated Notes to satisfy Pembina's obligations under the indenture governing the Series 1 Subordinated Notes. Upon delivery of the Series 2021-A Class A Preferred Shares, the Series 1 Subordinated Notes will be immediately and automatically surrendered and cancelled and all rights of any holders of the Series 1 Subordinated Notes will automatically cease. The fair value of the automatic delivery feature was assessed as nominal at inception.

On March 25, 2021, Pembina cancelled its \$800 million revolving credit facility. No balance was outstanding on the cancellation date.

On April 30, 2021, Pembina completed an extension on its \$2.5 billion revolving credit facility, which now matures on June 1, 2026.

On December 10, 2021, Pembina closed an offering of \$1.0 billion of senior unsecured medium-term notes. The offering was conducted in two tranches, consisting of the issuance of \$500 million in senior unsecured medium-term notes, series 17, having a fixed coupon of 3.53 percent per annum, payable semi-annually and maturing on December 10, 2031; and \$500 million in senior unsecured medium-term notes, series 18, having a fixed coupon of 4.49 percent per annum, payable semi-annually and maturing on December 10, 2051.

For more information about Pembina's exposure to interest rate, foreign currency and liquidity risk, see Note 25 *Financial Instruments*.

15. DECOMMISSIONING PROVISION

The decommissioning provision reflects the discounted cash flows expected to be incurred to decommission Pembina's pipeline systems, gas processing and fractionation plants, storage and terminalling hubs, including estimated environmental reclamation and remediation costs. Changes in the measurement of the decommissioning provision are added to, or deducted from, the cost of the related property, plant and equipment or right of use asset. When a re-measurement of the decommissioning provision relates to a retired asset, the amount is recorded in earnings (loss).

The undiscounted cash flows at the time of decommissioning are calculated using an estimated timing of economic outflows ranging from one to 83 years, with the majority estimated at 50 years. The estimated economic lives of the underlying assets form the basis for determining the timing of economic outflows. Pembina applied credit-adjusted risk-free rates of 3.3 percent to 4.7 percent (2020: 3.3 percent to 4.7 percent) and an inflation rate of 1.8 percent (2020: 1.8 percent).

<i>(\$ millions)</i>	2021	2020
Balance at January 1	348	337
Unwinding of discount rate	16	15
Additions	29	11
Change in cost estimates and other	19	(15)
Balance at December 31	412	348

16. SHARE CAPITAL

Pembina is authorized to issue an unlimited number of common shares, without par value, 254,850,850 Class A preferred shares, issuable in series and an unlimited number of Class B preferred shares. The holders of the common shares are entitled to receive notice of, attend and vote at any meeting of the shareholders of Pembina, receive dividends declared and share in the remaining property of Pembina upon distribution of the assets of Pembina among its shareholders for the purpose of winding-up its affairs.

Common Share Capital

<i>(\$ millions, except as noted)</i>	Number of Common Shares <i>(millions)</i>	Common Share Capital
Balance at December 31, 2019	548	15,539
Share-based payment transactions	2	105
Balance at December 31, 2020	550	15,644
Share-based payment transactions	—	47
Repurchased	—	(13)
Balance at December 31, 2021	550	15,678

Share Repurchase Program

On February 25, 2021, the Toronto Stock Exchange ("TSX") accepted the Company's notice of intention to commence a normal course issuer bid ("NCIB") that allows the Company to repurchase, at its discretion, up to approximately 27.5 million common shares through the facilities of the TSX, the New York Stock Exchange and/or alternative Canadian trading systems or as otherwise permitted by applicable securities law, subject to certain restrictions on the number of common shares that may be purchased on a single day. Common shares purchased by the Company will be cancelled. The NCIB commenced March 2, 2021 and will terminate on March 1, 2022 or on such earlier date as the Company has purchased the maximum number of common shares permitted pursuant to the notice of intention.

The following table summarizes Pembina's share repurchases under its NCIB:

For the years ended December 31 <i>(millions, except as noted)</i>	2021	2020
Number of common shares repurchased for cancellation <i>(thousands)</i>	450	—
Average price per share	\$37.77	—
Total cost ⁽¹⁾	17	—

⁽¹⁾ Total cost includes \$13 million (2020: nil) charged to share capital and \$4 million (2020: nil) charged to deficit.

Preferred Share Capital

<i>(\$ millions, except as noted)</i>	Number of Preferred Shares <i>(millions)</i>	Preferred Share Capital
Balance at December 31, 2019	122	2,956
Part VI.1 tax	—	(10)
Balance at December 31, 2020	122	2,946
Class A, Series 11 Preferred shares redeemed, net of issue costs	(7)	(170)
Class A, Series 13 Preferred shares redeemed, net of issue costs	(10)	(250)
Part VI.1 tax	—	(9)
Balance at December 31, 2021	105	2,517

On June 15, 2020, none of the eight million Cumulative Redeemable Rate Reset Class A Preferred Series 19 shares outstanding were converted into Cumulative Redeemable Floating Rate Class A Preferred Series 20 shares.

On November 16, 2020, none of the nine million Cumulative Redeemable Rate Reset Class A Preferred Series 9 shares outstanding were converted into Cumulative Redeemable Floating Rate Class A Preferred Series 10 shares.

On January 25, 2021, in connection with the offering of the Series 1 Subordinated Notes, Pembina issued 600,000 Series 2021- A Class A Preferred Shares, to Computershare Trust Company of Canada, to be held in trust as treasury shares to satisfy Pembina's obligations under the indenture governing the Series 1 Subordinated Notes.

On March 1, 2021, Pembina redeemed all of the 6.8 million issued and outstanding Cumulative Redeemable Minimum Rate Reset Class A Preferred Shares, Series 11 (the "Series 11 Class A Preferred Shares") for a redemption price equal to \$25.00 per Series 11 Class A Preferred Share.

On June 1, 2021, Pembina redeemed all of the 10 million issued and outstanding Cumulative Redeemable Minimum Rate Reset Class A Preferred Shares, Series 13 (the "Series 13 Class A Preferred Shares") for a redemption price equal to \$25.00 per Series 13 Class A Preferred Shares, less taxes required to be deducted or withheld by the Company.

Dividends

The following dividends were declared by Pembina:

For the years ended December 31 <i>(\$ millions)</i>	2021	2020
Common shares		
\$2.52 per common share (2020: \$2.52)	1,386	1,385
Class A preferred shares		
\$1.23 per Series 1 Class A Preferred Share (2020: \$1.23)	12	12
\$1.12 per Series 3 Class A Preferred Share (2020: \$1.12)	7	7
\$1.14 per Series 5 Class A Preferred Share (2020: \$1.14)	11	11
\$1.10 per Series 7 Class A Preferred Share (2020: \$1.10)	11	11
\$1.08 per Series 9 Class A Preferred Share (2020: \$1.18)	10	11
\$0.36 per Series 11 Class A Preferred Share (2020: \$1.44)	2	10
\$0.72 per Series 13 Class A Preferred Share (2020: \$1.44)	7	14
\$1.12 per Series 15 Class A Preferred Share (2020: \$1.12)	9	9
\$1.21 per Series 17 Class A Preferred Share (2020: \$1.21)	7	7
\$1.17 per Series 19 Class A Preferred Share (2020: \$1.21)	10	10
\$1.23 per Series 21 Class A Preferred Share (2020: \$1.23)	20	20
\$1.31 per Series 23 Class A Preferred Share (2020: \$1.31)	16	16
\$1.30 per Series 25 Class A Preferred Share (2020: \$1.30)	13	13
	135	151

On January 6, 2022, Pembina announced that its Board of Directors had declared a dividend of \$0.21 per common share in the total amount of \$116 million, payable on February 15, 2022 to shareholders of record on January 25, 2022.

