

REPORT TO SHAREHOLDERS

Year ended December 31, 2020



MANAGEMENT'S DISCUSSION AND ANALYSIS

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Basis of Presentation

The following restated Management's Discussion and Analysis ("MD&A") of the financial and operating results of Pembina Pipeline Corporation ("Pembina" or the "Company") is dated February 25, 2021, and is supplementary to, and should be read in conjunction with, Pembina's restated audited consolidated financial statements as at and for the year ended December 31, 2020 ("Consolidated Financial Statements"), which were filed on SEDAR on November 18, 2021.

This MD&A supersedes and replaces the original Management's Discussion and Analysis of the financial and operating results of Pembina dated February 25, 2021 for the year ended December 31, 2020, which was filed on SEDAR on February 25, 2021 (the "Original MD&A").

The Company has restated certain financial information of the Company for the years ended December 31, 2020, 2019 and 2018, to address the restatement of revenue and cost of goods sold for such periods in connection with the Company's accounting treatment of certain contracts within its marketing business and, in connection therewith, the Company has restated and refiled on the date hereof the Company's Consolidated Financial Statements. In connection with the foregoing, this MD&A reflects the restated revenue and cost of goods sold figures for the years ended December 31, 2020 and 2019 with no impact to earnings, cash flows or financial position. See "Restatement of Revenue and Cost of Goods Sold" in this MD&A and Note 3 of the Consolidated Financial Statements for more detail.

Other than the restated revenue and cost of goods sold figures for the years ended December 31, 2020 and 2019 and related disclosures in respect of the restatement of such figures, this MD&A does not, and does not purport to, update or restate the information in the Original MD&A or reflect any events that occurred after the date of the Original MD&A.

The Consolidated Financial Statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board, using the accounting policies described in Note 5 of the Consolidated Financial Statements. All dollar amounts contained in this MD&A are expressed in Canadian dollars unless otherwise noted. For further details on Pembina and Pembina's significant assets, including definitions for capitalized terms used herein and not otherwise defined, refer to Pembina's restated annual information form ("AIF") for the year ended December 31, 2020. Additional information about Pembina filed with Canadian and U.S. securities commissions, including quarterly and annual reports, annual information forms (filed with the U.S. Securities and Exchange Commission (the "SEC") under Form 40-F) and management information circulars, can be found online at www.sedar.com, www.sec.gov and through Pembina's website at www.pembina.com.

Abbreviations

For a list of abbreviations that may be used in this MD&A, refer to the Abbreviations section of this MD&A.

Non-GAAP Financial Measures

Pembina has identified certain financial performance measures that management believes provide meaningful information in assessing Pembina's underlying performance. Readers are cautioned that these measures do not have a standardized meaning prescribed by IFRS and therefore may not be comparable to similar measures presented by other entities. Refer to the "Non-GAAP Measures" section of this MD&A for a list and description, including reconciliations to the most directly comparable GAAP measures, of such non-GAAP measures.

Risk Factors and Forward-Looking Information

Management has identified the primary risk factors that could have a material impact on the financial results and operations of Pembina. Such risk factors are described in the "Risk Factors" section of this MD&A and are also included in Pembina's AIF. The Company's financial and operational performance is potentially affected by a number of factors, including, but not limited to, the factors described within the "Forward-Looking Statements & Information" section of this MD&A. This MD&A contains forward-looking statements based on Pembina's current expectations, estimates, projections and assumptions. This information is provided to assist readers in understanding the Company's future plans and expectations and may not be appropriate for other purposes.

1. ABOUT PEMBINA

Pembina is a leading transportation and midstream service provider that has been serving North America's energy industry for more than 65 years. Pembina owns an integrated system of pipelines that transport various hydrocarbon liquids and natural gas products produced primarily in western Canada. The Company also owns gas gathering and processing facilities; an oil and natural gas liquids infrastructure and logistics business; and is growing an 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. Pembina is committed to identifying additional opportunities to connect hydrocarbon production to new demand locations through the development of infrastructure that would extend Pembina's service offering even further along the hydrocarbon value chain. These new developments will contribute to ensuring that hydrocarbons produced in the Western Canadian Sedimentary Basin and the other basins where Pembina operates can reach the highest value markets throughout the world.

Purpose of Pembina:

To be the leader in delivering integrated infrastructure solutions connecting global markets;

- **Customers** choose us first for reliable and value-added services;
- **Investors** receive sustainable industry-leading total returns;
- **Employees** say we are the 'employer of choice' and value our safe, respectful, collaborative and fair work culture; and
- **Communities** welcome us and recognize the net positive impact of our social and environmental commitment.

Ongoing Impact of the COVID-19 Pandemic

In March 2020, the World Health Organization declared the global outbreak of the novel coronavirus ("COVID-19") a pandemic. In response, many governments imposed restrictions on individuals and businesses, resulting in a significant slowdown of the global economy. While these restrictions have been relaxed in certain jurisdictions, a resurgence of COVID-19 cases (including cases resulting from variants of the COVID-19 virus) in certain geographic areas and the risk that this could occur in other areas has caused governments in certain jurisdictions to sustain and, in some cases, re-impose restrictions. In addition, while vaccines are beginning to be distributed, there is ongoing uncertainty as to the timing, level of adoption, duration of efficacy and overall effectiveness of the vaccine, including against variants of the COVID-19 virus. As a result, there remains significant uncertainty as to the extent and duration of the global economic slowdown. The global economic slowdown has led, and may continue to lead, to significant operational disruption of businesses and their workforces, a significant increase in economic uncertainty and a decrease in demand for crude oil, natural gas, NGL and other commodities.

Pembina's greatest assets are its people and the relationships with its customers, investors and the communities in which it has a presence. Pembina will continue to keep its employees and stakeholders top of mind and supported while navigating through these events. Pembina will adjust its response as needed and will continue to base decisions on recommendations from public health experts, ongoing evaluation of global energy prices and the impact on Pembina and its customers' businesses.

The impacts of the COVID-19 pandemic have been assessed throughout the MD&A and, where material, additional disclosure has been provided to indicate the potential impacts the COVID-19 pandemic may have on Pembina and its results of operations.

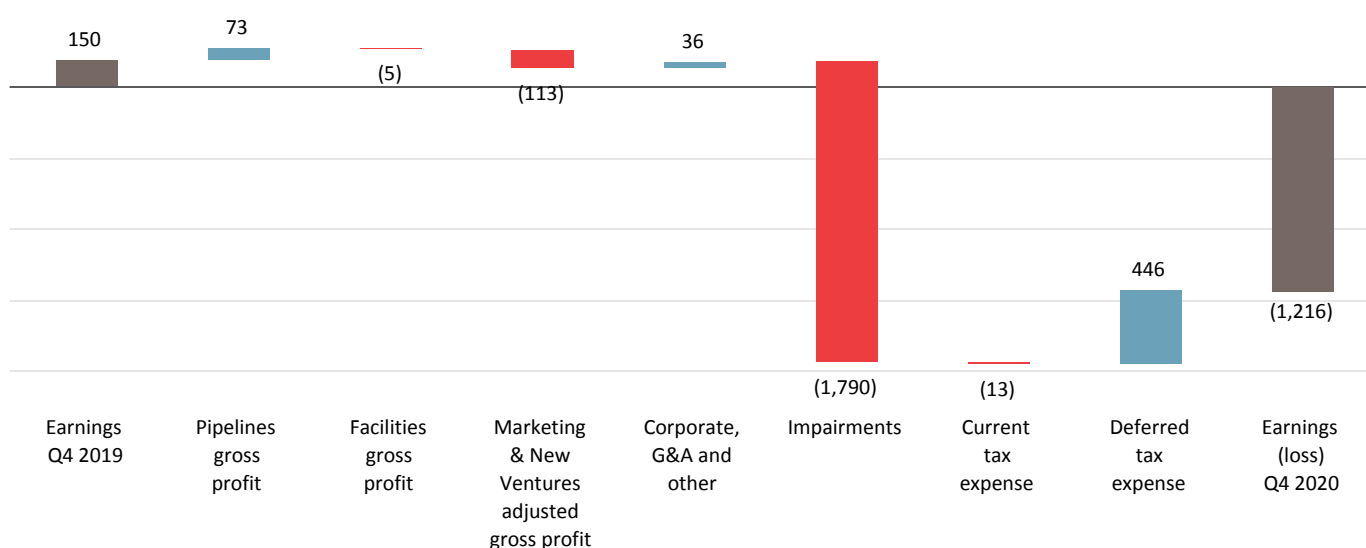
2. FINANCIAL & OPERATING OVERVIEW

Consolidated Financial Overview for the Three Months Ended December 31

Results of Operations

(\$ millions, except where noted)	2020 ⁽³⁾	2019 ⁽³⁾	Change	% Change
Infrastructure and other services revenue	798	662	136	21
Product sales revenue	882	1,006	(124)	(12)
Total Revenue	1,680	1,668	12	1
Net revenue ⁽¹⁾	954	837	117	14
Adjusted gross profit ⁽⁵⁾	561	605	(44)	(7)
Gross profit	247	605	(358)	(59)
Earnings (loss)	(1,216)	150	(1,366)	(911)
Earnings (loss) per common share – basic and diluted (dollars)	(2.28)	0.22	(2.50)	(1,136)
Cash flow from operating activities	766	728	38	5
Cash flow from operating activities per common share – basic (dollars) ⁽¹⁾	1.39	1.41	(0.02)	(1)
Adjusted cash flow from operating activities ⁽¹⁾	603	576	27	5
Adjusted cash flow from operating activities per common share – basic (dollars) ⁽¹⁾	1.10	1.11	(0.01)	(1)
Capital investments	161	429	(268)	(62)
Adjusted EBITDA ⁽¹⁾	866	787	79	10
Total volume (mboe/d) ⁽²⁾	3,614	3,577	37	1

Change in Earnings (\$ millions)⁽³⁾⁽⁴⁾



Results Overview

Results in the fourth quarter of 2020 were positively impacted by higher gross profit in Pipelines, due to the contribution from the assets acquired in the Kinder Acquisition, combined with improving volumes and lower operating expenses for the conventional pipeline assets. Facilities gross profit remained consistent during the fourth quarter of 2020 as Duvernay II and Empress Infrastructure came into service, in November 2019 and October 2020 respectively, offset by lower capital fees at the Resthaven facility and the Cutbank Complex. Marketing & New Ventures results started to show signs of improvement and Pembina monetized a portion of NGL storage positions built up during the second and third quarters of 2020; however, this was offset by unrealized losses on commodity-related derivatives and lower crude margins. General & administrative and other expenses decreased due to lower incentive and acquisition related costs. Pembina recognized \$2.1 billion (\$1.6 billion net of tax)(2019: \$300 million) in impairments during the fourth quarter of 2020, which resulted in a \$1.2 billion loss and an associated deferred tax recovery for the fourth quarter of 2020. See the "Impairments" section for further details. Excluding impairments and the associated deferred tax recovery, earnings for the fourth quarter of 2020 would have been \$338 million.

Changes in Results for the Three Months Ended December 31

Infrastructure and other services revenue	▲	\$136 million increase in revenue due to revenue contributed by the Cochin Pipeline, Edmonton Terminals and Vancouver Wharves acquired in the Kinder Acquisition and revenue associated with Duvernay II and Empress Infrastructure being placed into service, in November 2019 and October 2020 respectively, combined with higher deferred revenue recognized in Pipelines, partially offset by lower capital fees in Facilities.
Product sales revenue	▼	\$124 million decrease (\$30 million decrease net of cost of goods sold), largely due to the impact of the COVID-19 pandemic on market conditions resulting in lower crude oil prices which also compressed margins and decreased crude activities, partially offset by higher marketed NGL volumes as Pembina monetized a portion of previously built up storage positions.
Cost of goods sold	▲	\$105 million decrease, largely due to lower crude oil prices and crude oil activities, partially offset by higher NGL market prices and increased marketed NGL volumes as Pembina monetized a portion of previously built up storage positions.
Operating expenses	▼	\$24 million increase, largely due to higher labour costs, repairs and maintenance costs and property taxes driven by growth in Pembina's business following the Kinder Acquisition, partially offset by lower reclamation costs on the conventional pipeline assets, combined with a lower average power pool price partially offsetting higher consumption.
Depreciation and amortization included in operations	▼	\$41 million increase, primarily due to growth in Pembina's asset base following the Kinder Acquisition and additional assets being placed into service.
Share of profit (loss) from equity accounted investees - operations	▼	\$19 million decrease largely due to a narrower AECO-Chicago natural gas price differential and lower NGL margins, also resulted in a lower contributions from Aux Sable and Alliance.
Realized loss (gain) on commodity-related derivatives	▼	\$14 million negative variance, due to higher NGL market prices creating a loss for NGL-based derivatives settled during the period.
Unrealized loss on commodity-related derivatives	▼	\$63 million negative variance, primarily due to the recovery in the forward price of propane, butane and crude oil during the fourth quarter of 2020, combined with a decrease in the forward price of natural gas.
General & administrative and other	▲	\$36 million decrease, largely due to lower incentive costs following the decline in Pembina's share price, combined with lower acquisition-related costs.
Impairments⁽⁴⁾	▼	Pembina recognized total impairments of \$2.1 billion (\$1.6 billion net of tax)(2019: \$300 million), associated with its investments in Ruby, CKPC and the assets associated with Jordan Cove. See the "Impairments" section for further details.
Net finance costs	●	Consistent with the prior period. Higher interest expense associated with higher average debt levels and interest expense associated with leases largely offset gains on non-commodity-related derivative financial instruments and foreign exchange gains.
Current tax expense	▼	\$13 million increase, primarily due to taxable income generated from the assets acquired in the Kinder Acquisition.
Deferred tax recovery	▲	\$446 million increase, largely due to the deferred tax recovery on the impairment expense discussed above.
Earnings (loss)	▼	\$1.4 billion decrease, due to the factors discussed above.
Cash flow from operating activities	▲	\$38 million increase, primarily driven by an increase in operating results after adjusting for non-cash items, largely attributable to the assets acquired in the Kinder Acquisition, and \$19 million decrease in taxes paid, partially offset by a \$22 million increase in net interest paid, \$24 million change in non-cash working capital and \$14 million decrease in distributions from equity accounted investees.
Adjusted cash flow from operating activities⁽¹⁾	▲	\$27 million increase, largely due to the same items impacting cash flow from operating activities, discussed above, net of the \$24 million change in non-cash working capital, partially offset by higher current tax expense.
Adjusted EBITDA⁽¹⁾	▲	\$79 million increase, largely due to the \$93 million contribution from the Cochin Pipeline, Edmonton Terminals and Vancouver Wharves acquired in the Kinder Acquisition, combined with higher deferred revenues recognized on the Peace Pipeline system and the Phase VI Expansion coming into service, partially offset by lower margins on crude oil sales in the marketing business as a result of the lower crude oil prices during the fourth quarter of 2020 and lower contribution from Alliance due to a narrower AECO-Chicago natural gas price differential, which resulted in lower revenues. Included in adjusted EBITDA is \$174 million (2019: \$196 million) related to equity accounted investees.
Total volume (mboe/d)⁽²⁾	▲	37 mboe/d increase, due to the contributions from the Cochin Pipeline acquired in the Kinder Acquisition, combined with higher deferred revenue volumes recognized on the Peace Pipeline system, as well as the Phase VI Expansion and Duvernay II coming into service, partially offset by lower interruptible volumes on the Drayton Valley Pipeline, Peace Pipeline system and Veresen Midstream, due to market conditions related to the COVID-19 pandemic, combined with lower volumes at the Younger facility following a staged restart after regularly scheduled maintenance in September 2020. Revenue volumes include 315 mboe/d (2019: 368 mboe/d) related to equity accounted investees.

▲ Increase; ▼ Decrease; or ● No impact; to earnings, adjusted EBITDA, cash flow from operations, adjusted cash flow from operating activities or total volumes.

⁽¹⁾ Refer to the "Non-GAAP Measures" section.

⁽²⁾ Total revenue volumes. See the "Abbreviations" section for definition. Marketed NGL volumes are excluded from volumes to avoid double counting. Refer to the "Marketing & New Ventures" section for further information.

⁽³⁾ 2020 period and comparative 2019 period have been restated. See "Voluntary Change in Accounting Policy", "Restatement of Revenue and Cost of Goods Sold" and Note 3 to the Consolidated Financial Statements.

⁽⁴⁾ Impairments include impairment expense of \$1.8 billion and impairment in share of profit from equity accounted investees of \$314 million.