On February 3, 2022, Pembina announced that its Board of Directors had declared a dividend of \$0.21 per common share in the total amount of \$116 million, payable on March 15, 2022 to shareholders of record on February 25, 2022.

Pembina's Board of Directors also declared quarterly dividends for Pembina's Class A preferred shares on January 6, 2022 as outlined in the following table:

Series	Record Date	Payable Date	Per Share Amount	Dividend Amount (\$ millions)
Series 1	February 1, 2022	March 1, 2022	\$0.306625	3
Series 3	February 1, 2022	March 1, 2022	\$0.279875	2
Series 5	February 1, 2022	March 1, 2022	\$0.285813	3
Series 7	February 1, 2022	March 1, 2022	\$0.273750	3
Series 9	February 1, 2022	March 1, 2022	\$0.268875	2
Series 15	March 15, 2022	March 31, 2022	\$0.279000	2
Series 17	March 15, 2022	March 31, 2022	\$0.301313	2
Series 19	March 15, 2022	March 31, 2022	\$0.292750	2
Series 21	February 1, 2022	March 1, 2022	\$0.306250	5
Series 23	January 31, 2022	February 15, 2022	\$0.328125	4
Series 25	January 31, 2022	February 15, 2022	\$0.325000	3

17. REVENUE

Revenue has been disaggregated into categories to reflect how the nature, timing and uncertainty of revenue and cash flows are affected by economic factors.

a. Revenue Disaggregation

For the years ended December 31 (\$ millions)	2021				2020			
	Pipelines	Facilities	Marketing & New Ventures	Total	Pipelines	Facilities	Marketing & New Ventures	Total
Take-or-pay ⁽¹⁾	1,642	754	—	2,396	1,664	740	—	2,404
Fee-for-service ⁽¹⁾	348	138	—	486	295	117	—	412
Product sales ⁽²⁾	—	—	5,577	5,577	—	—	2,956	2,956
Revenue from contracts with customers	1,990	892	5,577	8,459	1,959	857	2,956	5,772
Operational finance lease income	17	2	—	19	15	—	—	15
Fixed operating lease income	116	33	—	149	131	35	—	166
Total external revenue	2,123	927	5,577	8,627	2,105	892	2,956	5,953

⁽¹⁾ Revenue recognized over time.

⁽²⁾ Revenue recognized at a point in time.

b. Contract Liabilities

Significant changes in the contract liabilities balances during the period are as follows:

For the years ended December 31 (\$ millions)	2021			2020		
	Take-or-Pay	Other Contract Liabilities	Total Contract Liabilities	Take-or-Pay	Other Contract Liabilities	Total Contract Liabilities
Opening balance	3	289	292	8	223	231
Additions (net in the period)	—	64	64	3	117	120
Revenue recognized from contract liabilities ⁽¹⁾	—	(65)	(65)	(8)	(51)	(59)
Closing balance	3	288	291	3	289	292
Less current portion ⁽²⁾	(3)	(68)	(71)	(3)	(59)	(62)
Ending balance	—	220	220	—	230	230

⁽¹⁾ Recognition of revenue related to performance obligations satisfied in the current period that were included in the opening balance of contract liabilities.

⁽²⁾ As at December 31, 2021, the balance includes \$3 million of cash collected under take-or-pay contracts which will be recognized within one year as the customer chooses to ship, process, or otherwise forego the associated service.

Contract liabilities depict Pembina's obligation to perform services in the future for cash and non-cash consideration which has been received from customers. Contract liabilities include up-front payments or non-cash consideration received from customers for future transportation, processing and storage services. Contract liabilities also include consideration received from customers for take-or-pay commitments where the customer has a make-up right to ship or process future volumes under a firm contract. These amounts are non-refundable should the customer not use its make-up rights.

Pembina does not have any contract assets. In all instances where goods or services have been transferred to a customer in advance of the receipt of customer consideration, Pembina's right to consideration is unconditional and has therefore been presented as a receivable.

c. Revenue Allocated to Remaining Performance Obligations

Pembina expects to recognize revenue in future periods that includes current unsatisfied remaining performance obligations totaling \$14.5 billion (2020: \$16.1 billion as restated). Over the next five years, this remaining performance obligation will be recognized annually ranging from \$2.0 billion (2020: \$1.9 billion as restated) declining to \$1.3 billion (2020: \$1.5 billion as restated). Subsequently, up to 2047 (2020: 2047), Pembina will recognize from \$1.1 billion (2020: \$1.3 billion as restated) to \$7 million (2020: \$7 million as restated) per year.

In preparing the above figures, Pembina has taken the practical expedient to exclude contracts that have original expected durations of one year or less. Variable consideration relating to flow through costs are not included in the amounts presented. These flow through costs do not impact net income or cash flow, and due to the long-term nature of the contracts there is significant uncertainty in estimating these amounts. In addition, Pembina excludes contracted revenue amounts for assets not yet in-service unless both Board of Directors approval and regulatory approval for the asset has been obtained.

Effective December 31, 2021, Pembina elected to change its policy for preparing the above figures to include contracts that are accounted for using the practical expedient to recognize revenue in an amount equal to Pembina's right to invoice. The inclusion of these contracts results in reliable and more relevant information for readers of the Company's Consolidated Financial Statements as this methodology results in a more complete value of Pembina's revenue allocated to remaining performance obligations. This change in policy was applied retrospectively and the prior period restated figures are shown above.

18. OTHER INCOME

For the year ended December 31, 2021, other income includes \$350 million associated with Pembina's termination of the arrangement agreement providing for the proposed acquisition by Pembina of Inter Pipeline Ltd.

19. NET FINANCE COSTS

For the years ended December 31 <i>(\$ millions)</i>	2021	2020
Interest expense on financial liabilities measured at amortized cost:		
Loans and borrowings	362	362
Subordinated hybrid notes	27	—
Leases	35	39
Unwinding of discount rate	16	15
Loss (gain) in fair value of non-commodity-related derivative financial instruments	19	(5)
Foreign exchange (gains) losses and other	(9)	9
Net finance costs	450	420

Net interest paid of \$443 million (2020: \$429 million) includes interest paid during construction and capitalized of \$25 million (2020: \$46 million).

20. OPERATING SEGMENTS

Pembina determines its reportable segments based on the nature of operations and includes three operating segments: Pipelines, Facilities and Marketing & New Ventures.

The Pipelines segment includes conventional, oil sands and transmission pipeline systems, crude oil storage and terminalling business and related infrastructure serving various markets and basins across North America.

The Facilities segment includes processing and fractionation facilities and related infrastructure, and a liquefied propane export facility on Canada's West Coast, which provide Pembina's customers with natural gas and NGL services that are highly integrated with Pembina's other businesses. In addition, the Facilities segment includes a bulk marine terminal in the Port of Vancouver, Canada.

The Marketing & New Ventures segment undertakes value-added commodity marketing activities including buying and selling products and optimizing storage opportunities, by contracting capacity on Pembina's and various third-party pipelines and utilizing Pembina's rail fleet and rail logistics capabilities. Marketing activities also include identifying commercial opportunities to further develop other Pembina assets. Pembina's Marketing business also includes results from Aux Sable's NGL extraction facility near Chicago, Illinois and other natural gas and NGL processing facilities, logistics and distribution assets in the United States and Canada.

The financial results of the operating segments are included below. Performance is measured based on results from operating activities, net of depreciation and amortization, as included in the internal management reports that are reviewed by Pembina's President and Chief Executive Officer, interim Chief Financial Officer and other Senior Vice Presidents. These results are used to measure performance as management believes that such information is the most relevant in evaluating results of certain segments relative to other entities that operate within these industries. Inter-segment transactions are recorded at market value and eliminated under corporate and inter-segment eliminations.

For the year ended December 31, 2021 <i>(\$ millions)</i>	Pipelines⁽¹⁾	Facilities	Marketing & New Ventures⁽²⁾	Corporate & Inter-segment Eliminations	Total
Revenue from external customers	2,123	927	5,577	—	8,627
Inter-segment revenue	156	436	—	(592)	—
Total revenue⁽³⁾	2,279	1,363	5,577	(592)	8,627
Operating expenses ⁽⁴⁾	556	471	—	(266)	761
Cost of goods sold, including product purchases	—	6	5,017	(334)	4,689
Depreciation and amortization included in operations	413	214	50	7	684
Cost of sales	969	691	5,067	(593)	6,134
Realized (gain) loss on commodity-related derivative financial instruments	—	(10)	210	—	200
Unrealized gain on commodity-related derivative financial instruments	—	(38)	(35)	—	(73)
Share of profit from equity accounted investees	124	80	77	—	281
Gross profit	1,434	800	412	1	2,647
Depreciation included in general and administrative	—	—	—	39	39
Other general and administrative ⁽⁴⁾	30	14	29	194	267
Other expense (income)	11	14	(5)	(268)	(248)
Impairment expense	447	22	5	—	474
Reportable segment results from operating activities	946	750	383	36	2,115
Net finance costs (income)	29	35	(8)	394	450
Reportable segment earnings (loss) before tax	917	715	391	(358)	1,665
Capital expenditures	475	136	21	26	658
Contributions to equity accounted investees	299	29	7	—	335

For the year ended December 31, 2020					
<i>(\$ millions)</i>	Pipelines⁽¹⁾	Facilities	Marketing & New Ventures⁽²⁾	Corporate & Inter-segment Eliminations	Total
Revenue from external customers	2,105	892	2,956	—	5,953
Inter-segment revenue	146	339	—	(485)	—
Total revenue⁽³⁾	2,251	1,231	2,956	(485)	5,953
Operating expenses ⁽⁴⁾	498	392	—	(178)	712
Cost of goods sold, including product purchases	—	11	2,815	(317)	2,509
Depreciation and amortization included in operations	402	199	50	11	662
Cost of sales	900	602	2,865	(484)	3,883
Realized gain on commodity-related derivative financial instruments	—	—	(54)	—	(54)
Unrealized (gain) loss on commodity-related derivative financial instruments	—	(4)	88	—	84
Share of profit from equity accounted investees - operations	227	55	—	—	282
Adjusted gross profit (loss)	1,578	688	57	(1)	2,322
Impairment in share of profit from equity accounted investees	—	—	(314)	—	(314)
Gross profit (loss)	1,578	688	(257)	(1)	2,008
Depreciation included in general and administrative	—	—	—	38	38
Other general and administrative ⁽⁴⁾	24	10	28	146	208
Other (income) expense	(1)	2	4	(23)	(18)
Impairment expense	1,396	10	370	—	1,776
Reportable segment results from operating activities	159	666	(659)	(162)	4
Net finance costs (income)	31	24	(13)	378	420
Reportable segment earnings (loss) before tax	128	642	(646)	(540)	(416)
Capital expenditures	587	370	38	34	1,029
Contributions to equity accounted investees	—	69	155	—	224

⁽¹⁾ Pipelines transportation revenue includes \$207 million (2020: \$228 million) associated with U.S. pipeline revenue.

⁽²⁾ Marketing & New Ventures includes revenue of \$265 million (2020: \$143 million) associated with U.S. midstream sales.

⁽³⁾ During 2021 and 2020, no one customer accounted for 10 percent or more of total revenues reported throughout all segments.

⁽⁴⁾ Pembina incurred \$440 million (2020: \$370 million) of employee costs, of which \$265 million (2020: \$244 million) was recorded in operating expenses and \$175 million (2020: \$126 million) in general and administrative expenses. Employee costs include salaries, benefits and share-based compensation.

Geographical Information

Non-Current Assets

For the years ended December 31		
<i>(\$ millions)</i>	2021	2020
Canada	26,128	26,504
United States	3,826	3,601
Total non-current assets⁽¹⁾	29,954	30,105

⁽¹⁾ Excludes deferred income tax assets.

21. EARNINGS (LOSS) PER COMMON SHARE

Basic Earnings (Loss) Per Common Share

The calculation of basic earnings per common share at December 31, 2021 was based on the earnings attributable to common shareholders of \$1.1 billion (2020: \$476 million loss) and a weighted average number of common shares outstanding of 550 million (2020: 550 million).

Diluted Earnings (Loss) Per common Share

The calculation of diluted earnings per common share at December 31, 2021 was based on earnings attributable to common shareholders of \$1.1 billion⁽¹⁾ (2020: \$476 million loss), and weighted average number of common shares outstanding after adjustment for the effects of all dilutive potential common shares of 551 million (2020: 550 million).

Earnings (Loss) Attributable to Common Shareholders

For the years ended December 31		
<i>(\$ millions)</i>	2021	2020
Earnings (loss)	1,242	(316)
Dividends on preferred shares	(135)	(148)
Cumulative dividends on preferred shares, not yet declared	(9)	(12)
Basic and diluted earnings (loss) attributable to common shareholders	1,098	(476)

Weighted Average Number of Common Shares

<i>(In millions of shares, except as noted)</i>	2021	2020
Issued common shares at January 1	550	548
Effect of shares issued on exercise of options	—	2
Basic weighted average number of common shares at December 31	550	550
Dilutive effect of share options on issue ⁽¹⁾	1	—
Diluted weighted average number of common shares at December 31	551	550
Basic earnings (loss) per common share (dollars)	2.00	(0.86)
Diluted earnings (loss) per common share (dollars)	1.99	(0.86)

⁽¹⁾ The average market value of Pembina's shares for purposes of calculating the dilutive effect of share options for the year ended December 31, 2021 was based on quoted market prices for the period during which the options were outstanding.

For the year ended December 31, 2021, no stock options (2020: 277 thousand) were excluded from the calculation of diluted earnings (loss) per common share as the impact of these options are anti-dilutive.

22. PENSION PLAN

As at December 31 <i>(\$ millions)</i>	2021	2020
Registered defined benefit net (asset) obligation	(11)	26
Supplemental defined benefit net obligation	17	18
Net employee benefit obligations	6	44

Pembina maintains defined contribution plans and non-contributory defined benefit pension plans covering its employees. Pembina contributes five to 10 percent of an employee's earnings to the defined contribution plan until the employee's age plus years of service equals 50, at which time they become eligible for the defined benefit plans. Pembina recognized \$11 million in expense for the defined contribution plan during the year (2020: \$12 million). The defined benefit plans include a funded registered plan for all eligible employees and an unfunded supplemental retirement plan for those employees affected by the Canada Revenue Agency maximum pension limits. The defined benefit plans are administered by separate pension funds that are legally separated from Pembina. Benefits under the plans are based on the length of service and the annual average best three years of earnings during the last 10 years of service of the employee. Benefits paid out of the plans are not indexed. Pembina measures its accrued benefit obligations and the fair value of plan assets for accounting purposes as at December 31 of each year. The most recent actuarial funding valuation was at December 31, 2020. The defined benefit plans expose Pembina to actuarial risks such as longevity risk, interest rate risk, and market (investment) risk.

Effective January 1, 2021, Pembina revised the eligibility requirements for the defined benefit plan. Employees with an age plus years of service of 40 at January 1, 2021 will remain eligible for the defined benefit plan, when their age plus years of service reaches 50. All other employees will remain in the defined contribution plan.