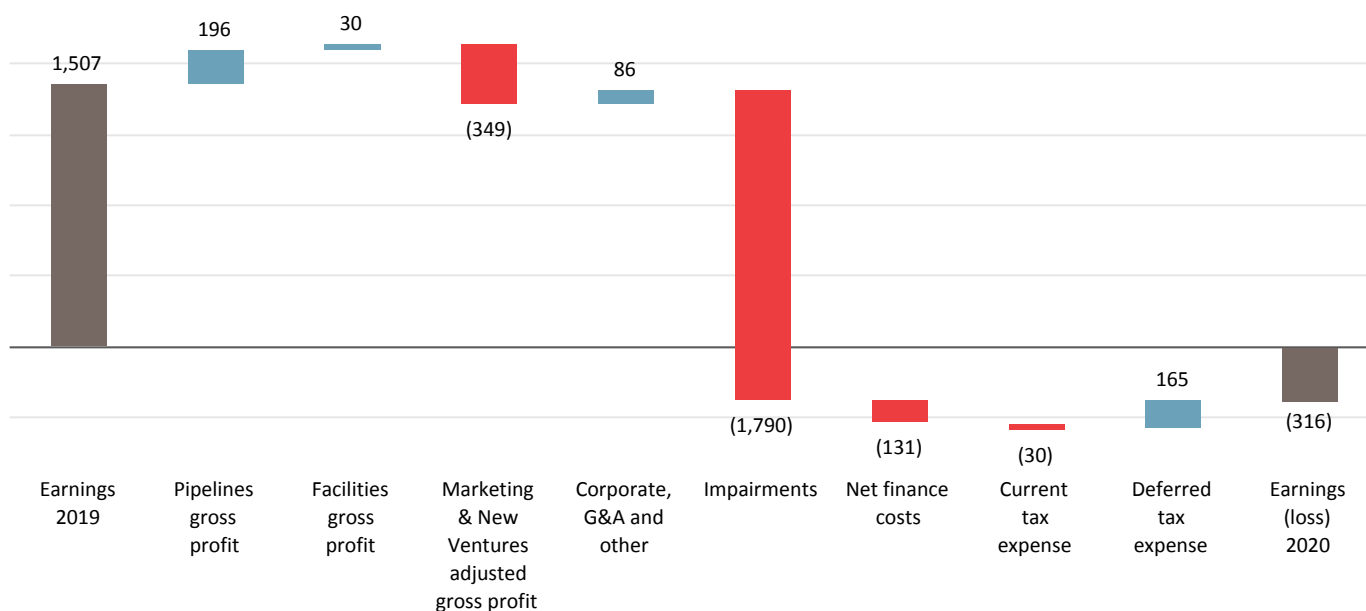
⁽⁵⁾ Adjusted gross profit represents gross profit excluding impairment in share of profit from equity accounted investees. See Note 22 to the Consolidated Financial Statements for further details.

Consolidated Financial Overview for the 12 Months Ended December 31

Results of Operations

(\$ millions, except where noted)	2020 ⁽³⁾	2019 ⁽³⁾	Change	% Change
Infrastructure and other services revenue	2,997	2,426	571	24
Product sales revenue	2,956	3,946	(990)	(25)
Revenue	5,953	6,372	(419)	(7)
Net revenue ⁽¹⁾	3,444	3,120	324	10
Adjusted gross profit	2,322	2,442	(120)	(5)
Gross profit	2,008	2,442	(434)	(18)
Earnings (loss)	(316)	1,507	(1,823)	(121)
Earnings (loss) per common share – basic (dollars)	(0.86)	2.69	(3.55)	(132)
Earnings (loss) per common share – diluted (dollars)	(0.86)	2.68	(3.54)	(132)
Cash flow from operating activities	2,252	2,532	(280)	(11)
Cash flow from operating activities per common share – basic (dollars) ⁽¹⁾	4.10	4.94	(0.84)	(17)
Adjusted cash flow from operating activities ⁽¹⁾	2,289	2,234	55	2
Adjusted cash flow from operating activities per common share – basic (dollars) ⁽¹⁾	4.16	4.36	(0.20)	(5)
Capital investments	1,029	1,645	(616)	(37)
Adjusted EBITDA ⁽¹⁾	3,281	3,061	220	7
Total volume (mboe/d) ⁽²⁾	3,500	3,451	49	1

Change in Earnings (\$ millions)⁽³⁾



Results Overview

Results for 2020 were positively impacted by higher gross profit in both Pipelines and Facilities primarily as a result of the assets acquired in the Kinder Acquisition, combined with lower operating expenses in Pipelines. Offsetting the results from Pipelines and Facilities, Marketing & New Ventures was negatively impacted by lower margins on crude oil and NGL sales, a lower contribution from Aux Sable as a result of lower NGL margins and a narrower AECO-Chicago natural gas price differential and higher unrealized losses on commodity-related derivatives. General & administrative expenses decreased in 2020, largely due to lower incentive costs, while other expenses decreased as the result of the recognition of other income associated with the Canadian Emergency Wage Subsidy. Net finance costs increased due to higher interest expense, driven by higher average debt levels, and foreign exchange losses on the repayment of U.S. dollar denominated debt. Pembina also recognized \$2.1 billion (\$1.6 billion net of tax)(2019: \$300 million) in non-cash impairments during the fourth quarter of 2020, which resulted in an associated deferred tax recovery. Excluding impairments and the associated deferred tax recovery, earnings for the year would have been \$1.2 billion.

Changes in Results for the 12 Months Ended December 31

Infrastructure and other services revenue	▲	\$571 million increase in revenue due to revenue contributed by the Cochin Pipeline, Edmonton Terminals and Vancouver Wharves acquired in the Kinder Acquisition, partially offset by lower interruptible volumes in Pipelines and lower capital fees in Facilities, largely due to reduced energy demand as a result of the ongoing COVID-19 pandemic.
Product sales revenue	▼	\$990 million decrease (\$246 million decrease net of cost of goods sold), largely due to weaker global energy demand throughout most of 2020, due to the COVID-19 pandemic, and the resulting decrease in prices for crude oil and propane. Additionally, the impact of the COVID-19 pandemic on market conditions compressed margins and decreased crude activities, while lower frac spreads impacted NGL margins, combined with a \$33 million arbitration award payment received during the first quarter of 2019.
Cost of goods sold	▲	\$743 million decrease, due to lower crude oil prices and lower crude activities as a result of the COVID-19 pandemic.
Operating expenses	▼	\$110 million increase, largely due to higher labour costs, repairs and maintenance costs and property tax, as a result of the larger asset base following the Kinder Acquisition, partially offset by lower reclamation costs on the conventional pipeline assets and a lower power pool price that partially offset increased consumption due to the larger asset base.
Depreciation and amortization included in operations	▼	\$191 million increase, primarily due to growth in Pembina's asset base following the Kinder Acquisition and additional assets being placed into service.
Share of profit (loss) from equity accounted investees - operations	▼	\$93 million decrease largely due to lower NGL margins and the narrower AECO-Chicago natural gas price differential, resulting in a lower contributions from Aux Sable and Alliance.
Realized gain on commodity-related derivatives	▲	\$21 million increase, due to lower market prices in the period creating a gain for crude and NGL-based derivatives settled during 2020.
Unrealized loss on commodity-related derivatives	▼	\$71 million negative variance, primarily due to additional contracts added and maturing during the year, combined with an increase in the forward price of propane.
General & administrative and other	▲	\$83 million decrease, largely due to lower incentive costs, driven by the decline in global equity markets which impacted Pembina's share price, combined with \$39 million in other income associated with the Canadian Emergency Wage Subsidy, which were partially offset by acquisition-related costs.
Impairments⁽⁴⁾	▼	Pembina recognized total impairments of \$2.1 billion (\$1.6 billion net of tax)(2019: \$300 million), associated with its investments in Ruby, CKPC and the assets associated with Jordan Cove. See the "Impairments" section for further details.
Net finance costs	▼	\$131 million increase, primarily driven by additional interest expense associated with higher average debt levels, combined with an increase in foreign exchange losses on the repayment of U.S. dollar denominated debt and increased interest expense related to leases.
Current tax expense	▼	\$30 million increase, as taxable income generated from the assets acquired in the Kinder Acquisition and the tax impact of the Canadian Emergency Wage Subsidy was partially offset by decreased taxable income from other Pembina entities.
Deferred tax recovery	▲	\$165 million increase, largely due to the recovery on the impairment expense discussed above, partially offset by the enactment of Alberta's Bill 3 in June of 2019, which reduced the Alberta corporate tax rate from 12 to 8 percent and resulted in a deferred tax recovery during 2019.
Earnings (loss)	▼	\$1.8 billion decrease, due to the factors discussed above.
Cash flow from operating activities	▼	\$280 million decrease, primarily driven by the \$199 million change in non-cash working capital, \$154 million increase in taxes paid, as Pembina made the final payment of 2019 taxes and 2020 installments, \$116 million decrease in distributions from equity accounted investees and \$114 million increase in net interest paid, partially offset by the increase in operating results after adjusting for non-cash items.
Adjusted cash flow from operating activities⁽¹⁾	▲	\$55 million increase, largely due to the same factors impacting cash flow from operating activities, discussed above, net of the change in non-cash working capital, increase in taxes paid and \$43 million lower accrued share-based payments, partially offset by the \$27 million increase in preferred share dividends following the Kinder Acquisition.
Adjusted EBITDA⁽¹⁾	▲	\$220 million increase, primarily due to the \$405 million contribution from the Cochin Pipeline, Edmonton Terminals and Vancouver Wharves acquired in the Kinder Acquisition, combined with the Phase VI Expansion coming into service in June 2020, Duvernay II coming into service in November 2019, lower operating expenses on the conventional pipeline assets, lower general & administrative and other expenses and realized gains on commodity related derivatives, discussed above. These increases were partially offset by lower margins on crude oil and propane sales in the marketing business as a result of lower prices for crude oil and lower frac spreads during 2020, as a result of the COVID-19 pandemic, and lower contribution from Aux Sable, due to lower NGL margins, and Alliance due to the narrower AECO-Chicago natural gas price differential. Included in adjusted EBITDA is \$681 million (2019: \$802 million) related to equity accounted investees.
Total volume (mboe/d)⁽²⁾	▲	49 mboe/d increase, due to the contributions from the Cochin Pipeline acquired in the Kinder Acquisition, combined Duvernay II coming into service, partially offset by lower interruptible volumes on the Drayton Valley Pipeline and Peace Pipeline system, due to market conditions, combined with lower volumes at the Younger facility following a staged restart after regularly scheduled maintenance in September 2020. Revenue volumes include 312 mboe/d (2019: 332 mboe/d) related to equity accounted investees.

▲ Increase; ▼ Decrease; or ● No impact; to earnings, adjusted EBITDA, cash flow from operations, adjusted cash flow from operating activities or total volumes.

⁽¹⁾ Refer to the "Non-GAAP Measures" section.

⁽²⁾ Total revenue volumes. See the "Abbreviations" section for definition. Marketed NGL volumes are excluded from volumes to avoid double counting. Refer to the "Marketing & New Ventures" section for further information.

⁽³⁾ 2020 period and comparative 2019 period have been restated. See "Voluntary Change in Accounting Policy", "Restatement of Revenue and Cost of Goods Sold" and Note 3 to the Consolidated Financial Statements.

⁽⁴⁾ Impairments include impairment expense of \$1.8 billion and impairment in share of profit from equity accounted investees of \$314 million.

3. SEGMENT RESULTS

Business Overview

The Pipelines Division provides customers with pipeline transportation, terminalling, storage and rail services in key market hubs in Canada and the United States for crude oil, condensate, natural gas liquids and natural gas. The division includes pipeline transportation capacity of approximately 3.1 mmboe/d⁽¹⁾ and above ground storage of approximately 11 mmbbls⁽¹⁾ within its conventional, oil sands and heavy oil, and transmission assets. The conventional assets include strategically located pipelines and terminalling hubs that gather and transport light and medium crude oils, condensate and natural gas liquids from western Alberta and northeast British Columbia to the Edmonton, Alberta area for further processing or transportation on downstream pipelines. The oil sands and heavy oil assets transport heavy and synthetic crude oil produced within Alberta to the Edmonton area and offer associated storage, terminalling and rail services. The transmission assets transport natural gas, ethane and condensate throughout Canada and the United States on long haul pipelines linking various key market hubs. In addition, the Pipelines Division assets provide linkages between Pembina's upstream and downstream assets across North America, enabling integrated customer service offerings. Together, these assets supply product from hydrocarbon producing regions to refineries, fractionators and market hubs in Alberta, British Columbia, Illinois and California, as well as other regions throughout North America.

The Facilities Division includes infrastructure that provides Pembina's customers with natural gas, condensate and NGL services. Pembina's natural gas gathering and processing assets are strategically positioned in active, liquids-rich areas of the WCSB and Williston Basin and are integrated with the Company's other businesses. Pembina provides sweet and sour gas gathering, compression, condensate stabilization, and both shallow cut and deep cut gas processing services with a total capacity of approximately 6 bcf/d⁽²⁾ for its customers. Condensate and NGL extracted at virtually all Canadian-based facilities have access to transportation on Pembina's pipelines. In addition, all NGL transported along the Alliance Pipeline are extracted through the Pembina operated Channahon Facility at the terminus. The Facilities Division includes approximately 354 mbpd⁽²⁾ of NGL fractionation, 21 mmbbls⁽¹⁾ of cavern storage and associated pipeline and rail terminalling facilities and the Company is currently constructing a liquefied propane export facility on Canada's West Coast. These facilities are fully integrated with the Company's other divisions, providing customers with the ability to access a comprehensive suite of services to enhance the value of their hydrocarbons. In addition, Pembina owns a bulk marine export terminal in Vancouver, British Columbia.

The Marketing & New Ventures Division strives to maximize the value of hydrocarbon liquids and natural gas originating in the basins where the Company operates. Pembina seeks to create new markets, and further enhance existing markets, to support both the Company's and its customers' overall business interests. In particular, Pembina seeks to identify opportunities to connect hydrocarbon production to new demand locations through the development of infrastructure. Pembina strives to increase producer netbacks and product demand to improve the overall competitiveness of the basins where the Company operates. Within the Marketing & New Ventures Division, Pembina undertakes value-added commodity marketing activities including buying and selling products (natural gas, ethane, propane, butane, condensate and crude oil), commodity arbitrage, and optimizing storage opportunities. The marketing business enters into contracts for capacity on both Pembina's and third-party infrastructure, handles proprietary and customer volumes and aggregates production for onward sale.

⁽¹⁾ Net capacity; excludes projects under development.

⁽²⁾ Net capacity. Includes Aux Sable capacity. The financial and operational results for Aux Sable are included in the Marketing & New Ventures Division; excludes projects under development.

Financial and Operational Overview by Division

3 Months Ended December 31							
	2020				2019		
<i>(\$ millions, except where noted)</i>	Volumes ⁽¹⁾	Gross Profit (Loss)	Adjusted Gross Profit	Adjusted EBITDA ⁽²⁾	Volumes ⁽¹⁾	Gross Profit ⁽⁴⁾	Adjusted EBITDA ⁽²⁾
Pipelines	2,730	419	419	577	2,667	346	467
Facilities	884	165	165	255	910	170	254
Marketing & New Ventures ⁽³⁾	—	(334)	(20)	75	—	93	120
Corporate	—	(3)	(3)	(41)	—	(4)	(54)
Total	3,614	247	561	866	3,577	605	787

12 Months Ended December 31							
	2020				2019		
<i>(\$ millions, except where noted)</i>	Volumes ⁽¹⁾	Gross Profit (Loss)	Adjusted Gross Profit	Adjusted EBITDA ⁽²⁾	Volumes ⁽¹⁾	Gross Profit ⁽⁴⁾	Adjusted EBITDA ⁽²⁾
Pipelines	2,623	1,578	1,578	2,208	2,566	1,382	1,854
Facilities	877	688	688	1,012	885	658	955
Marketing & New Ventures ⁽³⁾	—	(257)	57	193	—	406	423
Corporate	—	(1)	(1)	(132)	—	(4)	(171)
Total	3,500	2,008	2,322	3,281	3,451	2,442	3,061

⁽¹⁾ Volumes for Pipelines and Facilities are revenue volumes, which are physical volumes plus volumes recognized from take-or-pay commitments. Volumes are stated in mboe/d, with natural gas volumes converted to mboe/d from MMcf/d at a 6:1 ratio.

⁽²⁾ Refer to the "Non-GAAP Measures" section.

⁽³⁾ Marketed NGL volumes are excluded from volumes to avoid double counting. Refer to the "Marketing & New Ventures" section for further information.

⁽⁴⁾ Comparative 2019 period has been restated. See "Voluntary Change in Accounting Policy" and Note 3 to the Consolidated Financial Statements.