Defined Benefit Obligations

As at December 31 <i>(\$ millions)</i>	2021		2020	
	Registered Plans	Supplemental Plan	Registered Plan	Supplemental Plan
Present value of unfunded obligations	—	17	—	18
Present value of funded obligations	257	—	278	—
Total present value of obligations	257	17	278	18
Fair value of plan assets	268	—	252	—
Recognized defined benefit assets (obligations)	11	(17)	(26)	(18)

Pembina funds the defined benefit obligation plans in accordance with government regulations by contributing to trust funds administered by an independent trustee. The funds are invested primarily in equities and bonds. Defined benefit plan contributions totaled \$23 million for the year ended December 31, 2021 (2020: \$23 million).

Pembina has determined that, in accordance with the terms and conditions of the defined benefit plans, and in accordance with statutory requirements of the plans, the present value of refunds or reductions in future contributions is not lower than the balance of the total fair value of the plan assets less the total present value of obligations. As such, no decrease in the defined benefit asset is necessary at December 31, 2021 (December 31, 2020: nil).

Registered Defined Benefit Pension Plan Assets Comprise

As at December 31 <i>(Percent)</i>	2021	2020
Equity securities	61	63
Debt	39	37
	100	100

Movement in the Present Value of the Defined Benefit Pension Obligation

(\$ millions)	2021		2020	
	Registered Plans	Supplemental Plan	Registered Plan	Supplemental Plan
Defined benefits obligations at January 1	278	18	250	16
Benefits paid by the plan	(28)	(1)	(28)	(2)
Current service costs	27	1	18	1
Interest expense	7	1	8	1
Actuarial (gains) losses in other comprehensive income	(27)	(2)	30	2
Defined benefit obligations at December 31	257	17	278	18

Movement in the Present Value of Registered Defined Benefit Pension Plan Assets

(\$ millions)	2021	2020
Fair value of plan assets at January 1	252	231
Contributions paid into the plan	23	23
Benefits paid by the plan	(28)	(28)
Return on plan assets	15	18
Interest income	6	8
Fair value of registered plan assets at December 31	268	252

Expense Recognition in Earnings (Loss)

For the years ended December 31	2021	2020
(\$ millions)		
Registered Plan		
Current service costs	28	19
Interest on obligation	8	9
Interest on plan assets	(6)	(8)
	30	20

The expense is recognized in the following line items in the consolidated statement of comprehensive income (loss):

For the years ended December 31	2021	2020
(\$ millions)		
Registered Plan		
Operating expenses	16	10
General and administrative expense	14	10
	30	20

Expense recognized for the Supplemental Plan was less than \$2 million for each of the years ended December 31, 2021 and 2020.

Actuarial Gains and Losses Recognized in Other Comprehensive Income (Loss)

(\$ millions)	2021			2020		
	Registered Plans	Supplemental Plan	Total	Registered Plan	Supplemental Plan	Total
Balance at January 1	(41)	(4)	(45)	(33)	(2)	(35)
Remeasurements:						
Financial assumptions	19	2	21	(13)	(1)	(14)
Experience adjustments	2	—	2	(10)	(1)	(11)
Return on plan assets excluding interest income	11	—	11	15	—	15
Recognized gain (loss) during the period after tax	32	2	34	(8)	(2)	(10)
Balance at December 31	(9)	(2)	(11)	(41)	(4)	(45)

Principal actuarial assumptions used:

As at December 31 <i>(weighted average percent)</i>	2021	2020
Discount rate	3.2	2.6
Future pension earning increases	4.0	4.0

Assumptions regarding future mortality are based on published statistics and mortality tables. The current longevities underlying the values of the liabilities in the defined plans are as follows:

As at December 31 <i>(years)</i>	2021	2020
Longevity at age 65 for current pensioners		
Males	22.0	21.9
Females	24.3	24.3
Longevity at age 65 for current member aged 45		
Males	23.0	22.9
Females	25.3	25.2

The calculation of the defined benefit obligation is sensitive to the discount rate, compensation increases, retirements and termination rates as set out above. A change in the estimated discount rate of 3.2 percent by 100 basis points at December 31, 2021 is considered reasonably possible in the next financial year. An increase by 100 basis points would result in a \$37 million reduction to the obligation whereas, a decrease would lead to a \$46 million increase to the obligation.

Pembina expects to contribute \$22 million to the defined benefit plans in 2022.

23. SHARE-BASED PAYMENTS

At December 31, 2021, Pembina has the following share-based payment arrangements:

Share Option Plan (Equity-Settled)

Pembina has a share option plan under which employees are eligible to receive options to purchase shares in Pembina.

Long-Term Share Unit Award Incentive Plan (Cash-Settled)

Pembina has a long-term share unit award incentive plan. Under the share-based compensation plan, awards of restricted ("RSU") and performance ("PSU") share units are made to officers and employees. The plan results in participants receiving cash compensation based on the value of the underlying notional shares granted under the plan. Payments are based on a trading value of Pembina's common shares plus notional dividends and performance of Pembina.

Pembina also has a deferred share unit ("DSU") plan. Under the DSU plan, directors are required to take at least 50 percent of total director compensation as DSUs, until such time that they have met certain share ownership guidelines. A DSU is a notional share that has the same value as one Pembina common share. Its value changes with Pembina's share price. DSUs do not have voting rights but they accrue dividends as additional DSU units, at the same rate as dividends paid on Pembina's common shares. DSUs are paid out when a director retires from the board and are redeemed for cash using the weighted average of trading price of common shares on the Toronto Stock Exchange ("TSX") for the last five trading days before the redemption date, multiplied by the number of DSUs the director holds.

Terms and Conditions of Share Option Plan and Share Unit Award Incentive Plan

Share Option Plan

Share options vest one-third on the first anniversary of the grant date, one-third on the second anniversary of the grant date and one-third on the third anniversary of the grant date and have a contractual life of seven years. In 2021, Pembina granted select executive officers and non-officers stock options that vest after a four-year period and expire seven years after issuance.

Long-Term Share Unit Award Incentive Plan⁽¹⁾

Grant date RSUs, PSUs and DSUs to Officers, Employees and Directors (thousands of units, except as noted)	PSUs ⁽²⁾	RSUs ⁽²⁾	DSUs	Total
2020	469	487	31	987
2021	704	1,429	44	2,177

⁽¹⁾ Distribution Units are granted in addition to RSU and PSU grants based on notional accrued dividends from RSU and PSU granted but not paid.

⁽²⁾ Contractual life of 3 years.

PSUs vest on the third anniversary of the grant date. RSUs vest one-third on the first anniversary of the grant date, one-third on the second anniversary of the grant date and one-third on the third anniversary of the grant date. In 2021, Pembina granted additional RSUs that vest on the third anniversary of the grant date. Actual units awarded are based on the trading value of the shares and performance of Pembina.

Disclosure of Share Option Plan

The number and weighted average exercise prices of share options as follows:

(thousands of options, except as noted)	Number of Options	Weighted Average Exercise Price (dollars)
Outstanding at December 31, 2019	18,584	\$44.65
Granted	7,316	\$37.55
Exercised	(2,188)	\$40.17
Forfeited	(1,103)	\$44.86
Expired	(833)	\$45.24
Outstanding at December 31, 2020	21,776	\$42.68
Granted	2,695	\$36.36
Exercised	(464)	\$34.41
Forfeited	(835)	\$39.23
Expired	(3,201)	\$47.87
Outstanding at December 31, 2021	19,971	\$41.33

As of December 31, 2021, the following options are outstanding:

(thousands of options, except as noted) Exercise Price (dollars)	Number Outstanding at December 31, 2021	Options Exercisable	Weighted Average Remaining Life
\$26.83 – \$35.25	3,517	1,102	5.2
\$35.26 – \$41.38	4,149	1,700	4.6
\$41.39 – \$43.41	2,677	2,677	2.7
\$43.42 – \$46.00	4,618	2,722	4.5
\$46.01 – \$49.78	5,010	3,575	4.3
Total	19,971	11,776	4.4

Options are exercised regularly throughout the year. Therefore, the weighted average share price during the year of \$40.17 (2020: \$49.79) is representative of the weighted average share price at the date of exercise.