Pipelines

Financial Overview for the Three Months Ended December 31

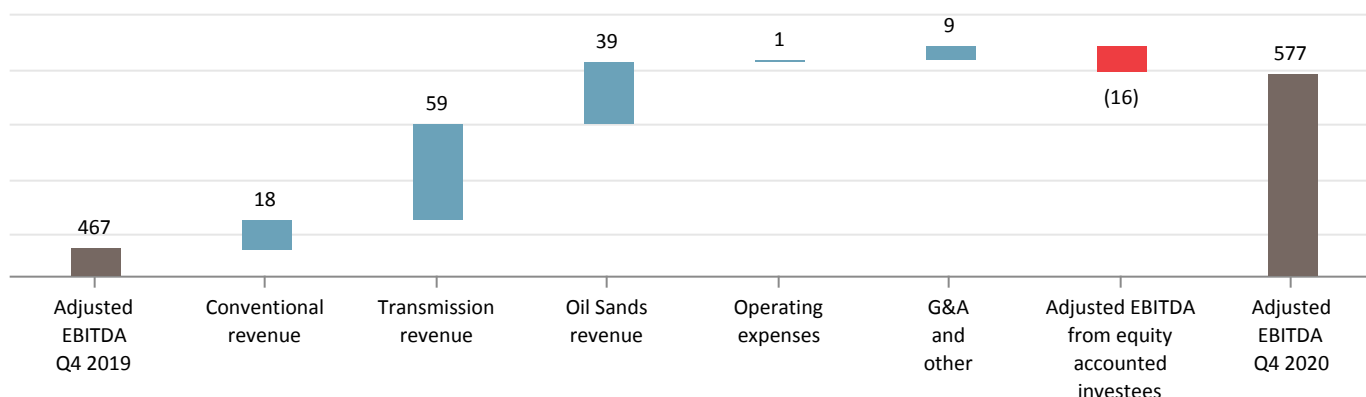
Results of Operations

(\$ millions, except where noted)	2020	2019 ⁽⁴⁾	Change	% Change
Conventional revenue ⁽¹⁾	372	354	18	5
Transmission revenue ⁽¹⁾	119	60	59	98
Oil Sands revenue ⁽¹⁾	112	73	39	53
Pipelines revenue ⁽¹⁾	603	487	116	24
Operating expenses ⁽¹⁾	136	137	(1)	(1)
Share of profit from equity accounted investees	54	62	(8)	(13)
Depreciation and amortization included in operations	102	66	36	55
Gross profit	419	346	73	21
Adjusted EBITDA ⁽²⁾	577	467	110	24
Volumes (mboe/d) ⁽³⁾	2,730	2,667	63	2
Distributions from equity accounted investees	80	80	—	—

Change in Results

Conventional revenue⁽¹⁾	▲	Increase primarily due to higher deferred revenue recognized in the fourth quarter of 2020 on the Peace Pipeline system, combined with the Phase VI Expansion coming into service during June 2020, partially offset by lower interruptible volumes on Drayton Valley Pipeline and Peace Pipeline system, due to current market conditions.
Transmission revenue⁽¹⁾	▲	Increase largely due to the contribution from the Cochin Pipeline following the Kinder Acquisition.
Oil Sands revenue⁽¹⁾	▲	Increase primarily due to the contribution from the Edmonton Terminals following the Kinder Acquisition.
Operating expenses⁽¹⁾	●	Consistent with prior period. Increase due to higher operating expenses associated with the Cochin Pipeline and Edmonton Terminals following the Kinder Acquisition, which was offset by lower reclamation costs for the conventional pipeline assets.
Share of profit from equity accounted investees	▼	Decrease largely due to lower interruptible revenues on the Alliance Pipeline, driven by a narrower AECO-Chicago natural gas price differential.
Depreciation and amortization included in operations	▼	Increase in depreciation due to the larger asset base as a result of the addition of the assets acquired in the Kinder Acquisition.
Distributions from equity accounted investees	●	\$51 million (2019: \$50 million) from Alliance and \$29 million (2019: \$30 million) from Ruby.
Volumes (mboe/d)⁽³⁾	▲	Increase primarily due to higher revenue volumes on the Cochin Pipeline and the Peace Pipeline system, both discussed above, partially offset by lower interruptible volumes on the Ruby Pipeline, Drayton Valley Pipeline and Peace Pipeline system, due to market conditions. Revenue volumes include 139 mboe/d (2019: 134 mboe/d) related to Alliance and 101 mboe/d (2019: 146 mboe/d) related to Ruby.
Adjusted EBITDA⁽²⁾	▲	Increase due to higher revenue associated with the Cochin Pipeline and Edmonton Terminals following the Kinder Acquisition, combined with higher deferred revenues recognized on the Peace Pipeline system and the Phase VI Expansion coming into service, partially offset by a slightly lower contribution from Alliance due to the narrower AECO-Chicago natural gas price differential. Included in adjusted EBITDA is \$70 million (2019: \$76 million) related to Alliance and \$45 million (2019: \$52 million) related to Ruby.

Change in Adjusted EBITDA (\$ millions)⁽²⁾



⁽¹⁾ Includes inter-segment transactions. See Note 22 of the Consolidated Financial Statements.

⁽²⁾ Refer to the "Non-GAAP Measures" section.

⁽³⁾ Revenue volumes. See the "Abbreviations" section for definition.

⁽⁴⁾ Comparative 2019 period has been restated. See "Voluntary Change in Accounting Policy" and Note 3 to the Consolidated Financial Statements.

Financial Overview for the 12 Months Ended December 31

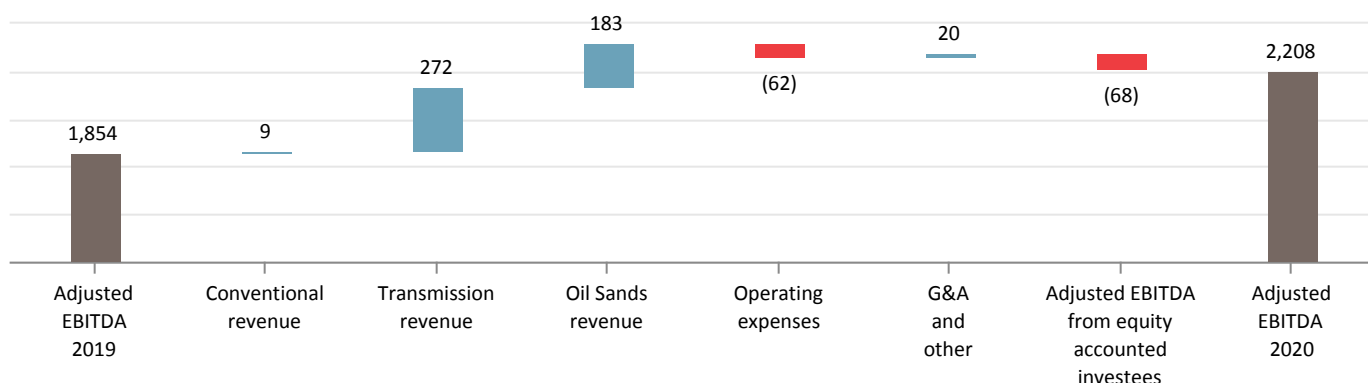
Results of Operations

(\$ millions, except where noted)	2020	2019 ⁽⁴⁾	Change	% Change
Conventional revenue ⁽¹⁾	1,323	1,314	9	1
Transmission revenue ⁽¹⁾	461	189	272	144
Oil Sands revenue ⁽¹⁾	467	284	183	64
Total revenue ⁽¹⁾	2,251	1,787	464	26
Operating expenses ⁽¹⁾	498	436	62	14
Share of profit from equity accounted investees	227	274	(47)	(17)
Depreciation and amortization included in operations	402	243	159	65
Gross profit	1,578	1,382	196	14
Adjusted EBITDA ⁽²⁾	2,208	1,854	354	19
Volumes (mboe/d) ⁽³⁾	2,623	2,566	57	2
Distributions from equity accounted investees	339	390	(51)	(13)

Change in Results

Conventional revenue⁽¹⁾	●	Consistent with prior period. Increases in deferred revenue recognized in the fourth quarter of 2020 on the Peace Pipeline system, additional revenue on the NEBC Pipeline system and the Phase VI Expansion coming into service during June 2020, were largely offset by lower interruptible revenue volumes on the Drayton Valley Pipeline and Peace Pipeline system, due to market conditions related to the COVID-19 pandemic.
Transmission revenue⁽¹⁾	▲	Increase largely due to the contribution from the Cochin Pipeline following the Kinder Acquisition.
Oil Sands revenue⁽¹⁾	▲	Increase primarily due to contribution from the Edmonton Terminals following the Kinder Acquisition, partially offset by the recognition of \$22 million in deferred variable revenue in the second quarter of 2019.
Operating expenses⁽¹⁾	▼	Increase primarily due to the additional operating expenses associated with the Cochin Pipeline and Edmonton Terminals following the Kinder Acquisition, partially offset by lower reclamation and power costs for the conventional pipeline assets.
Share of profit from equity accounted investees	▼	Decrease largely due to lower interruptible volumes and revenues on the Alliance Pipeline, driven by a narrower AECO-Chicago natural gas price differential.
Depreciation and amortization included in operations	▼	Increase in depreciation due to the larger asset base, primarily as a result of the assets acquired in the Kinder Acquisition.
Distributions from equity accounted investees	▼	\$217 million (2019: \$268 million) from Alliance and \$122 million (2019: \$121 million) from Ruby. The decrease in distributions from Alliance was largely due to the same factors impacting share of profit from equity accounted investees discussed above.
Volumes (mboe/d)⁽³⁾	▲	Increase primarily due to the contribution from the Cochin Pipeline following the Kinder Acquisition, partially offset by lower interruptible volumes on the Drayton Valley Pipeline, Peace Pipeline system and the Alliance Pipeline, discussed above. Revenue volumes include 130 mboe/d (2019: 141 mboe/d) related to Alliance and 103 mboe/d (2019: 103 mboe/d) related to Ruby.
Adjusted EBITDA⁽²⁾	▲	Increase due to the contribution from the Cochin Pipeline and Edmonton Terminals following the Kinder Acquisition, combined with the Phase VI Expansion coming into service and lower operating expenses on the conventional pipeline assets, partially offset by a lower contribution from Alliance, due to the narrower AECO-Chicago natural gas price differential. Included in adjusted EBITDA is \$274 million (2019: \$328 million) related to Alliance and \$188 million (2019: \$202 million) related to Ruby.

Change in Adjusted EBITDA (\$ millions)⁽²⁾



⁽¹⁾ Includes inter-segment transactions. See Note 22 of the Consolidated Financial Statements.

⁽²⁾ Refer to the "Non-GAAP Measures" section.

⁽³⁾ Revenue volumes. See the "Abbreviations" section for definition.

⁽⁴⁾ Comparative 2019 period has been restated. See "Voluntary Change in Accounting Policy" and Note 3 to the Consolidated Financial Statements.

Financial and Operational Overview

	3 Months Ended December 31						12 Months Ended December 31					
	2020			2019			2020			2019		
(\$ millions, except where noted)	Volumes ⁽¹⁾	Gross Profit	Adjusted EBITDA ⁽²⁾	Volumes ⁽¹⁾	Gross Profit ⁽³⁾	Adjusted EBITDA ⁽²⁾	Volumes ⁽¹⁾	Gross Profit	Adjusted EBITDA ⁽²⁾	Volumes ⁽¹⁾	Gross Profit ⁽³⁾	Adjusted EBITDA ⁽²⁾
Pipelines												
Conventional	993	254	295	958	216	253	898	892	1,055	910	850	993
Transmission	684	116	205	646	97	173	670	470	828	591	388	684
Oil Sands	1,053	49	77	1,063	33	41	1,055	216	325	1,065	144	177
Total	2,730	419	577	2,667	346	467	2,623	1,578	2,208	2,566	1,382	1,854

⁽¹⁾ Revenue volumes in mboe/d. See the "Abbreviations" section for definition.

⁽²⁾ Refer to the "Non-GAAP Measures" section.

⁽³⁾ Comparative 2019 period has been restated. See "Voluntary Change in Accounting Policy" and Note 3 to the Consolidated Financial Statements.

Projects & New Developments⁽¹⁾

Pipelines continues to focus on the execution of various system expansions. The projects in the following table were recently placed into service and impact Pipelines results.

Significant Projects	In-service Date
Phase VI Expansion	June 2020
Wapiti Condensate Lateral	March 2020
NEBC Montney Infrastructure	February 2020

As previously announced during the quarter, Pembina re-activated its Phase VII Expansion of the Peace Pipeline ("Phase VII"). The capital cost estimate for Phase VII has been revised lower, by approximately \$175 million, to \$775 million, reflecting a reimagining of the project to optimize the scope with customers' current development plans and transportation requirements. The initial capacity of Phase VII has been reduced from the previous 240,000 bpd, to 160,000 bpd, however, the ability to quickly and efficiently return the project to its original capacity has been retained. The lower capital cost reflects fewer pump stations, as well as additional savings achieved through value engineering and an optimized construction and procurement strategy.

During the fourth quarter, Pembina recognized an impairment on its investment in Ruby. The impairment was the result of upcoming contract expirations and prevailing interruptible tariff rates, along with Rockies basin fundamentals, and the ongoing uncertainty with respect to Jordan Cove, which would ultimately be expected to utilize capacity on the Ruby Pipeline. While the near-term fundamentals of the asset present challenges, Pembina continues to have a constructive longer-term view of Ruby's value, given the scarcity value of large diameter pipelines and Ruby Pipeline's role in providing reliable energy supply to the California market. Furthermore, Ruby Pipeline is a carbon-neutral pipeline and responsible source of natural gas supply to the Pacific Northwest region.

The following outlines the projects and new developments within Pipelines:

Phase VII Expansion		
Capital Budget: \$775 million	In-service Date: First half of 2023	Status: On time, trending on budget
This expansion is expected to add approximately 160 mbpd of incremental capacity upstream of Fox Creek, accessing capacity available on the pipelines downstream of Fox Creek. Included in the expansion is a 20-inch, approximately 220 km pipeline in the La Glace-Valleyview-Fox Creek corridor, and two new pump stations or terminal upgrades, between La Glace and Edmonton, Alberta.		

As previously announced, in response to the COVID-19 pandemic, the resulting economic slowdown and decreased demand for crude oil and NGL, Pembina made the decision to defer some of its previously announced expansion projects including the Phase VIII Expansion and the Phase IX Expansion. While these two projects remain deferred, the initial contracts supporting the projects are still in place and there remain strong indications of interest for incremental capacity. Value engineering work is ongoing and given strong customer interest, Pembina expects to make a decision in the second half of 2021 to re-activate these projects.

Phase VIII Expansion	Status: Deferred
This expansion will include 10-inch and 16-inch pipelines in the Gordondale to La Glace corridor as well as six new pump stations or terminal upgrades located between Gordondale and Fox Creek.	
The carrying value of the project at December 31, 2020 was \$40 million.	

Phase IX Expansion	Status: Deferred
This expansion will include 6-inch and 16-inch pipelines debottlenecking the corridor north of Gordondale as well as upgrades at one pump station. In addition, this expansion will see existing pipelines, which are currently batching, converted to single product lines.	
The carrying value of the project at December 31, 2020 was \$3 million.	

⁽¹⁾ For further details on Pembina's significant assets, including definitions for capitalized terms used herein that are not otherwise defined, refer to Pembina's AIF for the year ended December 31, 2020 filed at www.sedar.com (filed with the U.S. Securities and Exchange Commission at www.sec.gov under Form 40-F) and on Pembina's website at www.pembina.com.

Facilities

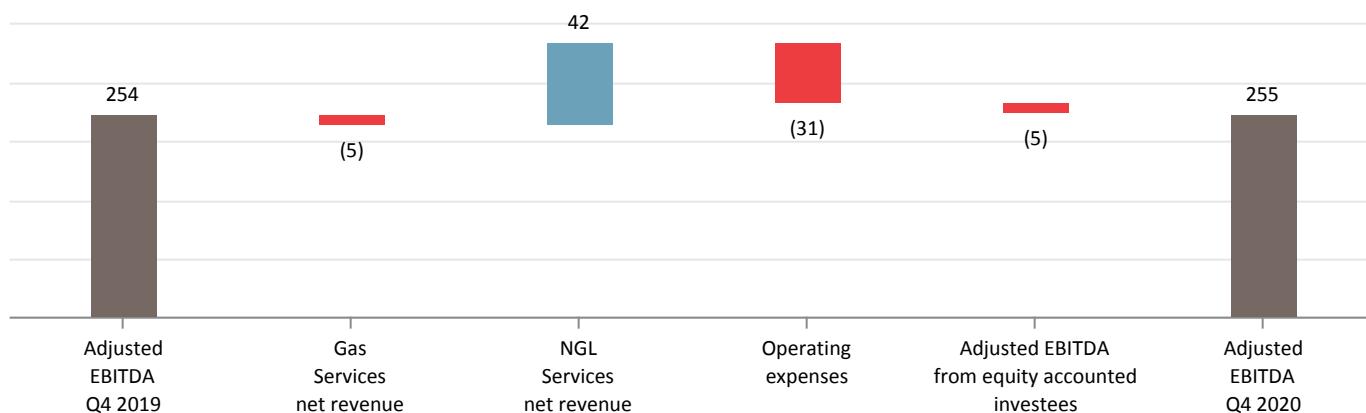
Financial Overview for the Three Months Ended December 31

Results of Operations

(\$ millions, except where noted)	2020	2019 ⁽⁴⁾	Change	% Change
Gas Services net revenue ⁽¹⁾⁽²⁾	147	152	(5)	(3)
NGL Services net revenue ⁽¹⁾⁽²⁾	175	133	42	32
Facilities net revenue ⁽¹⁾⁽²⁾	322	285	37	13
Operating expenses ⁽¹⁾	111	80	31	39
Share of profit from equity accounted investees	14	14	—	—
Unrealized loss on commodity-related derivative financial instruments	10	—	10	100
Depreciation and amortization included in operations	50	49	1	2
Gross profit	165	170	(5)	(3)
Adjusted EBITDA ⁽²⁾	255	254	1	—
Volumes (mboe/d) ⁽³⁾	884	910	(26)	(3)
Distributions from equity accounted investees	25	21	4	19

Changes in Results	
Gas Services net revenue⁽¹⁾⁽²⁾	● Consistent with the prior period. Increased revenue associated with Duvernay II being placed into service in November 2019, combined with the Empress infrastructure being placed into service in October 2020, offset lower revenues at the Resthaven facility and the Cutbank Complex due to lower capital fees, and lower volumes at the Younger facility due to a staged restart following regularly scheduled maintenance in September 2020.
NGL Services net revenue⁽¹⁾⁽²⁾	▲ Increase primarily due to revenues from the Vancouver Wharves following the Kinder Acquisition, combined with higher operating expense recoveries at the Redwater Complex.
Operating expenses⁽¹⁾	▼ Increase largely due to operating expenses associated with Vancouver Wharves, following the Kinder Acquisition, combined with higher power and fuel costs at the Redwater Complex that are recovered as part of revenue.
Share of profit from equity accounted investees	● Consistent with the prior period.
Depreciation and amortization included in operations	● Consistent with the prior period.
Distributions from equity accounted investees	● \$25 million (2019: \$20 million) from Veresen Midstream and nil (2019: \$1 million) from Fort Corp.
Volumes (mboe/d)⁽³⁾	▼ Decrease primarily due to lower volumes at the Younger facility, discussed above, combined with lower volumes at Veresen Midstream due to market conditions, partially offset by incremental volumes associated with Duvernay II being placed into service in November 2019. Revenue volumes include 75 mboe/d (2019: 88 mboe/d) related to Veresen Midstream.
Adjusted EBITDA⁽²⁾	● Consistent with the prior period. The increased contribution from Vancouver Wharves following the Kinder Acquisition, Duvernay II and the Empress infrastructure being placed into service, were largely offset by lower revenue at the Resthaven facility and Cutbank Complex and lower volumes at the Younger facility, discussed above. Included in adjusted EBITDA is \$42 million (2019: \$48 million) related to Veresen Midstream.

Change in Adjusted EBITDA (\$ millions)⁽²⁾



⁽¹⁾ Includes inter-segment transactions. See Note 22 of the Consolidated Financial Statements.

⁽²⁾ Refer to the "Non-GAAP Measures" section.

⁽³⁾ Revenue volumes. See the "Abbreviations" section for definition.

⁽⁴⁾ Comparative 2019 period has been restated. See "Voluntary Change in Accounting Policy" and Note 3 to the Consolidated Financial Statements.

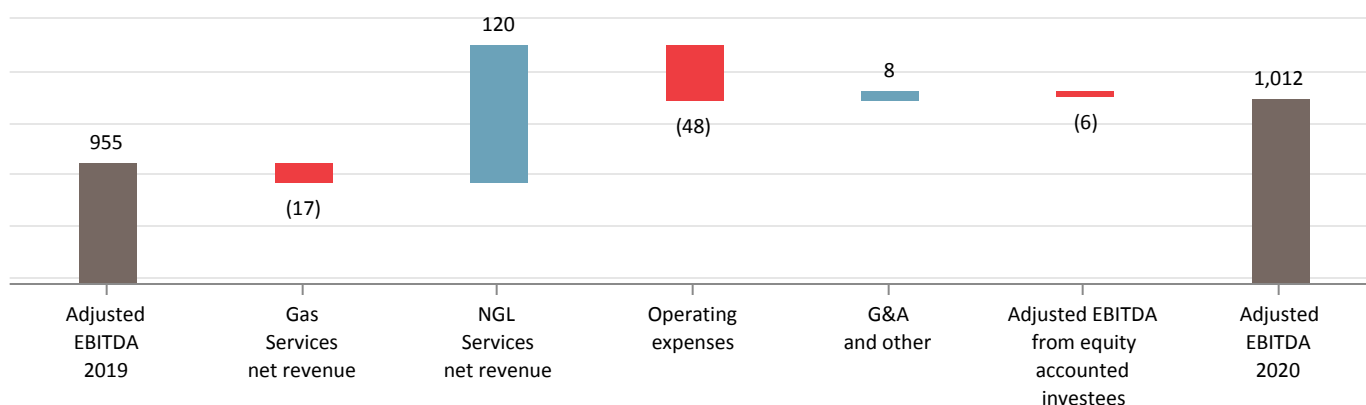
Financial Overview for the 12 Months Ended December 31

Results of Operations

(\$ millions, except where noted)	2020	2019 ⁽⁴⁾	Change	% Change
Gas Services net revenue ⁽¹⁾⁽²⁾	571	588	(17)	(3)
NGL Services net revenue ⁽¹⁾⁽²⁾	649	529	120	23
Facilities net revenue ⁽¹⁾⁽²⁾	1,220	1,117	103	9
Operating expenses ⁽¹⁾	392	344	48	14
Share of profit from equity accounted investees	55	51	4	8
Unrealized gain on commodity-related derivative financial instruments	(4)	—	(4)	100
Depreciation and amortization included in operations	199	166	33	20
Gross profit	688	658	30	5
Adjusted EBITDA ⁽²⁾	1,012	955	57	6
Volumes (mboe/d) ⁽³⁾	877	885	(8)	(1)
Distributions from equity accounted investees	101	101	—	—

Changes in Results	
Gas Services net revenue⁽¹⁾⁽²⁾	▼ Decrease due to lower capital fees at the Resthaven facility and the Cutbank Complex, combined with lower volumes at the Younger facility, due to regularly scheduled maintenance during September 2020 and lower gas feedstock availability, partially offset by Duvernay II being placed into service in November 2019 and increased processing days at Kakwa River due to a turnaround in 2019.
NGL Services net revenue⁽¹⁾⁽²⁾	▲ Increase primarily due to additional revenues from the Vancouver Wharves following the Kinder Acquisition, combined with higher operating expense recoveries at the Redwater Complex and the Redwater Co-generation facility going into service in March 2019.
Operating expenses⁽¹⁾	▼ Increase largely due to the addition of the Vancouver Wharves following the Kinder Acquisition, combined with Duvernay II and the Duvernay Sour Treatment Facilities going into service, partially offset by lower power costs as the Younger facility was shut down for regularly scheduled maintenance during the third quarter of 2020.
Share of profit from equity accounted investees	● Consistent with the prior period.
Depreciation and amortization included in operations	▼ Increase in depreciation due to the larger asset base as a result of the addition of the assets acquired in the Kinder Acquisition and Duvernay II and the Duvernay Sour Treatment Facilities going into service.
Distributions from equity accounted investees	● \$97 million (2019: \$96 million) from Veresen Midstream and \$4 million (2019: \$5 million) from Fort Corp.
Volumes (mboe/d)⁽³⁾	● Consistent with the prior period. Lower revenue volumes at the Younger facility due to regularly scheduled maintenance and lower gas feedstock availability, combined with lower revenue volumes at Veresen Midstream, as a result of deferred drilling and completions by a key customer, due to COVID-19 restrictions, were largely offset by revenue volumes associated with Duvernay II being placed into service in November 2019. Revenue volumes include 79 mboe/d (2019: 88 mboe/d) related to Veresen Midstream.
Adjusted EBITDA⁽²⁾	▲ Increase primarily due to additional contribution from Duvernay II being placed into service in November 2019, and the Redwater Co-generation facility being placed into service in March 2019, combined with lower general & administrative expense, as a result of lower long-term incentive costs. Included in adjusted EBITDA is \$174 million (2019: \$182 million) related to Veresen Midstream.

Change in Adjusted EBITDA (\$ millions)⁽²⁾



⁽¹⁾ Includes inter-segment transactions. See Note 22 of the Consolidated Financial Statements.

⁽²⁾ Refer to the "Non-GAAP Measures" section.

⁽³⁾ Revenue volumes. See the "Abbreviations" section for definition.

⁽⁴⁾ Comparative 2019 period has been restated. See "Voluntary Change in Accounting Policy" and Note 3 to the Consolidated Financial Statements.

Financial and Operational Overview

	3 Months Ended December 31						12 Months Ended December 31					
	2020			2019			2020			2019		
(\$ millions, except where noted)	Volumes ⁽¹⁾	Gross Profit	Adjusted EBITDA ⁽²⁾	Volumes ⁽¹⁾	Gross Profit ⁽³⁾	Adjusted EBITDA ⁽²⁾	Volumes ⁽¹⁾	Gross Profit	Adjusted EBITDA ⁽²⁾	Volumes ⁽¹⁾	Gross Profit ⁽³⁾	Adjusted EBITDA ⁽²⁾
Facilities												
Gas Services	673	74	138	690	90	146	667	344	558	678	339	551
NGL Services	211	91	117	220	80	108	210	344	454	207	319	404
Total	884	165	255	910	170	254	877	688	1,012	885	658	955

⁽¹⁾ Revenue volumes in mboe/d, with natural gas volumes converted to mboe/d from MMcf/d at a 6:1 ratio. See the "Abbreviations" section for definition.

⁽²⁾ Refer to the "Non-GAAP Measures" section.

⁽³⁾ Comparative 2019 period has been restated. See "Voluntary Change in Accounting Policy" and Note 3 to the Consolidated Financial Statements.

Projects & New Developments⁽¹⁾

Facilities continues to build-out its natural gas and NGL processing and fractionation assets to service customer demand. The projects in the following table were recently placed into service and impact Facilities results.

Significant Projects	In-service Date
Duvernay III	November 2020
Empress Infrastructure	October 2020
Duvernay Sour Treatment Facilities	March 2020
Duvernay II	November 2019
Redwater Co-generation Facility	March 2019

During the quarter, Pembina completed the start up of new fractionation and terminalling facilities at the Empress facility. This project was placed into service on time and on budget. These new assets add approximately 30,000 bpd of propane-plus fractionation capacity and enable Pembina to optimize propane marketing from the facility between eastern and western markets.

During the quarter, Pembina completed the start up of Duvernay III, which includes a 100 MMcf/d sweet gas, shallow cut processing train; 20,000 bpd of inlet condensate stabilization; and other associated infrastructure. The project was placed into service on time and under budget.

As previously announced during the quarter, Pembina re-activated its Empress Co-generation Facility. This is the Company's second co-generation project following the very successful development of a co-generation facility at the Redwater Complex.

As previously announced during the quarter, Pembina has acquired an additional 11.25 percent interest in the Pembina Empress Extraction Plant, of which Pembina currently is the majority owner and operator. The acquisition provides Pembina with 135 MMcf/d of incremental ethane-plus extraction capacity at the Empress facility.

The following outlines the projects and new developments within Facilities:

Prince Rupert Terminal		
Capital Budget: \$250 million	In-service Date: First quarter of 2021	Status: Delayed, over budget
The Prince Rupert Terminal is located on Watson Island, British Columbia and is expected to have a permitted capacity of approximately 25 mbpd of propane. The propane supply will be sourced primarily from the Company's Redwater Complex. Marine, rail, sphere, and mechanical construction is nearing completion, electrical construction and commissioning activities are in progress.		

Hythe Developments		
Capital Budget⁽²⁾: \$240 million	In-service Date: First quarter of 2021	Status: On time, on budget
Pembina and its 45 percent owned joint venture, Veresen Midstream, have completed construction of natural gas gathering and processing infrastructure in the Pipestone Montney region and are awaiting a third-party tie-in. The infrastructure consists of an expansion of up to 125 MMcf/d (56 MMcf/d net to Pembina) of sour gas processing at Veresen Midstream's existing Hythe Facility and a new, approximately 60 km, 12-inch sour gas pipeline, to be owned by Veresen Midstream and constructed by Pembina. In addition, Veresen Midstream will fund and own a compressor station, built and operated by NuVista Energy Ltd. Pembina will own and construct various other laterals.		

Empress Co-generation Facility		
Capital Budget: \$120 million	In-service Date⁽³⁾: First quarter of 2023	Status: On time, on budget
The Empress Co-generation Facility will use natural gas to generate up to 45 megawatts of electrical power, thereby reducing overall operating costs by providing power and heat to the existing Empress NGL Extraction Facility. All the power will be consumed on site, thereby supplying approximately 90 percent of the site's power requirements. Further, this project will contribute to annual greenhouse gas emission reductions at the Empress NGL Extraction Facility through the utilization of the co-generation waste heat and the low-emission power generated.		

As previously announced, in response to the COVID-19 pandemic, the resulting economic slowdown and decreased demand for crude oil and NGL, Pembina made the decision to defer some of its previously announced expansion projects, including the Prince Rupert Terminal Expansion.

Prince Rupert Terminal Expansion	Status: Deferred
The Prince Rupert Terminal Expansion will increase the export capacity of the terminal. Engineering of the expansion is well advanced, and Pembina expects to make a final investment decision in the second half of 2021.	
The carrying value of the project at December 31, 2020 was \$10 million.	

⁽¹⁾ For further details on Pembina's significant assets, including definitions for capitalized terms used herein that are not otherwise defined, refer to Pembina's AIF filed at www.sedar.com (filed with the U.S. Securities and Exchange Commission at www.sec.gov under Form 40-F) and on Pembina's website at www.pembina.com.

⁽²⁾ Net to Pembina.

⁽³⁾ Subject to environmental and regulatory approvals. See the "Forward-Looking Statements & Information" section.

Marketing & New Ventures

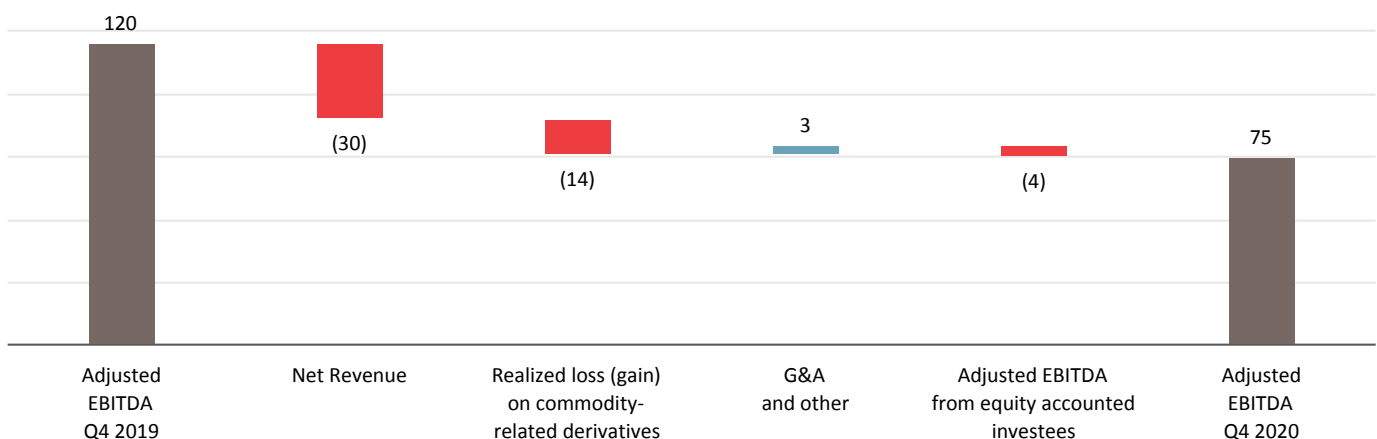
Financial Overview for the Three Months Ended December 31

Results of Operations

(\$ millions, except where noted)	2020 ⁽⁴⁾	2019 ⁽⁴⁾	Change	% Change
Marketing revenue ⁽¹⁾	882	1,006	(124)	(12)
Cost of goods sold ⁽¹⁾	809	903	(94)	(10)
Net revenue ⁽¹⁾⁽²⁾	73	103	(30)	(29)
Share of profit from equity accounted investees - operations	2	13	(11)	(85)
Realized loss (gain) on commodity-related derivative financial instruments	6	(8)	(14)	175
Unrealized loss on commodity-related derivative financial instruments	76	23	(53)	(230)
Depreciation and amortization included in operations	13	8	5	63
Adjusted gross profit	(20)	93	(113)	(122)
Adjusted EBITDA ⁽²⁾	75	120	(45)	(38)
Volumes (mboe/d) ⁽³⁾	207	190	17	9
Distributions from equity accounted investees	4	22	(18)	(82)

Change in Results	
Net revenue⁽¹⁾⁽²⁾	▼ Decrease largely due to the impact of the COVID-19 pandemic on market conditions resulting in lower crude oil prices, compressed margins and decreased crude activities, partially offset by higher marketed NGL volumes as Pembina monetized a portion of storage positions built up during the second and third quarters of 2020.
Share of profit from equity accounted investees - operations	▼ Decrease largely due to lower revenues at Aux Sable as a result of lower NGL margins and a narrower AECO-Chicago natural gas price differential.
Realized loss (gain) on commodity-related derivatives	▼ Realized loss due to higher NGL market prices creating a loss for NGL-based derivatives settled during the period.
Unrealized loss on commodity-related derivatives	▼ Unrealized loss on commodity-related derivatives primarily due to the recovery in the forward price of propane, butane and crude oil during the fourth quarter of 2020, combined with a decrease in the forward price of natural gas.
Depreciation and amortization included in operations	● Consistent with the prior period.
Distributions from equity accounted investees	▼ Decrease due to the lower revenues at Aux Sable as a result of lower NGL margins and a narrower AECO-Chicago natural gas price differential.
Volumes (mboe/d)⁽³⁾	▲ Marketed NGL volumes increased as Pembina monetized a portion of the storage positions that were built up during the second and third quarters of 2020 when commodity prices were lower, combined with increased volumes at Aux Sable due to higher ethane sales. Revenue volumes includes 37 mboe/d (2019: 32 mboe/d) related to Aux Sable.
Adjusted EBITDA⁽²⁾	▼ Decrease largely due to lower margins on crude oil sales as a result of the lower crude oil prices during the fourth quarter of 2020 due to the impact of the COVID-19 pandemic, combined with a realized loss on commodity-related derivatives due to higher NGL market prices. Included in adjusted EBITDA is \$13 million (2019: \$18 million) related to Aux Sable.

Change in Adjusted EBITDA (\$ millions)⁽²⁾



(1) Includes inter-segment transactions. See Note 22 of the Consolidated Financial Statements.

(2) Refer to the "Non-GAAP Measures" section.

(3) Marketed NGL volumes. See the "Abbreviations" section for definition.

(4) 2020 period and comparative 2019 period have been restated. See "Restatement of Revenue and Cost of Goods Sold" and Note 3 to the Consolidated Financial Statements.