Expected volatility is estimated by considering historic average share price volatility. The weighted average inputs used in the measurement of the fair values at grant date of share options are the following:

Share Options Granted

For the years ended December 31 (dollars, except as noted)	2021 Graded Vesting	2021 Cliff Vesting	2020 Graded Vesting
Weighted average			
Fair value at grant date	7.78	6.59	3.82
Expected volatility (percent)	49.06	40.01	36.61
Expected option life (years)	3.67	5.00	3.67
Expected annual dividends per option	2.52	2.52	2.52
Expected forfeitures (percent)	7.1	7.1	6.9
Risk-free interest rate (based on government bonds)(percent)	0.6	1.0	0.5

Disclosure of Long-Term Share Unit Award Incentive Plan

The long-term share unit award incentive plans were valued using the volume weighted average price for 20 days ending December 31, 2021 of \$37.99 (2020: \$32.53). Actual payment may differ from amount valued based on market price and company performance.

Employee Expenses

For the years ended December 31 ((\$ millions)	2021	2020
Share option plan, equity settled	31	17
Long-term share unit award incentive plan	69	11
Share-based compensation expense	100	28
Total carrying amount of liabilities for cash settled arrangements	88	60
Total intrinsic value of liability for vested benefits	56	39

24. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

(\$ millions)	Currency Translation Reserve	Cash Flow Hedge Reserve	Pension and other Post-Retirement Benefit Plan Adjustments ⁽²⁾	Total
Balance at December 31, 2019	134	—	(36)	98
Other comprehensive loss before hedging activities	(117)	—	(10)	(127)
Other comprehensive gain resulting from hedging activities ⁽¹⁾	32	—	—	32
Tax impact	(1)	—	—	(1)
Balance at December 31, 2020	48	—	(46)	2
Other comprehensive (loss) gain before hedging activities	(18)	—	34	16
Other comprehensive gain resulting from hedging activities ⁽¹⁾	2	8	—	10
Balance at December 31, 2021	32	8	(12)	28

⁽¹⁾ Amounts relate to hedges of the Company's net investment in foreign operations (reported in Currency Translation Reserve) and interest rate derivatives designated as cash flow hedges (reported in Cash Flow Hedge Reserve)(Note 25).

⁽²⁾ Pension and other Post-Retirement Benefit Plan Adjustments will not be reclassified into earnings.

25. FINANCIAL INSTRUMENTS & RISK MANAGEMENT

Risk Management Overview

Pembina has exposure to counterparty credit risk, liquidity risk and market risk. Pembina recognizes that effective management of these risks is a critical success factor in managing organization and shareholder value.

Risk management strategies, policies and limits ensure risks and exposures are aligned to Pembina's business strategy and risk tolerance. Pembina's Board of Directors is responsible for providing risk management oversight at Pembina and oversees how management monitors compliance with Pembina's risk management policies and procedures and reviews the adequacy of this risk framework in relation to the risks faced by Pembina. Internal audit personnel assist the Board of Directors in its oversight role by monitoring and evaluating the effectiveness of the organization's risk management system.

Counterparty Credit Risk

Counterparty credit risk represents the financial loss Pembina may experience if a counterparty to a financial instrument or commercial agreement failed to meet its contractual obligations to Pembina in accordance with the terms and conditions of the financial instruments or agreements with Pembina. Counterparty credit risk arises primarily from Pembina's cash and cash equivalents, trade and other receivables, advances to related parties and from counterparties to its derivative financial instruments. The carrying amount of Pembina's cash and cash equivalents, trade and other receivables, advances to related parties, derivative financial instruments and certain financial guarantees represents the maximum counterparty credit exposure, without taking into account security held.

Pembina manages counterparty credit risk through established credit management techniques, including conducting comprehensive financial and other assessments for all new counterparties and regular reviews of existing counterparties to establish and monitor a counterparty's creditworthiness, setting exposure limits, monitoring exposures against these limits, entering into master netting arrangements and obtaining financial assurances where warranted. Pembina utilizes various sources of financial, credit and business information in assessing the creditworthiness of a counterparty including external credit ratings, where available, and in other cases, detailed financial statement analysis in order to generate an internal credit rating based on quantitative and qualitative factors. The Board of Directors has approved a counterparty exposure limit matrix which establishes the maximum exposure that can be approved for a counterparty based on debt rating. Pembina continues to closely monitor and reassess the creditworthiness of its counterparties, which has resulted in Pembina reducing or mitigating its exposure to certain counterparties where it was deemed warranted and permitted under contractual terms.

Financial assurances from counterparties may include guarantees, letters of credit and cash. At December 31, 2021 letters of credit totaling \$100 million (December 31, 2020: \$130 million) were held primarily in respect of customer trade receivables.

Pembina typically has collected its trade receivables in full and at December 31, 2021, 98 percent were current (2020: 94 percent). Management defines current as outstanding accounts receivable under 30 days past due. Pembina has a general lien and a continuing and first priority security interest in, and a secured charge on, all of a shipper's petroleum products in its custody.

At December 31, the aging of past due trade and other receivables was as follows:

<i>(\$ millions)</i>	2021	2020
31-60 days past due	2	3
Greater than 61 days past due	2	8
	4	11

Pembina uses a loss allowance matrix to measure lifetime expected credit losses at initial recognition and throughout the life of the receivable. The loss allowance matrix is determined based on Pembina's historical default rates over the expected life of trade receivables, adjusted for forward-looking estimates. Management believes the unimpaired amounts that are past due by greater than 30 days are fully collectible based on historical default rates of customers and management's assessment of counterparty credit risk through established credit management techniques as discussed above.

Expected credit losses on lease receivables are determined using a probability-weighted estimate of credit losses, measured as the present value of all expected cash shortfalls, discounted at the interest rates implicit in the leases, using reasonable and supportable information about past events, current conditions and forecasts of future economic conditions. Pembina considers the risk of default relating to lease receivables low based on Pembina's assessment of individual counterparty credit risk through established credit management techniques as discussed above.

Advances to related parties at December 31, 2021 are held at amortized cost and consist of funds advanced by Pembina to a jointly controlled entity. Expected credit losses are measured using a probability-weighted estimate of credit losses, measured as the present value of all expected cash shortfalls, discounted at the effective interest rate of the financial asset, using reasonable and supportable information about past events, current conditions and forecasts of future economic conditions.

Pembina monitors and manages its concentration of counterparty credit risk on an ongoing basis. Pembina believes these measures minimize its counterparty credit risk but there is no certainty that they will protect it against all material losses. As part of its ongoing operations, Pembina must balance its market and counterparty credit risks when making business decisions.

Liquidity Risk

Liquidity risk is the risk Pembina will not be able to meet its financial obligations as they come due. The following are the contractual maturities of financial liabilities, including estimated interest payments.

As at December 31, 2021 (\$ millions)	Outstanding Balances Due by Period					
	Carrying Amount	Expected Cash Flows	Less Than 1 Year	1 - 3 Years	3 - 5 Years	More Than 5 Years
Trade payables and accrued liabilities	1,063	1,063	1,063	—	—	—
Loans and borrowings	10,645	16,535	1,478	1,944	2,088	11,025
Subordinated hybrid notes	594	874	41	58	58	717
Dividends payable	115	115	115	—	—	—
Derivative financial liabilities	59	59	59	—	—	—
Lease liabilities	723	978	113	181	152	532

Pembina manages its liquidity risk by forecasting cash flows over a 12 month rolling time period to identify financing requirements. These financing requirements are then addressed through a combination of credit facilities and through access to capital markets, if required.