Financial Overview for the 12 Months Ended December 31

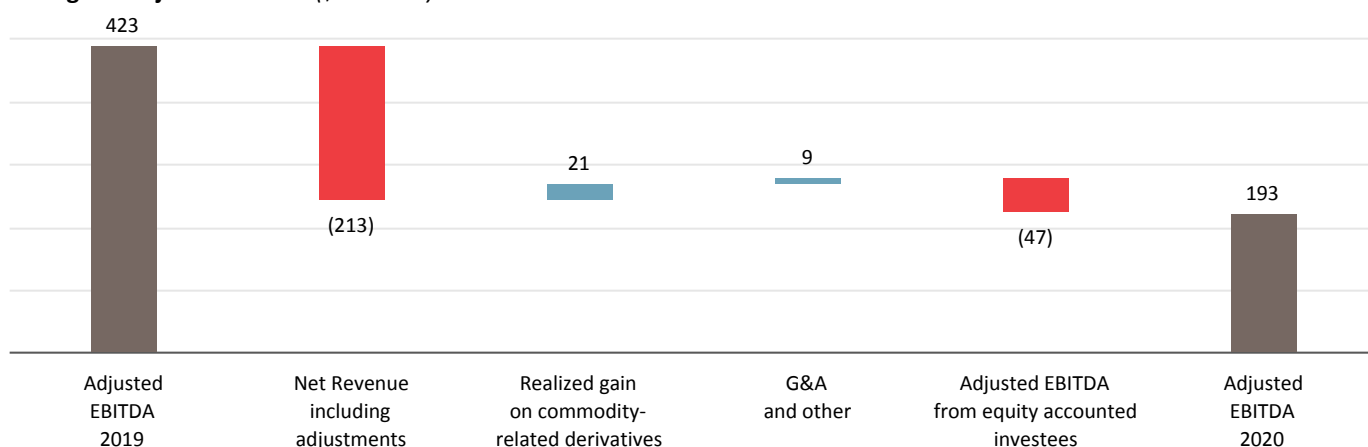
Results of Operations

(\$ millions, except where noted)	2020 ⁽⁵⁾	2019 ⁽⁵⁾	Change	% Change
Marketing revenue ⁽¹⁾	2,956	3,946	(990)	(25)
Cost of goods sold ⁽¹⁾	2,815	3,559	(744)	(21)
Net revenue ⁽¹⁾⁽²⁾	141	387	(246)	(64)
Share of profit from equity accounted investees - operations	—	50	(50)	(100)
Realized gain on commodity-related derivative financial instruments	(54)	(33)	21	(64)
Unrealized loss on commodity-related derivative financial instruments	88	13	(75)	(577)
Depreciation and amortization included in operations	50	51	(1)	(2)
Adjusted gross profit	57	406	(349)	(86)
Adjusted EBITDA ⁽²⁾	193	423	(230)	(54)
Volumes (mboe/d) ⁽³⁾	182	189	(7)	(4)
Distributions from equity accounted investees	19	84	(65)	(77)

Change in Results

Net revenue⁽¹⁾⁽²⁾	▼	Decrease largely due to lower average crude oil and propane prices during 2020, primarily as a result of the COVID-19 pandemic and the resulting decrease in global energy demand. Market conditions also compressed margins and decreased crude activities, while lower frac spreads impacted NGL margins, combined with a \$33 million arbitration award payment received during the first quarter of 2019.
Share of profit from equity accounted investees - operations	▼	Decrease largely due to lower revenues at Aux Sable as a result of lower NGL margins and a narrower AECO-Chicago natural gas price differential, partially offset by lower operating and general and administrative expenses.
Realized gain on commodity-related derivatives	▲	Increase due to lower average market prices creating a gain for crude and NGL-based derivatives settled during the year.
Unrealized loss on commodity-related derivatives	▼	Unrealized loss primarily due to additional contracts added and maturing during the year, combined with an increase in the forward price of propane.
Depreciation and amortization included in operations	●	Consistent with the prior period.
Distributions from equity accounted investees	▼	Decrease largely due to the lower margins at Aux Sable, discussed above.
Volumes (mboe/d)⁽³⁾	●	Consistent with the prior period. NGL storage positions built up during the second and third quarters of 2020 when commodity prices were at the lowest levels were largely offset by higher marketed NGL volumes during the fourth quarter and increased ethane volumes at Aux Sable. Revenue volumes includes 37 mboe/d (2019: 33 mboe/d) related to Aux Sable.
Adjusted EBITDA⁽²⁾	▼	Decrease largely due to lower margins on crude oil and propane sales as a result of lower crude oil, propane prices and frac spreads during 2020, combined with a lower contribution from Aux Sable due to lower NGL margins and the narrower AECO-Chicago natural gas price differential, partially offset by higher realized gains on commodity-related derivatives and lower G&A and other due to cost saving initiatives. Included in adjusted EBITDA is \$27 million (2019: \$74 million) related to Aux Sable.

Change in Adjusted EBITDA (\$ millions)⁽²⁾⁽⁴⁾



⁽¹⁾ Includes inter-segment transactions. See Note 22 of the Consolidated Financial Statements.

⁽²⁾ Refer to the "Non-GAAP Measures" section.

⁽³⁾ Marketed NGL volumes. See the "Abbreviations" section for definition.

⁽⁴⁾ Net revenue excludes the positive arbitration award payment of \$33 million.

⁽⁵⁾ 2020 period and comparative 2019 period have been restated. See "Restatement of Revenue and Cost of Goods Sold" and Note 3 to the Consolidated Financial Statements.

Financial and Operational Overview

	3 Months Ended December 31						12 Months Ended December 31					
	2020			2019			2020			2019		
(\$ millions, except where noted)	Volumes ⁽¹⁾	Gross Profit (Loss)	Adjusted EBITDA ⁽²⁾	Volumes ⁽¹⁾	Gross Profit (Loss)	Adjusted EBITDA ⁽²⁾	Volumes ⁽¹⁾	Gross Profit (Loss)	Adjusted EBITDA ⁽²⁾	Volumes ⁽¹⁾	Gross Profit (Loss)	Adjusted EBITDA ⁽²⁾
Marketing & New Ventures												
Marketing	207	(17)	78	190	96	127	182	57	205	189	407	440
New Ventures ⁽³⁾	—	(317)	(3)	—	(3)	(7)	—	(314)	(12)	—	(1)	(17)
Total	207	(334)	75	190	93	120	182	(257)	193	189	406	423

⁽¹⁾ Marketed NGL volumes in mboe/d. See the "Abbreviations" section for definition.

⁽²⁾ Refer to the "Non-GAAP Measures" section.

⁽³⁾ All New Ventures projects have not yet commenced operations and therefore have no volumes.

Projects & New Developments⁽¹⁾

The following outlines the projects and new developments within Marketing & New Ventures:

CKPC

As previously announced, Pembina, along with its joint venture partner, have suspended indefinitely the execution of the integrated propane dehydration ("PDH") plant and polypropylene upgrading facility ("PDH/PP Facility"). While Pembina continues to believe in the strategic rationale of this project, this decision reflects 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 remains under a force majeure condition. CKPC is working through a process to manage, defer or cancel existing agreements with, among others, the lump-sum consortium, lenders, and technology licensors, in order to minimize the need for additional capital contributions. CKPC will continue to take action to safeguard its existing investment associated with long-lead equipment and intellectual property. As a result of the project suspension Pembina recognized an impairment on its investment during the fourth quarter. The Company remains committed to its global market access strategy and helping to ensure that hydrocarbons produced in the WCSB, and the other basins where the Company operates, can reach the highest value markets throughout the world. We remain equally committed to supporting further development of the petrochemical industry in Alberta and are ideally positioned to do so as the leading transporter of ethane in the province of Alberta.

Jordan Cove

In light of current regulatory and political uncertainty, Pembina recognized an impairment on its investment in Jordan Cove and is evaluating the path forward. The Company continues to believe in the strategic rationale of Jordan Cove, which would be the first U.S. west coast LNG facility and would benefit from advantaged access to Asian markets. Additionally, the project would bring significant economic benefits to Oregon and contribute to reducing global greenhouse gas emissions by displacing the use of coal globally.

⁽¹⁾ For further details on Pembina's significant assets, including definitions for capitalized terms used herein that are not otherwise defined, refer to Pembina's AIF for the year ended December 31, 2020 filed at www.sedar.com (filed with the U.S. Securities and Exchange Commission at www.sec.gov under Form 40-F) and on Pembina's website at www.pembina.com.

Impairments

Pembina recognized the following impairments for the year ended December 31, 2020:

(\$ millions)	Property, Plant & Equipment	Equity Accounted Investees	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
Income tax impact				535
Impairments net of tax				1,555

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.

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 future volumes resulting from the uncertainty with Jordan Cove.

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 PDH/PP 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 remains under a force majeure condition. 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.

4. LIQUIDITY & CAPITAL RESOURCES

Available Sources of Liquidity

As at December 31 (\$ millions)	2020	2019
Working capital ⁽¹⁾⁽⁴⁾	(792)	(460)
Variable rate debt ⁽²⁾⁽³⁾		
Bank debt	1,534	2,100
Variable rate debt swapped to fixed	(318)	—
Total variable rate debt outstanding (weighted average interest rate of 1.6% (2019: 3.3%))	1,216	2,100
Fixed rate debt ⁽²⁾		
Senior unsecured notes	—	273
Senior unsecured medium-term notes	9,300	7,800
Variable rate debt swapped to fixed	318	—
Total fixed rate debt outstanding (weighted average interest rate of 3.9% (2019: 4.0%))	9,618	8,073
Total debt outstanding	10,834	10,173
Cash and unutilized debt facilities	2,685	1,040

⁽¹⁾ As at December 31, 2020, working capital included \$600 million (December 31, 2019: \$74 million) associated with the current portion of loans and borrowings.

⁽²⁾ Face value.

⁽³⁾ Includes U.S. \$250 million variable rate debt outstanding at December 31, 2020 (December 31, 2019: \$454 million).

⁽⁴⁾ Comparative 2019 period has been restated. See "Voluntary Change in Accounting Policy" and Notes 3 and 4 to the Consolidated Financial Statements.

Pembina currently anticipates its cash flow from operating activities, the majority of which is derived from fee-based contracts, will be more than sufficient to meet its operating obligations, to fund its dividend and to fund its capital investment. Pembina expects to source funds required for debt maturities from cash, its credit facilities and by accessing the capital markets, as required. Based on its successful access to financing in the capital markets over the past several years, Pembina expects to continue to have access to additional funds as required. However, depending on the duration and severity of the COVID-19 pandemic, the continued slowdown of the global economy and the decrease in demand for crude oil, Pembina's ability to access financing in the capital markets could be adversely impacted. Refer to "Risk Factors – Ongoing Impact of the COVID-19 Pandemic" below and "Risk Factors – General Risk Factors – Additional Financing and Capital Resources" in Pembina's MD&A and Note 27 to the Consolidated Financial Statements for more information. Management continues to monitor the situation and remains satisfied that the leverage employed in Pembina's capital structure is sufficient and appropriate given the characteristics and operations of the underlying asset base.

Management may adjust Pembina's capital structure as a result of changes in economic conditions or the risk characteristics of the underlying assets. To maintain or modify Pembina's capital structure in the future, Pembina may renegotiate debt terms, repay existing debt, seek new borrowings, issue additional equity or hybrid securities and/or repurchase shares.

As at December 31, 2020, Pembina's credit facilities consisted of: an unsecured \$2.5 billion (December 31, 2019: \$2.5 billion) revolving credit facility, which includes a \$750 million (December 31, 2019: \$750 million) accordion feature and matures in May 2024; an unsecured \$500 million (December 31, 2019: \$500 million) non-revolving term loan, which matures in August 2022; an unsecured \$800 million (December 31, 2019: nil) revolving credit facility, which matures in April 2022; an unsecured U.S. \$250 million (December 31, 2019: nil) non-revolving term loan, which matures in May 2025 and an operating facility of \$20 million (December 31, 2019: \$20 million) which matures in May 2021 and is typically renewed on an annual basis (collectively, the "Credit Facilities"). There are no repayments due over the term of the Credit Facilities. As at December 31, 2020, Pembina had \$2.7 billion (December 31, 2019: \$1.0 billion) of cash and unutilized debt facilities. As at December 31, 2020, Pembina had loans and borrowings (excluding deferred financing costs) of \$10.8 billion (December 31, 2019: \$10.2 billion). Pembina is required to meet certain specific and customary affirmative and negative financial covenants under its medium-term notes and the Credit Facilities, including a requirement to maintain certain financial ratios. See "Liquidity & Capital Resources – Covenants" below for more information. Pembina is also subject to customary restrictions on its operations and activities under its medium-term notes and Credit Facilities, including restrictions on the granting of security, incurring indebtedness and the sale of its assets.

Financing Activity

On January 10, 2020, Pembina closed an offering of \$1.0 billion of senior unsecured medium-term notes. The offering was conducted in three tranches, consisting of \$250 million issued through a re-opening of Pembina's senior unsecured medium-term notes, series 10, having a fixed coupon of 4.02 percent per annum, payable semi-annually and maturing on March 27, 2028; \$500 million issued through a re-opening of Pembina's senior unsecured medium-term notes, series 11, having a fixed coupon of 4.75 percent per annum, payable semi-annually and maturing on March 26, 2048; and \$250 million issued through a re-opening of Pembina's senior unsecured medium-term notes, series 12, having a fixed coupon of 3.62 percent per annum, payable semi-annually and maturing on April 3, 2029.

On April 6, 2020, Pembina entered into an unsecured \$800 million revolving credit facility with certain existing lenders, which provided additional liquidity and flexibility in Pembina's capital structure in light of current market conditions. The unsecured revolving credit facility matures April 3, 2022. The other terms and conditions of the credit facility, including financial covenants, are substantially similar to Pembina's unsecured \$2.5 billion revolving credit facility.

On May 7, 2020, Pembina entered into an unsecured U.S. \$250 million non-revolving term loan with a global bank, which provided additional liquidity and flexibility in Pembina's capital structure in light of current market conditions. The term loan matures May 7, 2025. The other terms and conditions of the credit facility, including financial covenants, are substantially similar to Pembina's unsecured \$2.5 billion revolving credit facility.

On May 28, 2020, Pembina closed an offering of \$500 million of senior unsecured medium-term notes. The offering was conducted in two tranches, consisting of the issuance of \$400 million in senior unsecured medium-term notes, series 16, having a fixed coupon of 4.76 percent per annum, payable semi-annually, and maturing on May 28, 2050 and \$100 million issued through a re-opening of Pembina's senior unsecured medium-term notes, series 7, having a fixed coupon of 3.71 percent per annum, payable semi-annually and maturing on August 11, 2026.

On July 10, 2020, Pembina's \$200 million senior unsecured notes, series C, were fully repaid through an early redemption, of which notice was provided to holders on June 5, 2020. The senior unsecured notes, series C, were originally set to mature in September 2021.

Subsequent to year-end, on January 25, 2021, Pembina closed an offering of \$600 million of fixed-to-fixed rate subordinated notes, series 1 (the "Subordinated Notes, Series 1"). The Subordinated Notes, Series 1 have a fixed coupon of 4.80 percent per annum, payable semi-annually, and mature on January 25, 2081. Pembina expects to use the net proceeds of the offering to fund the redemption of its outstanding Cumulative Redeemable Minimum Rate Reset Class A Preferred Shares, Series 11 and Series 13, to repay other outstanding indebtedness, as well as for general corporate purposes.

Covenants

Pembina's financial covenants under note indenture governing its medium-term notes and the agreements governing the Credit Facilities include the following:

Debt Instrument	Financial Covenant ⁽¹⁾	Ratio	Ratio as at December 31, 2020
Senior unsecured medium-term notes	Funded Debt to Capitalization	Maximum 0.70	0.42
Credit Facilities	Debt to Capital	Maximum 0.65	0.42
	EBITDA to Senior Interest Coverage	Minimum 2.5:1.0	7.4

⁽¹⁾ Terms as defined in relevant agreements.

Pembina was in compliance with all covenants under its note indenture and agreements governing its Credit Facilities as at December 31, 2020 (December 31, 2019: in compliance).

Credit Risk

Pembina continues to actively monitor and reassess the creditworthiness of its counterparties. The slowdown of the global economy and decrease in demand for crude oil and other commodities as a result of the ongoing COVID-19 pandemic increases Pembina's counterparty risk, as it has the potential to negatively impact the financial position of Pembina's customers' and related parties' and their access to credit, capital markets and other sources of liquidity. The majority of Pembina's credit exposure is to investment grade or split-investment grade counterparties. Pembina assesses all counterparties during the on-boarding process and actively monitors credit limits and exposure across the business. Financial assurances to mitigate and reduce risk may include guarantees, letters of credit and cash. Letters of credit totaling \$130 million (December 31, 2019: \$90 million) were held as at December 31, 2020, primarily in respect of customer trade receivables.

Outstanding Share Data

Issued and outstanding (<i>thousands</i>) ⁽¹⁾	February 19, 2021
Common shares	549,951
Stock options	21,650
Stock options exercisable	10,418
Class A, Series 1 Preferred shares	10,000
Class A, Series 3 Preferred shares	6,000
Class A, Series 5 Preferred shares	10,000
Class A, Series 7 Preferred shares	10,000
Class A, Series 9 Preferred shares	9,000
Class A, Series 11 Preferred shares	6,800
Class A, Series 13 Preferred shares	10,000
Class A, Series 15 Preferred shares	8,000
Class A, Series 17 Preferred shares	6,000
Class A, Series 19 Preferred shares	8,000
Class A, Series 21 Preferred shares	16,000
Class A, Series 23 Preferred shares	12,000
Class A, Series 25 Preferred shares	10,000

⁽¹⁾ Pembina issued 600,000 Series 2021-A Class A Preferred shares to the Computershare Trust Company of Canada, to be held in trust to satisfy its obligation under the Subordinated Note Indenture, in connection with the issuance of the Subordinated Notes, Series 1.