Market Risk

Pembina's results are subject to movements in commodity prices, foreign exchange and interest rates. A formal Risk Management Program including policies and procedures has been designed to mitigate these risks.

a. Commodity Price Risk

Certain of the transportation contracts or tolling arrangements with respect to Pembina's pipeline assets do not include take-or-pay commitments from crude oil and gas producers and, as a result, Pembina is exposed to throughput risk with respect to those assets. A decrease in volumes transported can directly and adversely affect Pembina's revenues and earnings. The demand for, and utilization of, Pembina's pipeline assets may be impacted by factors such as changing market fundamentals, capacity bottlenecks, operational incidents, regulatory restrictions, system maintenance, weather and increased competition. Market fundamentals, such as commodity prices and price differentials, natural gas and gasoline consumption, alternative energy sources and global supply disruptions outside of Pembina's control can impact both the supply of and demand for the commodities transported on Pembina's pipelines.

Pembina's Marketing business includes activities related to product storage, terminalling, and hub services. These activities expose Pembina to certain risks relating to fluctuations in commodity prices and, as a result, Pembina may experience volatility in revenue and impairments related to the book value of stored product with respect to these activities. Primarily, Pembina enters into contracts to purchase and sell crude oil, condensate, NGL and natural gas at floating market prices; as a result, the prices of products that are marketed by Pembina are subject to volatility as a result of factors such as seasonal demand changes, extreme weather conditions, market inventory levels, general economic conditions, changes in crude oil markets and other factors. Pembina manages its risk exposure by balancing purchases and sales to secure less volatile margins. Notwithstanding Pembina's management of price and quality risk, marketing margins for commodities can vary and have varied significantly from period to period in the past. This variability could have an adverse effect on the results of Pembina's Marketing business and its overall results of operations. To assist in reducing this inherent variability in its Marketing business, Pembina has invested, and will continue to invest, in assets that have a fee-based revenue component.

Pembina is also exposed to potential price declines and decreasing frac spreads between the time Pembina purchases NGL feedstock and sells NGL products. Frac spread is the difference between the sale prices of NGL products and the cost of NGL sourced from natural gas and acquired at prices related to natural gas prices. Frac spreads can change significantly from period to period depending on the relationship between NGL and natural gas prices (the "frac spread ratio"), absolute commodity prices and changes in the Canadian to U.S. dollar exchange rate. In addition to the frac spread ratio changes, there is also a differential between NGL product prices and crude oil prices which can change margins realized for midstream products. The amount of profit or loss made on the extraction portion of the business will generally increase or decrease with frac spreads. This exposure could result in variability of cash flow generated by the Marketing business, which could affect Pembina and the cash dividends that Pembina is able to distribute.

Pembina utilizes financial derivative instruments as part of its overall risk management strategy to assist in managing the exposure to commodity price, interest rate, cost of power and foreign exchange risk. As an example of commodity price mitigation, Pembina actively fixes a portion of its exposure to fractionation margins through the use of derivative financial instruments. Additionally, Pembina's Marketing business is also exposed to variability in quality, time and location differentials for various products, and financial instruments may be used to offset Pembina's exposures to these differentials. Pembina does not use financial instruments for speculative purposes. Commodity price fluctuations and volatility can also impact producer activity and throughput in Pembina's infrastructure.

The following table shows the impact on earnings⁽¹⁾ if the underlying commodity price risk of the derivative financial instruments (increased) or decreased by 15 percent, with other variables held constant.

As at December 31, 2021 <i>(\$ millions)</i>	15 Percent Price Increase	15 Percent Price Decrease
Crude oil	(40)	40
Natural gas	11	(11)
NGL ⁽²⁾	(39)	39

⁽¹⁾ Based on average market prices.

⁽²⁾ Includes propane, butane and condensate.

b. Foreign Exchange Risk

Certain of Pembina's cash flows, namely a portion of its commodity-related cash flows, certain cash flows from U.S.-based infrastructure assets and distributions from U.S.-based investments in equity accounted investees, are subject to currency risk, arising from the denomination of specific cash flows in U.S. dollars. Additionally, a portion of Pembina's capital expenditures and contributions or loans to Pembina's U.S.-based investments in equity accounted investees, may be denominated in U.S. dollars. Furthermore, the value of the investment in U.S. dollar denominated subsidiaries will fluctuate with changes in exchange rates when translated into Pembina's functional currency.

Pembina monitors, assesses and responds to these foreign currency risks using an active risk management program, which may include the issuance of U.S. dollar debt, and exchange of foreign currency for domestic currency at a fixed rate.

The following table shows the impact on earnings⁽¹⁾ if the underlying foreign exchange risk rate of the derivative financial instruments (increased) or decreased by \$0.10, with other variables held constant.

As at December 31, 2021 <i>(\$ millions)</i>	\$0.10 Rate Increase	\$0.10 Rate Decrease
U.S. to Canadian dollars	(27)	27

⁽¹⁾ Based on the U.S. to Canadian dollar exchange rate.

c. Interest Rate Risk

Interest bearing financial liabilities include Pembina's debt and lease liabilities. Pembina has a floating interest rate debt in the form of its credit facilities and certain long-term debt, which subjects Pembina to interest rate risk. Pembina monitors and assesses variable interest rate risk and responds to this risk by issuing long-term debt with fixed interest rates or by entering into interest rate swaps.

Pembina's U.S. drawings on its credit facilities, certain U.S. debt, and Pembina's interest rate swaps have variable rate components that reference the USD London Interbank Offered Rate ("LIBOR"). 1-Week and 2-Month USD LIBOR rates have been phased out on December 31, 2021 and other USD LIBOR rates will cease to be published at the end of June 2023. LIBOR will likely be replaced by a secured overnight financing rate. Pembina will continue to monitor developments and the potential impact on the business.

At the reporting date, the interest rate profile of Pembina's interest-bearing financial instruments was:

As at December 31 <i>(\$ millions)</i>	2021	2020
Carrying amounts of financial liability		
Fixed rate instruments ⁽¹⁾	11,055	10,120
Variable rate instruments ⁽²⁾	907	1,530
	11,962	11,650

⁽¹⁾ Includes lease liabilities and subordinated hybrid notes.

⁽²⁾ At December 31, 2021, Pembina held positions in financial derivative contracts designated as cash flow hedging instruments, fixing the interest rates on U.S. \$250 million of variable rate debt (December 31, 2020: U.S. \$250 million).

Cash Flow Sensitivity Analysis for Variable Rate Instruments

The following table shows the impact on earnings if interest rates at the reporting date would have (increased) decreased earnings by 100 basis points, with other variables held constant.

As at December 31, 2021 (\$ millions)	100 Basis Point Increase	100 Basis Point Decrease
Variable rate instruments	(11)	11

Fair Values

The fair values of financial assets and liabilities, together with the carrying amounts shown in the consolidated statements of financial position, are shown in the table below. Certain non-derivative financial instruments measured at amortized cost including, cash and cash equivalents, trade receivables and other, finance lease receivables, advances to related parties, trade payables and other, and other liabilities have been excluded because they have carrying amounts that approximate their fair value due to the nature of the item or the short time to maturity. These instruments would be classified in Level 2 of the fair value hierarchy.