Credit Ratings

The following information with respect to Pembina's credit ratings is provided as such information relates to Pembina's financing costs and liquidity. Specifically, credit ratings affect Pembina's ability to obtain short-term and long-term financing and the cost of such financing. A reduction in the current ratings on Pembina's debt by its rating agencies, particularly a downgrade below investment-grade ratings, could adversely affect Pembina's cost of financing and its access to sources of liquidity and capital. In addition, changes in credit ratings and the associated costs may affect Pembina's ability to enter into normal course derivative or hedging transactions. Credit ratings are intended to provide investors with an independent measure of credit quality of any issues of securities. The credit ratings assigned by the rating agencies are not recommendations to purchase, hold or sell the securities, nor do the credit ratings comment on market price or suitability for a particular investor. Any credit rating may not remain in effect for a given period of time or may be revised or withdrawn entirely by a rating agency in the future if, in its judgment, circumstances so warrant.

Pembina targets strong 'BBB' credit ratings. DBRS Limited ("DBRS") has assigned a debt rating of 'BBB' to Pembina's senior unsecured notes and senior unsecured medium-term notes, a debt rating of 'BB+' to the Subordinated Notes, Series 1, and a rating of 'Pfd-3' to each issued series of Pembina's Class A Preferred Shares, other than the Class A Preferred Shares, Series 2021-A (the "Series 2021-A Preferred Shares").

The long-term corporate credit rating assigned by S&P Global Ratings ("S&P"), a division of The McGraw-Hill Companies, on Pembina is 'BBB'. S&P has also assigned a debt rating of 'BBB' to Pembina's senior unsecured notes and senior unsecured medium-term notes, a debt rating of 'BB' to the Subordinated Notes, Series 1, and a rating of 'P-3 (High)' to each issued series of Pembina's Class A Preferred Shares, other than the Series 2021-A Preferred Shares. DBRS and S&P affirmed Pembina's credit ratings during the second quarter of 2020.

Contractual Obligations and Off-Balance Sheet Arrangements

Contractual Obligations

Pembina had the following contractual obligations outstanding at December 31, 2020:

Contractual Obligations ⁽¹⁾ (\$ millions)	Payments Due By Period				
	Total	Less than 1 year	1 – 3 years	3 – 5 years	After 5 years
Leases ⁽²⁾	1,064	131	217	174	542
Loans and borrowings ⁽³⁾	16,275	1,058	2,262	2,708	10,247
Construction commitments ⁽⁴⁾	1,208	523	149	43	493
Other	569	112	145	75	237
Total contractual obligations	19,116	1,824	2,773	3,000	11,519

⁽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 35 and 175 mbpd of NGL each year up to and including 2029. Power purchase agreements range from one to 24 years and involve the purchase of power from electrical service providers. Pembina has secured up to 80 megawatts per day each year up to and including 2044.

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

⁽³⁾ Excluding deferred financing costs. Including interest payments on Pembina's senior unsecured notes.

⁽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.

Off-Balance Sheet Arrangements

Pembina does not have any off-balance sheet arrangements that have, or are reasonably likely to have, a current or future effect on Pembina's financial condition, results of operations, liquidity or capital investments.

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 regulatory requirements, engineering and construction services, utilities and product purchases and sales. 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, 2020, Pembina had \$91 million (December 31, 2019: \$103 million) in letters of credit issued.

5. CAPITAL INVESTMENTS

Capital Invested

(\$ millions)	3 Months Ended December 31		12 Months Ended December 31	
	2020	2019	2020	2019
Pipelines	76	254	587	892
Facilities	75	143	370	569
Marketing & New Ventures	4	22	38	157
Corporate and other projects	6	10	34	27
Total capital invested	161	429	1,029	1,645

In 2020, capital investments in Pipelines continued to be primarily related to Pembina's system expansion projects. In 2020, capital investments in Facilities were largely related to continued construction on Duvernay, Empress Expansion and the Prince Rupert Terminal. Capital investments in Marketing & New Ventures in both 2020 and 2019 were primarily related to Jordan Cove.

Contributions to Equity Accounted Investees

(\$ millions)	3 Months Ended December 31		12 Months Ended December 31	
	2020	2019	2020	2019
Alliance	—	13	—	13
Aux Sable	—	1	3	4
Veresen Midstream	—	23	69	73
CKPC	—	83	152	173
Total	—	120	224	263

Contributions made to CKPC during 2020 and 2019 were related to the development of the PDH/PP Facility, combined with a parental guarantee on CKPC's revolving credit facility provided by Pembina during the first quarter of 2020, discussed further in the "Financing Activities for Equity Accounted Investees" section below. Contributions to CKPC decreased during 2020, compared to 2019, following Pembina's announcement in the first quarter of 2020 that it had deferred capital spending on the PDH/PP Facility. In the fourth quarter of 2020, Pembina announced that it, along with its joint venture partner in CKPC, would be suspending execution of the PDH/PP Facility project indefinitely.

Contributions made to Veresen Midstream during both 2020 and 2019 were largely related to construction of the Hythe Developments. See the "Projects & New Developments" for Facilities for further details on the Hythe Developments.

6. DIVIDENDS

Common Share Dividends

Common share dividends are payable if, as, and when declared by Pembina's Board of Directors. The amount and frequency of dividends declared and payable is at the discretion of Pembina's Board of Directors, which considers earnings, cash flow, capital requirements, the financial condition of Pembina and other relevant factors when making its dividend determination.

Preferred Share Dividends

Other than in respect of the Series 2021-A Preferred Shares, the holders of Pembina's Class A Preferred Shares are entitled to receive fixed cumulative dividends. Dividends on the Series 1, 3, 5, 7, 9, 11, 13 and 21 Class A Preferred Shares are payable quarterly on the first day of March, June, September and December, if, as and when declared by the Board of Directors of Pembina. Dividends on the Series 15, 17 and 19 Class A Preferred Shares are payable on the last day of March, June, September and December in each year, if, as and when declared by the Board of Directors of Pembina. Dividends on the Series 23 and 25 Class A Preferred Shares are payable on the 15th day of February, May, August and November in each year, if, as and when declared by the Board of Directors of Pembina.

Dividends are not payable on the Series 2021-A Class A Preferred Shares, nor shall any dividends accumulate or accrue, prior to delivery to the holders of the Subordinated Notes, Series 1 following the occurrence of certain bankruptcy or insolvency events in respect of Pembina. Thereafter, dividends on the Series 2021-A Class A Preferred Shares are payable on the 25th day of January and July in each year, if, as and when declared by the Board of Directors.

On June 1, 2020, Pembina announced that it did not intend to exercise its right to redeem the eight million Cumulative Redeemable Rate Reset Class A Preferred Shares, Series 19 (the "Series 19 Class A Preferred Shares") outstanding on June 30, 2020. The annual dividend rate for the Series 19 Class A Preferred Shares for the five-year period from and including June 30, 2020 to, but excluding, June 30, 2025 is 4.684 percent.

On November 2, 2020, Pembina announced that it did not intend to exercise its right to redeem the nine million Cumulative Redeemable Rate Reset Class A Preferred Shares, Series 9 (the "Series 9 Class A Preferred Shares") outstanding on December 1, 2020. The annual dividend rate for the Series 9 Class A Preferred for the five-year period from and including December 1, 2020 to, but excluding, December 1, 2025 is 4.302 percent.

Subsequent to the end of the year, on January 25, 2021, Pembina announced it intends to redeem 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") on March 1, 2021 for a redemption price equal to \$25.00 per Series 11 Class A Preferred Share, less any tax required to be deducted or withheld by the Company.

7. SELECTED QUARTERLY INFORMATION

Selected Quarterly Operating Information

(mboe/d)	2020				2019			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Volumes⁽¹⁾⁽²⁾								
Pipelines								
Conventional Pipelines	993	863	834	902	958	908	895	880
Transmission Pipelines	684	661	668	668	646	594	558	563
Oil Sands Pipelines	1,053	1,056	1,053	1,059	1,063	1,068	1,065	1,064
Facilities								
Gas Services	673	657	658	678	690	672	668	682
NGL Services	211	214	214	201	220	194	198	214
Total	3,614	3,451	3,427	3,508	3,577	3,436	3,384	3,403

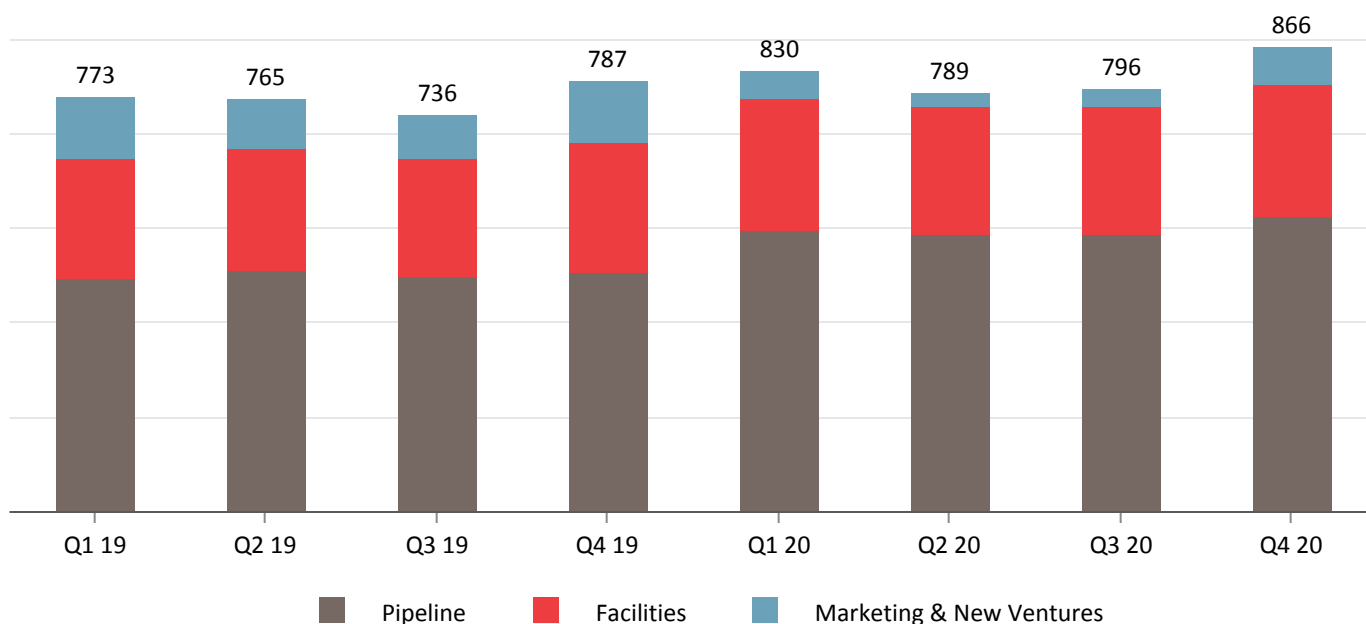
⁽¹⁾ Revenue volumes. See the "Abbreviations" section for definition.

⁽²⁾ Includes Pembina's proportionate share of volumes from equity accounted investees.

Deferred Take-or-pay Revenue

(\$ millions)	2020				2019			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Pipelines								
Opening balance	42	45	22	8	17	23	19	7
Revenue deferred	52	66	53	40	31	27	27	36
Revenue recognized	(91)	(69)	(30)	(26)	(40)	(33)	(23)	(24)
Ending take-or-pay contract liability balance	3	42	45	22	8	17	23	19
Facilities								
Opening balance	—	2	1	—	—	—	1	2
Revenue deferred	—	1	1	1	—	—	2	—
Revenue recognized	—	(3)	—	—	—	—	(3)	(1)
Ending take-or-pay contract liability balance	—	—	2	1	—	—	—	1

Quarterly Segmented Adjusted EBITDA (\$ millions)⁽¹⁾



⁽¹⁾ Refer to the "Non-GAAP Measures" section.

Quarterly Financial Information

(\$ millions, except where noted)		2020 ⁽²⁾				2019 ⁽²⁾			
	Q4	Q3	Q2	Q1		Q4	Q3	Q2	Q1
Revenue	1,680	1,496	1,229	1,548		1,668	1,492	1,563	1,649
Net revenue ⁽¹⁾	954	849	776	865		837	751	758	774
Operating expenses	201	178	154	179		177	151	134	140
Realized loss (gain) on commodity-related derivative financial instruments	6	(7)	(36)	(17)		(8)	(5)	(1)	(19)
Share of profit (loss) from equity accounted investees	(244)	62	66	84		89	90	98	97
Gross profit	247	568	460	733		605	615	631	590
Earnings (loss)	(1,216)	323	258	319		150	373	667	317
Earnings (loss) per common share – basic and diluted (dollars)	(2.28)	0.51	0.40	0.51		0.22	0.67	1.23	0.56
Cash flow from operating activities	766	434	642	410		728	535	661	608
Cash flow from operating activities per common share – basic (dollars) ⁽¹⁾	1.39	0.78	1.17	0.75		1.41	1.05	1.29	1.20
Adjusted cash flow from operating activities ⁽¹⁾	603	524	586	576		576	530	550	578
Adjusted cash flow from operating activities per common share – basic (dollars) ⁽¹⁾	1.10	0.95	1.07	1.05		1.11	1.04	1.08	1.14
Common shares outstanding (millions):									
Weighted average – basic	550	550	550	549		518	512	511	509
Weighted average – diluted	550	550	550	549		519	513	513	511
End of period	550	550	550	550		548	512	511	510
Common share dividends declared	346	346	347	346		314	307	302	290
Dividends per common share	0.63	0.63	0.63	0.63		0.60	0.60	0.59	0.57
Preferred share dividends declared	38	38	37	38		34	31	30	31
Capital investments	161	174	211	483		429	421	434	361
Contributions to equity accounted investees	—	28	2	194		120	25	28	90
Distributions from equity accounted investees	109	111	116	123		123	142	140	170
Adjusted EBITDA ⁽¹⁾	866	796	789	830		787	736	765	773

⁽¹⁾ Refer to the "Non-GAAP Measures" section.

⁽²⁾ 2020 period and comparative 2019 period have been restated. See "Voluntary Change in Accounting Policy", "Restatement of Revenue and Cost of Goods Sold" and Note 3 to the Consolidated Financial Statements. The restatement reduces revenue and cost of goods sold for all quarterly comparative periods, including Q3 2020: \$73 million, Q2 2020: \$39 million, Q1 2020: \$123 million, Q4 2019: \$86 million, Q3 2019: \$208 million, Q2 2019: \$245 million, and Q1 2019: \$319 million.

During the periods in the table above, Pembina's financial and operating results were impacted by the following factors and trends:

- Impairments recognized on Pembina's interests in Ruby, CKPC and the assets associated with Jordan Cove in the fourth quarter of 2020 and the partial impairment of Pembina's interest in Ruby in the fourth quarter of 2019;
- The Kinder Acquisition, which was completed on December 16, 2019;
- The COVID-19 pandemic and the resulting decrease in demand for commodities, which led to a significant decline in global energy prices, resulting in a reduction in capital spending budgets by Pembina and its customers;
- The narrowing of the AECO-Chicago natural gas price differential;
- Increased production in key operating areas and resource plays within the WCSB, including the Deep Basin, Montney and Duvernay, prior to the onset of the COVID-19 pandemic;
- New large-scale growth projects across Pembina's business being placed into service;
- Volatility in commodity market prices impacting margins within the marketing business, partially mitigated through Pembina's risk management program;
- A decrease in the Alberta corporate tax rate from 12 to 8 percent following the enactment of Bill 3 in June 2019;
- Higher net finance costs impacting earnings associated with debt related to financing acquisitions, growth projects and volatility in foreign exchange rates; and
- Increased common and preferred shares outstanding and corresponding dividends due to the Kinder Acquisition.

8. SELECTED EQUITY ACCOUNTED INVESTEE INFORMATION

Loans and Borrowings of Equity Accounted Investees

Under equity accounting, the assets and liabilities of an investment are net into a single line item in the consolidated statement of financial position, "Investments in Equity Accounted Investees". To assist readers' understanding and to evaluate the capitalization of Pembina's investments, loans and borrowings associated with investments in equity accounted investees are presented below based on Pembina's proportionate ownership in such investments, as at December 31, 2020. In addition, certain of the equity accounted investees have borrowing arrangements with an amortization structure, thereby necessitating periodic repayments of principal. These repayments occur prior to the distribution of residual cash flow to Pembina. The loans and borrowings and amortization schedules are presented below and classified by the division in which the results for the investment are reported. Please refer to the "Abbreviations" section for a summary of Pembina's investments in equity accounted investees and the division in which their results are reported.

As at December 31		
(\$ millions) ⁽¹⁾	2020	2019
Pipelines	926	1,057
Facilities	1,200	1,150
Total	2,126	2,207

⁽¹⁾ Balances reflect Pembina's ownership percentage of the outstanding balance face value.

Amortization Schedule of Loans and Borrowings of Equity Accounted Investees

(\$ millions) ⁽¹⁾	12 Months Ended					
	December 31, 2020	2021	2022	2023	2024	2025+
Pipelines	153	114	590	62	67	93
Facilities	—	12	36	36	1,116	—
Total	153	126	626	98	1,183	93

⁽¹⁾ Balances reflect Pembina's ownership percentage of the outstanding balance face value.

Financing Activities for Equity Accounted Investees

On December 31, 2020, CKPC provided notice to cancel its U.S. \$1.7 billion term facility and its U.S. \$150 million revolving credit facility. As a result, Pembina accelerated the recognition of the previously recorded financial guarantee liability.

On April 27, 2020, Ruby fully repaid its 364-day term loan. Concurrent to repayment, Ruby entered into a new amortizing term loan that matures on March 31, 2021. At December 31, 2020, U.S. \$32 million (U.S. \$16 million net to Pembina) remained outstanding.

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.

Credit Risk for Equity Accounted Investees

At December 31, 2020, Pembina's various equity accounted investees held letters of credit totaling \$105 million (December 31, 2019: \$84 million) primarily in respect of customer trade receivables.

9. OTHER

Selected Annual Financial Information

(\$ millions, except where noted)	2020 ⁽¹⁾	2019 ⁽¹⁾	2018 ⁽¹⁾
Revenue	5,953	6,372	6,125
Earnings (loss)	(316)	1,507	1,297
Per common share - basic (dollars)	(0.86)	2.69	2.32
Per common share - diluted (dollars)	(0.86)	2.68	2.32
Total assets	31,416	32,755	26,811
Long-term financial liabilities ⁽²⁾	11,695	11,493	7,949
Common share dividends declared (\$ per share)	2.52	2.36	2.24
Preferred share dividends declared	151	126	122

⁽¹⁾ 2020 and comparative 2019 and 2018 periods have been restated. See "Voluntary Change in Accounting Policy", "Restatement of Revenue and Cost of Goods Sold" and Notes 3 and 4 to the Consolidated Financial Statements.

⁽²⁾ Includes long-term loans and borrowings, long-term convertible debentures, which matured on December 31, 2018, long-term derivative financial instruments, contract liabilities, provisions and employee benefits, share-based payments, taxes payable and other liabilities.

See the "Quarterly Financial Information" section for the factors impacting years ended December 31, 2020 and 2019.

Increases in revenues, earnings and earnings per common share (basic and diluted) between 2018 and 2019 were largely due to a significant deferred tax recovery following the reduction in the Alberta corporate income tax rate from 12 percent to eight percent, and results from new assets going into service, offset by a partial impairment in Pembina's investment in Ruby. Increases in total assets and long-term financial liabilities from 2018 to 2019 were largely due to additional assets and loans and borrowings associated with the Kinder Acquisition.

Related Party Transactions

Pembina enters into transactions with related parties in the normal course of business. These transactions primarily include contracting capacity from and advancing funds to equity accounted investees, and providing management, administrative, operational and workforce related services to various affiliates on a cost recovery basis. These services are provided under separate consulting services agreements. For more information on these transactions, refer to Note 30 to the Consolidated Financial Statements.

Risk Management

Hedge of Net Investment in Foreign Operations

On May 7, 2020, Pembina designated the U.S. \$250 million non-revolving term loan it entered into as a hedge of the Company's net investment in U.S. functional currency foreign operations. Foreign exchange gains and losses on the designated debt are recognized in the currency translation reserve in accumulated other comprehensive income.

Interest Rate Risk - Cash Flow Hedge

On May 8, 2020, Pembina designated financial derivative contracts that fix the interest rate on \$250 million of variable rate debt as cash flow hedging instruments. Unrealized gains (losses) 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.

For more information on these transactions and Pembina's derivative instruments, refer to Note 27 to the Consolidated Financial Statements.

Pension Liability

Pembina maintains defined contribution plans and defined benefit pension plans for employees and retirees. The defined benefit plans include a funded registered plan for all qualified employees and an unfunded supplemental retirement plan for those employees affected by the Canada Revenue Agency maximum pension limits. At the end of 2020, the pension plans carried a net obligation of \$44 million (2019: \$35 million). At December 31, 2020, plan obligations amounted to \$296 million (2019: \$266 million) compared to plan assets of \$252 million (2019: \$231 million). In 2020, the pension plans' expense was \$20 million (2019: \$15 million). Pembina's contributions to the pension plans totaled \$23 million in 2020 (2019: \$20 million).

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.

Disclosure Controls and Procedures and Internal Control over Financial Reporting

Disclosure Controls and Procedures

Pembina maintains disclosure controls and procedures ("DC&P") designed to provide reasonable assurance that information required to be disclosed in Pembina's annual filings, interim filings and other reports filed or submitted by it under securities laws is recorded, processed, summarized and reported accurately and in the time periods specified under such securities laws, and include controls and procedures designed to ensure such information is accumulated and communicated to Pembina's management, including its certifying officers, as appropriate to allow timely decisions regarding required disclosure. As at December 31 2020, an evaluation of the effectiveness of the design and operation of Pembina's DC&P, as defined in National Instrument 52-109 *Certification of Disclosure in Issuer's Annual and Interim Filings* ("NI 52-109") and Rule 13a – 15(e) and 15(d) – 15(e) under the United States *Securities Exchange Act of 1934*, as amended (the "Exchange Act"), was carried out by management, including the President and Chief Executive Officer ("CEO") and the Senior Vice President and Chief Financial Officer ("CFO"). Based on the evaluation, the CEO and CFO have concluded that the design and operation of Pembina's DC&P were not effective as at that date as a result of the material weakness described below.

Management's Annual Report on Internal Control over Financial Reporting

Pembina maintains internal control over financial reporting ("ICFR") which is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS, and include policies and procedures that: (a) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of Pembina; (b) are designed to provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRS, and that receipts and expenditures of Pembina are being made only in accordance with authorizations of management and directors of Pembina; and (c) are designed to provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of Pembina's assets that could have a material effect on Pembina's financial statements. Management is responsible for establishing and maintaining DC&P and ICFR, as defined in NI 52-109 and Rule 13a – 15(e) and 15(d) – 15(e) under the Exchange Act.

Under the supervision and with the participation of our CEO and our CFO, management has conducted an evaluation of the effectiveness of our ICFR, as at December 31, 2020 based on the framework set forth in Internal Control – Integrated Framework issued in 2013 by the Committee of Sponsoring Organizations of the Treadway Commission. A material weakness is a deficiency, or a combination of deficiencies, in ICFR, such that there is a reasonable possibility that a material misstatement of the annual financial statements, or interim financial statements, will not be prevented or detected on a timely basis. Based on its evaluation under this framework, management concluded that, as at December 31, 2020, the Company has identified a "material weakness" related to controls over contract assessment in its Marketing business. Specifically, we 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 Marketing and New Ventures on a gross basis that should have been recorded on a net basis. Management has restated revenue and cost of goods sold for the 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 for details of the restatement.

Remediation of Material Weakness

The control deficiency described above was detected by management during the third quarter of 2021 prior to the filing of Pembina's interim financial statements for the three and nine months ended September 30, 2021. The Company has prioritized the remediation of the material weakness described above and is working under the oversight of the Audit Committee to resolve the issue.

Specific actions to remediate this material weakness include the following:

- i. Revision of the process of identifying contracts to consult with internal experts to assist in the evaluation of technical accounting matters; and
- ii. Enhance contract analysis, including revision of the process used to assess accounting implications for complex contracts.

As the conclusion regarding the material weakness in ICFR was reached in late October 2021, Pembina has not had adequate time to implement and evaluate the controls and procedures described above, as limited complex and material transactions requiring an application of the foregoing remediation actions have occurred in this period. Pembina has, therefore, not had adequate time or opportunity to apply its proposed remediation actions to evidence the remediation of the material weakness described above and the material weakness will continue to be addressed throughout the remainder of 2021.

Changes in Internal Control over Financial Reporting

Pembina previously excluded business processes acquired through the Kinder Acquisition on December 16, 2019, from the Company's evaluation of internal control over financial reporting as permitted by applicable securities laws in Canada and the United States. Effective May 1, 2020, Pembina completed the integration of the Kinder Acquisition into its existing enterprise resource planning ("ERP") system. As a result of the ERP system integration, certain processes supporting Pembina's ICFR for the Kinder Acquisition changed in the second quarter of 2020. The Company completed the evaluation of ICFR of the Kinder Acquisition in the fourth quarter of 2020 and the overall controls and procedures we follow in establishing ICFR were not significantly impacted.

Other than the Kinder Acquisition and the material weakness described above, there has been no change in Pembina's ICFR that occurred during the year ended December 31, 2020 that has materially affected, or are reasonably likely to materially affect, Pembina's internal control over financial reporting.

10. ACCOUNTING POLICIES & ESTIMATES

Changes in Accounting Policies & Restatement

Voluntary change in accounting policy

Pembina re-assessed its policy for the measurement of its decommissioning provision. Previously, Pembina's decommissioning provision was measured at the present value of the expected costs to settle the obligations using a risk-free interest rate based on the Government of Canada's benchmark long-term bond yield. Effective December 31, 2020, Pembina elected to change its policy for the measurement of its decommissioning obligations to utilize a credit-adjusted risk-free interest rate. As a result of this change in policy, Pembina's decommissioning provision is now measured using a risk-free interest rate based on the Government of Canada's benchmark long-term bond yield, adjusted for Pembina's credit risk. The use of a credit-adjusted risk-free rate results in reliable and more relevant information for the readers of the Company's Consolidated Financial Statements as this methodology results in a more accurate representation of the value at which such liabilities could be transferred to a third party, provides a better indication of the risk associated with such obligations, and increases the comparability of Pembina's financial statements to those of its peers.

Management has applied the change in accounting policy retrospectively. The Consolidated Financial Statements have been restated to reflect adjustments made as a result of this change in accounting policy. The following tables present the impacts of the change in accounting policy for decommissioning provisions to the statement of financial position, the statement of earnings (loss) and comprehensive income (loss), and the statement of cash flows, for each of the line items affected.

i. Impacts on the Consolidated Statements of Financial Position

As at (\$ millions)	December 31, 2020 Policy change	December 31, 2019 Policy change	January 1, 2019 Policy change
Assets			
Property, plant and equipment	(546)	(372)	(304)
Investments in equity accounted investees	24	20	15
Right-of-use assets	(51)	(39)	—
Advances to related parties and other assets	(7)	(7)	(7)
Total assets	(580)	(398)	(296)
Liabilities			
Decommissioning provision	(734)	(527)	(411)
Deferred tax liabilities	37	31	32
Total liabilities	(697)	(496)	(379)
Equity			
Deficit	117	98	83
Total equity attributable to Shareholders	117	98	83

A reconciliation for each of the line items affected in the restated Consolidated Statements of Financial Position is presented in Note 4 of the Consolidated Financial Statements.

ii. Reconciliation of the Consolidated Statements of Earnings (Loss) and Comprehensive Income (Loss)

For the years ended December 31 (\$ millions, except per share amounts)	2020	2019		
	Policy change	Previously reported	Policy change	Restated
Cost of sales	(18)	5,187	(4)	5,183
Share of profit from equity accounted investees	4	370	5	375
Gross profit	22	2,433	9	2,442
Net finance costs	(3)	294	(5)	289
Earnings (loss) before income tax	25	1,528	14	1,542
Deferred tax (recovery) expense	6	(174)	(1)	(175)
Earnings (loss) attributable to shareholders	19	1,492	15	1,507
Total comprehensive income (loss) attributable to shareholders	19	1,273	15	1,288
Earnings (loss) attributable to common shareholders, net of preferred share dividends	19	1,361	15	1,376
Earnings (loss) per common share - basic	0.04	2.66	0.03	2.69
Earnings (loss) per common share - diluted	0.04	2.65	0.03	2.68

iii. Reconciliation of the Consolidated Statement of Cash Flows

For the years ended December 31 (\$ millions)	2020	2019		
	Policy change	Previously reported	Policy change	Restated
Earnings (loss)	19	1,492	15	1,507
Share of profit from equity accounted investees	(4)	(370)	(5)	(375)
Adjustments for depreciation and amortization	(18)	511	(4)	507
Adjustments for net finance costs	(3)	294	(5)	289
Adjustments for income tax expense	6	36	(1)	35
Cash flow from operating activities	—	2,532	—	2,532

Restatement of revenue and cost of goods sold

During the third quarter of 2021, Pembina identified certain contract types that were recorded incorrectly within Marketing & New Ventures. Revenue and cost of goods sold associated with the contracts were recorded on a gross basis but should have been recorded on a net basis. As a result, Pembina restated its 2020 Consolidated Statements of Earnings (Loss) and Comprehensive Income (Loss) and the associated comparative periods by decreasing revenue and cost of goods sold, with no impact to earnings, cash flows or financial position.

i. Reconciliation of the Consolidated Statements of Earnings (Loss) and Comprehensive Income (Loss)

For the years ended December 31 (\$ millions, except per share amounts)	2020			2019		
	Previously reported	Restatement adjustment	Restated	Previously reported	Restatement adjustment	Restated
Revenue	6,202	(249)	5,953	7,230	(858)	6,372
Cost of sales	4,132	(249)	3,883	5,183	(858)	4,325
Gross profit	2,008	—	2,008	2,442	—	2,442
Earnings (loss) per common share - basic	0.86	—	0.86	2.69	—	2.69
Earnings (loss) per common share - diluted	0.86	—	0.86	2.68	—	2.68

New Standards and Interpretations Not Yet Adopted

The International Accounting Standards Board have issued a standard and amendments to existing standards that are effective for periods on or after January 1, 2021, 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.

- Interbank Offered Rates ("IBOR") Reform - Phase 2 (Amendments to IFRS 9, IFRS 7, and IFRS 16);
- Property, Plant and Equipment: Proceeds before Intended Use (Amendments to IAS 16);
- 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;
- Classification of Liabilities as Current or Non-Current (Amendments to IAS 1); and
- IFRS 17: *Insurance Contracts*.

Critical Accounting Judgments and Estimates

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 to be a pandemic, many governments have imposed restrictions on individuals and businesses, resulting in a significant slowdown of the global economy. While these restrictions have been relaxed in certain jurisdictions, a resurgence of COVID-19 cases (including cases resulting from variants of the COVID-19 virus) in certain geographic areas and the risk that this could occur in other areas has caused governments in certain jurisdictions to sustain and, in some cases, re-impose restrictions. In addition, while vaccines are beginning to be distributed, there is ongoing uncertainty as to the timing, level of adoption, duration of efficacy and overall effectiveness of the vaccine, including against variants of the COVID-19 virus. As a result, there remains significant uncertainty as to the extent and duration of the global economic slowdown. This uncertainty has created volatility in asset and commodity prices, currency exchange rates and a marked decline in long-term interest rates. In addition, the resulting decrease in demand for crude oil has resulted in a decline in global crude oil prices. Management applied judgment and will continue to assess the situation in determining the impact of the significant uncertainties created by these events and conditions on the carrying amounts of assets and liabilities in the Consolidated Financial Statements.

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

Judgments

(i) Business Combinations

Business combinations are accounted for using the acquisition method of accounting. The determination of fair value often requires management to make judgments about future possible events. The assumptions with respect to lease identification, classification and measurement, the fair value of property plant and equipment, intangible assets, decommissioning provisions and contract liabilities acquired, as well as the determination of deferred taxes, generally require the most judgment.

(ii) Depreciation and Amortization

Depreciation and amortization of property, plant and equipment and intangible assets are based on management's judgment of the most appropriate method to reflect the pattern of an asset's future economic benefit expected to be consumed by Pembina. Among other factors, these judgments are based on industry standards and historical experience.

(iii) 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. In addition, management applies judgment to assign goodwill acquired as part of a business combination to the CGU or group of CGUs that is expected to benefit from the synergies of the business combination for purposes of impairment testing. 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.

(iv) Assessment of 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.

(v) Pattern of Revenue Recognition

The pattern of revenue recognition is impacted by management's judgments as to the nature of Pembina's performance obligations, the amount of consideration allocated to performance obligations that are not sold on a stand-alone basis, the valuation of material rights and the timing of when those performance obligations have been satisfied.

(vi) Leases

Management applies judgment to determine whether a contract is, or contains, a lease from both a lessee and lessor perspective. This assessment is based on whether the contract conveys a right to control the use of an identified asset for a period of time in exchange for consideration. Key judgments include whether a contract identifies an asset (or portion of an asset), whether the lessee obtains substantially all the economic benefits of the asset over the contract term and whether the lessee has the right to direct the asset's use. Judgment is also applied in determining the rate used to discount the lease payments.

Estimates

(i) Business Combinations

Estimates of future cash flows, forecast prices, interest rates, discount rates, cost, market values and useful lives are made in determining the fair value of assets acquired and liabilities assumed. Changes in any of the assumptions or estimates used in determining the fair value of acquired assets and liabilities could impact the amounts assigned to assets, liabilities, intangible assets, goodwill and deferred taxes in the purchase price equation. Future earnings can be affected as a result of changes in future depreciation and amortization, asset or goodwill impairment.

(ii) Provisions and Contingencies

Management uses judgment in determining the likelihood of realization of contingent assets and liabilities to determine the outcome of contingencies. Provisions recognized are based on management's best estimate of the timing, scope and amount of expected future cash outflows to settle the obligation.

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 and the timing of when these costs will occur.

(iii) 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. The assessment of future recoverability involves significant estimates to be made by management.

(iv) Depreciation and Amortization

Estimated useful lives of property, plant and equipment and intangible assets are based on management's assumptions and estimates of the physical useful lives of the assets, the economic lives, which may be associated with the reserve lives and commodity type of the production area, in addition to the estimated residual value.