As at December 31 (\$ millions)	2021				2020			
	Carrying Value	Fair Value ⁽¹⁾			Carrying Value	Fair Value ⁽¹⁾		
		Level 1	Level 2	Level 3		Level 1	Level 2	Level 3
Financial assets carried at fair value								
Derivative financial instruments ⁽³⁾	95	—	84	11	53	—	53	—
Financial liabilities carried at fair value								
Derivative financial instruments ⁽³⁾	59	—	59	—	69	—	69	—
Contingent consideration ⁽⁴⁾	70	—	35	35	—	—	—	—
Financial liabilities carried at amortized cost								
Loans and borrowings ⁽²⁾	11,239	—	11,814	—	10,876	—	11,902	—

⁽¹⁾ The basis for determining fair value is disclosed in Note 4.

⁽²⁾ Carrying value of current and non-current balances. Includes loans and borrowings and subordinated hybrid notes.

⁽³⁾ At December 31, 2021 all derivative financial instruments are carried at fair value through earnings, except for \$8 million in interest rate derivative financial assets that have been designated as cash flow hedges.

⁽⁴⁾ Included in trade payables and other and other liabilities. See Note 9 for further details.

Level 2

Pembina's Level 2 financial instruments carried at fair value are valued using inputs that include quoted forward prices for commodities, time value and volatility factors, which can be substantially observed or corroborated in the marketplace. Instruments in this category include non-exchange traded derivatives such as over-the-counter physical forwards and options, including those that have prices similar to quoted market prices. Pembina obtains quoted market prices for its inputs from information sources including banks, Bloomberg Terminals and Natural Gas Exchange.

Level 3

In April 2021, Pembina entered into a long-term power purchase agreement that resulted in the recognition of an embedded derivative which Pembina has classified in Level 3 of the fair value hierarchy. The embedded derivative is accounted for at fair value with realized and unrealized gains and losses recognized in earnings. The fair value is measured using a forward pricing model based on the fixed off take price and forward power price differentials each reporting date. The fair value is determined using the contracted Alberta Electric System Operator ("AESO") wind power price at the reporting date compared to the quoted forward AESO wind power prices at the reporting date adjusted for the wind discount, which is calculated as the decrease in realized power price for wind generators relative to the average power pool prices.

The significant unobservable inputs used in the fair value measurement of the Level 3 derivative instrument were as follows:

Significant Unobservable Inputs (percent)	2021
Wind discount	29.0
Wind escalation rate	4.5
Wind capacity	38.2

Wind discount inputs are adjusted for management's projections of wind discount escalation over time which cannot be substantially observed or corroborated in the marketplace.

The table below shows the impact to earnings associated with the change in fair value of the derivative if the following significant unobservable inputs at the reporting date would have (increased) decreased, with other variables held constant. Management concluded that changes in the wind capacity factor would not have a material impact to the fair value measurement.

As at December 31, 2021 <i>(\$ millions)</i>	Sensitivity Range	Increase	Decrease
Wind discount	+/- 20 percent	(38)	38
Wind escalation rate	+/- 10 percent	(8)	8

Changes in net fair value of derivative asset and liability classified as Level 3 in the fair value hierarchy were as follows:

For the year ended December 31 <i>(\$ millions)</i>	2021
Level 3 net derivative asset at beginning of period	—
Total gain (loss):	
Included in earnings	11
Level 3 net derivative asset at end of period	11

There were no transfers into or out of Level 3 during the year ended December 31, 2021.

Interest Rates Used for Determining Fair Value

The interest rates used to discount estimated cash flows, when applicable, are based on the government yield curve at the reporting date plus an adequate credit spread, and were as follows:

As at December 31 <i>(percent)</i>	2021	2020
Derivatives	0.4 - 1.8	0.5 - 0.7
Loans and borrowings	1.1 - 5.0	0.5 - 3.9

Fair value of power derivatives are based on market rates reflecting forward curves.

Derivative instruments

Pembina enters into derivative instruments to hedge future cash flows associated with interest rate, commodity, and foreign exchange exposures. Derivatives are considered effective hedges to the extent that they offset the changes in value of the hedged item or transaction resulting from a specified risk factor. 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 and are classified as held at fair value through profit or loss ("FVTPL").

The following table is a summary of the net derivative financial instruments:

As at December 31 (\$ millions)	2021					2020			
	Current Asset ⁽¹⁾	Non-Current Asset	Current Liability ⁽¹⁾	Non-Current Liability	Total	Current Asset ⁽¹⁾	Non-Current Asset	Current Liability ⁽¹⁾	Total
Commodity, power, storage and rail financial instruments	13	73	(48)	(6)	32	11	27	(68)	(30)
Interest rate	1	8	—	—	9	—	1	(1)	—
Foreign exchange	—	—	(5)	—	(5)	14	—	—	14
Net derivative financial instruments	14	81	(53)	(6)	36	25	28	(69)	(16)

⁽¹⁾ At December 31, 2021 the derivative financial instruments were offset by \$11 million (2020: \$6 million) when determining the net amounts presented on the consolidated statement of financial position.

Notional and Maturity Summary

The maturity and notional amount or quantity outstanding related to Pembina's derivative instruments are as follows:

(\$ millions)	Liquids (bpd)	Natural Gas (GJ/d)	Power (GWh)	Foreign Exchange	Interest Rate
As at December 31, 2021					
Purchases ⁽¹⁾	—	62,615	6,166	—	—
Sales ⁽¹⁾	16,550	—	—	—	—
Millions of U.S. dollars	—	—	—	272	250
Maturity dates	2022	2022	2040	2022	2025
As at December 31, 2020					
Purchases ⁽¹⁾⁽²⁾	1,756	73,557	—	—	—
Sales ⁽¹⁾	25,284	—	—	—	—
Millions of U.S. dollars	—	—	—	260	250
Maturity dates	2021	2021	2021	2021	2025

⁽¹⁾ Barrels per day ("bpd"), gigajoules per day ("GJ/d") and gigawatt hours ("GWh").

⁽²⁾ As at December 31, 2020 Pembina had outstanding power purchase derivatives representing approximately 6 megawatt hours.

Gains and Losses on Derivative Instruments

Realized and unrealized losses (gains) on derivative instruments are as follows:

For the years ended December 31 (\$ millions)	2021	2020
Derivative instruments held at FVTPL⁽¹⁾		
Realized loss (gain)		
Commodity-related	200	(54)
Foreign exchange	(12)	2
Unrealized (gain) loss		
Commodity-related	(73)	84
Foreign exchange	19	5
Derivative instruments in hedging relationships⁽²⁾		
Unrealized (gain) loss		
Interest rate	(8)	—

⁽¹⁾ Realized and unrealized losses (gains) on commodity derivative instruments held at FVTPL are included in loss (gain) on commodity-related derivative financial instruments in the Consolidated Financial Statements. Realized and unrealized losses (gains) on foreign exchange derivative instruments held at FVTPL are included in net finance costs in the Consolidated Financial Statements.

⁽²⁾ Unrealized losses (gains) on derivatives in designated cash flow hedging relationships are recognized in the cash flow hedge reserve in accumulated other comprehensive income, with realized (gains) losses being reclassified to net finance costs. Refer to Note 24 for amounts reclassified. No (gains) losses have been recognized in net income relating to discontinued cash flow hedges.

Non-Derivative Instruments Designated as Net Investment Hedges

Pembina has designated certain U.S. dollar denominated debt as a hedge of the Company's net investment in U.S. dollar denominated subsidiaries and investments in equity accounted investees. The designated debt has been assessed as having no ineffectiveness as the U.S. dollar debt has an equal and opposite exposure to U.S. dollar fluctuations. As a result, all foreign exchange gains or losses on the debt are reported directly in other comprehensive income.

The following balances of U.S. dollar debt had been designated as hedges:

For the years ended December 31 (\$ millions)	2021	2020
Notional amount of U.S. debt designated (in U.S. dollars)	250	250
Carrying value of U.S. debt designated	316	317
Maturity date	2025	2025

26. CAPITAL MANAGEMENT

Pembina's objective when managing capital is to ensure a stable stream of dividends to shareholders that is sustainable over the long-term. Pembina manages its capital structure based on requirements arising from significant capital development activities, the risk characteristics of its underlying asset base and changes in economic conditions. Pembina manages its capital structure and short-term financing requirements using non-GAAP measures, including the ratios of debt to adjusted EBITDA, debt to total enterprise value, adjusted cash flow to debt and debt to equity. The metrics are used to measure Pembina's financial leverage and measure the strength of Pembina's balance sheet. Pembina remains satisfied that the leverage currently employed in its capital structure is sufficient and appropriate given the characteristics and operations of the underlying asset base. Pembina, upon approval from its Board of Directors, will balance its overall capital structure through new equity or debt issuances, as required.

Pembina maintains a conservative capital structure that allows it to finance its day-to-day cash requirements through its operations, without requiring external sources of capital. Pembina funds its operating commitments, short-term capital spending as well as its dividends to shareholders through this cash flow, while new borrowing and equity issuances are primarily reserved for the support of specific significant development activities. The capital structure of Pembina consists of shareholder's equity, comprised of common and preferred equity, plus long-term debt. Long-term debt is comprised of bank credit facilities and unsecured notes.

Pembina is subject to certain financial covenants under its note indentures and credit agreements and is in compliance with all financial covenants as of December 31, 2021.

Note 16 of these financial statements shows the change in share capital for the year ended December 31, 2021.

27. GROUP ENTITIES

Significant Subsidiaries

As at December 31 <i>(percentages)</i>	Jurisdiction	Ownership Interest
Pembina Cochin LLC	Delaware U.S.	100
Pembina Empress NGL Partnership	Alberta	100
Pembina Gas Services Limited Partnership	Alberta	100
Pembina Holding Canada L.P.	Alberta	100
Pembina Infrastructure and Logistics L.P.	Alberta	100
Pembina Midstream Limited Partnership	Alberta	100
Pembina Oil Sands Pipeline L.P.	Alberta	100
Pembina Pipeline	Alberta	100

28. RELATED PARTIES

Pembina enters into transactions with related parties in the normal course of business and on terms equivalent to those that prevail in arm's length transactions, unless otherwise noted. Pembina contracts capacity from its equity accounted investees, advances funds to support operations, provides letters of credit, including financial guarantees, and provides services, on a cost recovery basis, to investments in equity accounted investees. A summary of the significant related party transactions are as follows:

Equity Accounted Investees

(\$ millions)	2021	2020
For the years ended December 31:		
Services provided	162	136
Services received	31	14
Interest income	15	14
As at December 31:		
Advances to related parties ⁽¹⁾	8	13
Trade receivables and other	7	7
Trade payables and accrued liabilities	27	18

⁽¹⁾ During the year ended December 31, 2021, Fort Corp. repaid advances of \$5 million (2020: \$5 million). During the year ended December 31, 2021, Pembina advanced U.S. \$10 million (2020: U.S. \$24 million) to Ruby and recognized an impairment of U.S. \$10 million (2020: U.S. \$110 million) on its advances to Ruby (Note 10).

Key Management Personnel and Director Compensation

Key management consists of Pembina's directors and certain key officers.

Compensation

In addition to short-term employee benefits, including salaries, director fees and short-term incentives, Pembina also provides key management personnel with share-based compensation, contributes to post employment pension plans and provides car allowances, parking and business club memberships.

Key management personnel compensation comprised:

For the years ended December 31	2021	2020
(\$ millions)		
Short-term employee benefits	9	8
Share-based compensation and other ⁽¹⁾	53	3
Total compensation of key management	62	11

⁽¹⁾ Includes termination benefits.

Transactions

Key management personnel and directors of Pembina control less than one percent of the voting common shares of Pembina (consistent with the prior year). Certain directors and key management personnel also hold Pembina preferred shares. Dividend payments received for the common and preferred shares held are commensurate with other non-related holders of those instruments.

Certain officers are subject to employment agreements in the event of termination without just cause or change of control.

Post-Employment Benefit Plans

Pembina has significant influence over the pension plans for the benefit of their respective employees. No balance payable is outstanding at December 31, 2021 (December 31, 2020: nil).

(\$ millions)	Transaction	Transaction Value Years Ended December 31	
Post-employment benefit plan		2021	2020
Defined benefit plan	Funding	23	23

29. COMMITMENTS AND CONTINGENCIES

Commitments

Pembina had the following contractual obligations outstanding at December 31, 2021:

Contractual Obligations ⁽¹⁾ (\$ millions)	Payments Due by Period				
	Total	Less than 1 Year	1 – 3 Years	3 – 5 Years	After 5 Years
Leases ⁽²⁾	978	113	181	152	532
Long-term debt ⁽³⁾	17,409	1,519	2,002	2,146	11,742
Construction commitments ⁽⁴⁾	1,042	435	32	24	551
Other	531	92	120	74	245
Total contractual obligations	19,960	2,159	2,335	2,396	13,070

⁽¹⁾ Pembina enters into product purchase agreements and power purchase agreements to secure supply for future operations. Purchase prices of both NGL and power are dependent on current market prices. Volumes and prices for NGL and power contracts cannot be reasonably determined, and therefore, an amount has not been included in the contractual obligations schedule. Product purchase agreements range from one to 9 years and involve the purchase of NGL products from producers. Assuming product is available, Pembina has secured between 18 and 190 mbpd of NGL each year up to and including 2030. Power purchase agreements range from one to 23 years and involve the purchase of power from electrical service providers. Pembina has secured up to 79 megawatts per day each year up to and including 2045.

⁽²⁾ Includes terminals, rail, office space, land and vehicle leases.

⁽³⁾ Includes loans and borrowings, subordinated hybrid notes and interest payments on Pembina's senior unsecured medium-term notes and subordinated hybrid notes. Excludes deferred financing costs.

⁽⁴⁾ Excluding significant projects that are awaiting regulatory approval, projects which Pembina is not committed to construct, and projects that are executed by equity accounted investees.

Commitments to Equity Accounted Investees

Pembina has commitments to provide contributions to certain equity accounted investees based on annual budgets approved by the joint venture partners and contractual agreements.

Contingencies

Pembina, including its subsidiaries and its investments in equity accounted investees, are subject to various legal and regulatory and tax proceedings, actions and audits arising in the normal course of business. We represent our interests vigorously in all proceedings in which we are involved. Legal and administrative proceedings involving possible losses are inherently complex, and we apply significant judgment in estimating probable outcomes. Of most significance is a claim filed against Aux Sable by a counterparty to an NGL supply agreement. Aux Sable has filed Statements of Defense responding to the claim. While the final outcome of such actions and proceedings cannot be predicted with certainty, at this time management believes that the resolutions of such actions and proceedings will not have a material impact on Pembina's financial position or results of operations.

Letters of Credit

Pembina has provided letters of credit to various third parties in the normal course of conducting business. The letters of credit include financial guarantees to counterparties for product purchases and sales, transportation services, utilities, engineering and construction services. The letters of credit have not had and are not expected to have a material impact on Pembina's financial position, earnings, liquidity or capital resources. As at December 31, 2021, Pembina had \$135 million (December 31, 2020: \$91 million) in letters of credit issued.

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STOCK EXCHANGE

Pembina Pipeline Corporation

Toronto Stock Exchange listing symbols for:

COMMON SHARES PPL
PREFERRED SHARES PPL.PR.A, PPL.PR.C, PPL.PR.E, PPL.PR.G,
PPL.PR.I, PPL.PR.O, PPL.PR.Q, PPL.PR.S, PPL.PFA, PPL.PFC
and PPL.PFE

New York Stock Exchange listing symbol for:

COMMON SHARES PBA

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