(v) 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, 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.

(vi) Impairment of Financial Assets

The measurement of financial assets carried at amortized cost includes management's estimates regarding the expected credit losses that will be realized on these financial assets.

(vii) Revenue from Contracts with Customers

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. Management's 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 or services being provided, the market environment, and customer specific considerations.

(viii) Fair Value of Financial Instruments

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.

(ix) Employee Benefit Obligations

An actuarial valuation is prepared to measure Pembina's net employee benefit obligations using management's best estimates with respect to longevity, discount and inflation rates, compensation increases, market returns on plan assets, retirement and termination rates.

(x) Leases

In measuring its 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 exercise in determining the lease term.

11. RISK FACTORS

Pembina's value proposition is based on balancing economic benefit against risk. Where appropriate, Pembina will seek to reduce risk. Pembina continually works to mitigate the impact of risks to its business by identifying all significant risks so that they can be appropriately managed. To assist with identifying and managing risk, Pembina has implemented a comprehensive Risk Management Program. The risks that may affect the business and operation of Pembina and its operating subsidiaries are described at a high level within this MD&A and more fully within Pembina's AIF, an electronic copy of which is available at www.pembina.com or on Pembina's SEDAR profile at www.sedar.com and which is filed under Form 40-F on Pembina's EDGAR profile at www.sec.gov. Further, additional discussion about counterparty risk, market risk, liquidity risk and additional information on financial risk management can be found in Note 27 of the Consolidated Financial Statements.

Ongoing Impact of the COVID-19 Pandemic

COVID-19 Related Impacts

Pembina's business and operations have been and may continue to be materially adversely affected by the COVID-19 pandemic, including ongoing uncertainty with respect to the extent and duration of the pandemic. The ongoing COVID-19 pandemic and actions that have, and may be, taken by governmental authorities in response thereto has resulted, and may continue to result in, among other things: an overall slowdown in the global economy; a decrease in global energy demand; increased volatility in financial and commodity markets; disruptions to global supply chains; labour shortages; significant impacts to the workforce; reductions in trade volumes; temporary operational restrictions and restrictions on gatherings of individuals, as well as shelter-in-place declarations and quarantine orders; business closures and travel bans; political and economic instability; and civil unrest. The recent resurgence of the COVID-19 virus and the recent spread of new variants thereof in certain geographic areas, including certain areas in which Pembina operates, and the possibility that a resurgence of the COVID-19 virus or the spread of such new or other variants or mutations thereof may occur in other areas, has resulted in the re-imposition of certain of the foregoing restrictions, and may result in further restrictions, by governmental authorities in certain jurisdictions, including certain jurisdictions in which Pembina operates. This further increases the risk and uncertainty as to the extent and duration of the COVID-19 pandemic and its ultimate impact of the global economy and other items noted above.

The risks to Pembina of the ongoing COVID-19 pandemic include, among other things: risks to the health and safety of Pembina's employees; a slowdown or temporary suspension of operations in certain geographic locations in which Pembina operates; delays in the completion, or deferral, of Pembina's growth and expansion projects; and supply chain disruptions, all or any of which could materially adversely impact Pembina's business operations and financial results. Pembina has already deferred certain growth projects as a result of the COVID-19 pandemic and the associated decline in global energy demand and the resulting decrease in commodity prices during 2020.

The full extent and impact of the COVID-19 pandemic continues to be unknown at this time and the degree to which it may impact Pembina's business operations and financial results will depend on future developments, which are highly uncertain and cannot be predicted with any degree of certainty, including: the duration, severity and geographic spread of the COVID-19 virus and variants and mutations thereof, including in respect of the recent resurgence of the virus and the recent spread of new variants thereof in certain geographic areas, including certain areas in which Pembina operates; further actions that may be taken by governmental authorities, including in respect of travel restrictions and business disruptions; the effectiveness and timing of actions taken to contain and treat the COVID-19 virus and variants and mutations thereof, including the vaccines developed in response thereto; and how quickly and to what extent normal economic and operating conditions can resume.

Impact on General Risks

Depending on the extent and duration of the COVID-19 pandemic, it may also have the effect of heightening many of the other risks described herein, including the risks relating to Pembina's exposure to commodity prices; the successful completion of Pembina's growth and expansion projects, including the expected return on investment thereof; Pembina's ability to maintain its credit ratings; restricted access to capital and increased borrowing costs; Pembina's ability to pay dividends and service obligations under its debt securities and other debt obligations; and otherwise complying with the covenants contained in the agreements that govern Pembina's existing indebtedness.

Risks Inherent in Pembina's Business

Commodity Price Risk

Pembina's business is exposed to commodity price volatility and a substantial decline in the prices of these commodities could adversely affect its financial results.

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 volume 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. See "*Reserve Replacement, Throughput and Product Demand*" below.

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 (the severity of which could increase due to climate change), 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 revenue from the sale of NGL if removed from a gas stream and the value such NGL would have had if left in the gas stream and sold at 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, transport differentials 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.

The Company 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 risks. As an example of commodity price mitigation, the Company 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 the Company's exposures to these differentials. The Company does not trade financial instruments for speculative purposes. Commodity price fluctuations and volatility can also impact producer activity and throughput in Pembina's infrastructure, which is discussed in more detail below.

For more information with respect to Pembina's financial instruments and financial risk management program, see Note 27 to Pembina's Consolidated Financial Statements, which note is incorporated by reference herein.

Regulation and Legislation

Legislation in Alberta and British Columbia exists to ensure that producers have fair and reasonable opportunities to produce, process and market their reserves. Regulatory authorities in Alberta and British Columbia may declare the operator of a pipeline a common carrier of crude oil, NGL or natural gas and, as such, must not discriminate between producers who seek access to the pipeline. Regulatory authorities may also establish conditions under which the carrier must accept and carry product, including the tariffs that may be charged. Producers and shippers may also apply to the appropriate regulatory authorities for a review of tariffs, and such tariffs may then be regulated if it is proven that the tariffs are not just and reasonable. The potential for direct regulation of tariffs, while considered remote by Pembina, could result in tariff levels that are less advantageous to Pembina and could impair the economic operation of such regulated pipeline systems.

The AER is the primary regulatory body that oversees Pembina's Alberta-issued energy permits, with some minor exceptions. Certain of Pembina's subsidiaries own pipelines in British Columbia, which are regulated by the BCOGC and the BCUC, and pipelines that cross provincial or international boundaries, which are regulated by the CER and/or the FERC and PHMSA. Certain of Pembina's operations and expansion projects are subject to additional regulations, and as Pembina's operations expand throughout Canada and North America, Pembina may be required to comply with the requirements of additional regulators and legislative bodies, including the Impact Assessment Agency of Canada, the BCEAO, the Ontario Ministry of Natural Resources and Forestry, the Saskatchewan Ministry of Energy and Resources and The Petroleum Branch of Manitoba Mineral Resources under Manitoba Agriculture and Resource Development.

In the U.S., FERC regulates interstate natural gas pipelines and the transportation of crude oil, NGL and refined products in interstate commerce. Under the NGA, FERC regulates the construction, extension, and abandonment of interstate natural gas pipelines and the tolls, terms and conditions of service and other aspects of the business of interstate natural gas pipelines. Interstate natural gas pipelines tolls, terms and conditions of service are filed at FERC and publicly available. Under the *Interstate Commerce Act*, FERC regulates the tolls, terms and conditions of the transportation in interstate commerce of crude oil, NGLs and refined products. Pipeline safety is regulated by the PHMSA, which sets standards for the design, construction, pressure testing, operation and maintenance, corrosion control, training and qualification of personnel, accident reporting and record keeping. The Office of Pipeline Safety, within the PHMSA, inspects and enforces the pipeline safety regulations across the U.S. All regulations and environmental, safety and economic compliance obligations are subject to change at the initiative of FERC, PHMSA or other United States Federal agencies with jurisdiction over aspects of the operations of pipelines, including environmental, economic and safety regulations. Changes by FERC in its regulations or policies could adversely impact Pembina's natural gas pipelines, making the construction, extension or expansion of such pipelines more costly, causing delay in the permitting of such projects or impacting the likelihood of success of completion of such projects. Similarly, changes in FERC's regulations or policies could adversely impact the tolls that Pembina's FERC regulated pipelines are able to charge and how such pipelines do business, whether such pipelines are regulated by FERC pursuant to the NGA or the ICA. Pembina continually monitors existing and changing regulations in all jurisdictions in which it currently operates, or into which it may expand in the future, and the potential implications to its operations; however, Pembina cannot predict future regulatory changes, and any such compliance and regulatory changes in any one or multiple jurisdictions could have a material adverse impact on Pembina, its financial results and its Shareholders.

In 2019, the federal government overhauled the environmental assessment and federal energy regulation regime in Canada. The National Energy Board ("NEB") and NEB Act were replaced by the CER and the *Canadian Energy Regulator Act* ("CER Act"). Similarly, the *Canadian Environmental Assessment Act, 2012* (Canada) ("CEAA") was replaced by the *Impact Assessment Act* (Canada) ("IAA") and the Canadian Environmental Assessment Agency was replaced by the new IAA as the authority responsible for conducting all federal impact assessments (formerly "environmental assessments") for certain designated projects under the IAA, unless referred to a review panel. The list of designated projects which are subject to mandatory assessment under the IAA is similar to the list under the CEAA; however, the length of new pipelines for which an impact assessment is required has been increased from 40 km to 75 km. The proposed IAA also contains a broader project assessment process than under the CEAA and provides for enhanced consultation with groups that may be affected by proposed projects, while also expanding the scope of factors and considerations that need to be taken into account under the project assessment process. The CER continues to oversee approved federal, interprovincial and international energy projects in a manner similar to the former regime under the NEB, with new projects being referred to a review panel under the IAA. On July 16, 2020, the federal government published the Strategic Assessment of Climate Change ("SACC") under the provisions for such assessments in the IAA. The SACC imposes the new requirements regarding GHG emissions planning on projects subject to the IAA.

At this point, while few projects have been subject to the new federal impact assessment regime, Pembina continues to actively monitor developments in this area. To the extent these changes lengthen the review timeline for projects or expand the scope of the matters to be considered, the new regime could materially impact the amount of time and capital resources required by Pembina to seek and obtain approval to construct and operate international or interprovincial pipelines or other projects designated pursuant to the IAA project list or ministerial designation powers under the IAA. The new regime could therefore materially and directly impact Pembina's business and financial results, and could indirectly affect Pembina's business and financial results by impacting the financial condition and growth projects of its customers and, ultimately, production levels and throughput on Pembina's pipelines and in its facilities.

Pembina's business and financial condition may also be influenced by federal and foreign legislation affecting, in particular, foreign investment, through legislation such as the *Competition Act* (Canada), the *Investment Canada Act* (Canada) and equivalent legislation in foreign jurisdictions.

There can be no assurance that changes to income tax laws, regulatory and environmental laws or policies and government incentive programs relating to the pipeline or crude oil and natural gas industry will not adversely affect Pembina or the value of its securities.

Operational Risks

Operational risks include, but are not limited to: pipeline leaks; the breakdown or failure of equipment, pipelines and facilities, information systems or processes; the compromise of information and control systems; the performance of equipment at levels below those originally intended (whether due to misuse, unexpected degradation or design, construction or manufacturing defects); releases at truck terminals and hubs; releases associated with the loading and unloading of potentially harmful substances onto rail cars and trucks; adverse sea conditions (including storms and rising sea levels) and releases or spills from shipping vessels loaded at Pembina's marine terminal; failure to maintain adequate supplies of spare parts; operator error; labour disputes; disputes with interconnected facilities and carriers; operational disruptions or apportionment on third-party systems or refineries, which may prevent the full utilization of Pembina's facilities and pipelines; and catastrophic events, including, but not limited to, those related to climate change and extreme weather events, including fires, floods and other natural disasters, explosions, train derailments, earthquakes, widespread epidemics or pandemic outbreaks, acts of civil protest or disobedience, terrorism or sabotage, and other similar events, many of which are beyond the control of Pembina and all of which could result in operational disruptions, damage to assets, related releases or other environmental issues, and delays in construction, labour and materials. Pembina may also be exposed from time to time to additional operational risks not stated in the immediately preceding sentence. In addition, the consequences of any operational incident (including as a result of adverse sea conditions) at Vancouver Wharves or involving a vessel receiving products from Vancouver Wharves, may be even more significant as a result of the complexities involved in addressing leaks and releases occurring in the ocean or along coastlines and/or the repair of marine terminals. Any leaks, releases or other incidents involving such vessels, or other similar operators along the West Coast, could result in significant harm to the environment, curtailment of, or disruptions of and/or delays in, offshore shipping activity in the affected areas, including Pembina's ability to effectively carry on operations at Vancouver Wharves. The occurrence or continuance of any of the foregoing events could increase the cost of operating Pembina's assets or reduce revenue, thereby impacting earnings. Additionally, facilities and pipelines are reliant on electrical power for their operations. A failure or disruption within the local or regional electrical power supply or distribution or transmission systems could significantly affect ongoing operations. Further, a significant increase in the cost of power or fuel could have a materially negative effect on the level of profit realized in cases where the relevant contracts do not provide for recovery of such costs. In the long-term, constraints on natural resource development could be impacted by climate change initiatives or policies, resulting in additional operational costs, delays or restrictions.

Pembina is committed to preserving customer and shareholder value by proactively managing operational risk through safe and reliable operations. Senior managers are responsible for the supervision of operational risk by ensuring appropriate policies, procedures and systems are in place within their business units and internal controls are operating efficiently. Pembina also has an extensive program to manage pipeline system integrity, which includes the development and use of in-line inspection tools and various other leak detection technologies. Pembina's maintenance, excavation and repair programs are focused on risk mitigation and, as such, resources are directed to the areas of greatest benefit and infrastructure is replaced or repaired as required. Pembina carries insurance coverage with respect to some, but not all, casualty occurrences in amounts customary for similar business operations, which coverage may not be sufficient to compensate for all casualty occurrences. In addition, Pembina has a comprehensive Security Management Program designed to reduce security-related risks.

Completion and Timing of Expansion Projects

The successful completion of Pembina's growth and expansion projects is dependent on a number of factors outside of Pembina's control, including the impact of general economic, business and market conditions, availability of capital on terms and rates acceptable to Pembina, receipt of regulatory approvals, reaching long-term commercial arrangements with customers in respect of certain portions of the expansions, construction schedules, commissioning difficulties or delays and costs that may change depending on supply, demand and/or inflation, labour, materials and equipment availability, contractor non-performance, acts of civil protest or disobedience, terrorism or sabotage, weather conditions, cost of engineering services, and change in governments that granted the requisite regulatory approvals. There is no certainty, nor can Pembina provide any assurance, that necessary regulatory approvals will be received on terms that maintain the expected return on investment associated with a specific project, or at all, or that satisfactory commercial arrangements with customers will be entered into on a timely basis, or at all, or that third parties will comply with contractual obligations in a timely manner. Factors such as special interest group opposition, Indigenous, landowner and other stakeholder consultation requirements, civil protest or disobedience, changes in shipper support, and changes to the legislative or regulatory framework could all have an impact on meeting contractual and regulatory milestones. As a result, the cost estimates and completion dates for Pembina's major projects may change during different stages of the project. Early stage projects face additional challenges, including securing leases, easements, rights-of-way, permits and/or licenses from landowners or governmental authorities allowing access for such purposes, as well as Indigenous consultation requirements. Accordingly, actual costs and construction schedules may vary from initial estimates and these differences can be significant, and certain projects may not proceed as planned, or at all. Further, there is a risk that maintenance will be required more often than currently planned or that significant maintenance capital projects could arise that were not previously anticipated.

Under most of Pembina's construction and operating agreements, the Company is obligated to construct the facilities and pipelines regardless of delays and cost increases and Pembina bears the risk for any cost overruns. Future agreements entered into with customers with respect to expansions may contain similar conditions. While Pembina is not currently aware of any significant undisclosed cost overruns with respect to its current projects at the date hereof, any such cost overruns may adversely affect the economics of particular projects, as well as Pembina's business operations and financial results, and could reduce Pembina's expected return on investment which, in turn, could reduce the level of cash available for dividends and to service obligations under Pembina's debt securities and other debt obligations.

Possible Failure to Realize Anticipated Benefits of Corporate Strategy

Pembina evaluates the value proposition for expansion projects, new acquisitions and divestitures on an ongoing basis. Planning and investment analysis is highly dependent on accurate forecasting assumptions and, to the extent that these assumptions do not materialize, financial performance may be lower or more volatile than expected. Volatility in the economy, change in cost estimates, failure to obtain regulatory approvals and permits, project scoping and risk assessment could result in a loss in profits for Pembina. As part of its ongoing strategy, Pembina may complete acquisitions of assets or other entities in the future. Achieving the benefits of completed and future acquisitions depends, in part, on successfully consolidating functions and integrating operations, procedures and personnel in a timely and efficient manner, as well as Pembina's ability to realize the anticipated growth opportunities and synergies from combining the acquired businesses and operations with those of Pembina. In particular, large scale acquisitions may involve significant pricing and integration risk. The integration of acquired businesses and entities requires the dedication of substantial management effort, time and resources, which may divert management's focus and resources from other strategic opportunities and from operational matters during this process. The integration process may also result in the loss of key employees and the disruption of ongoing business, customer and employee relationships, which may adversely affect Pembina's ability to achieve the anticipated benefits of any acquisitions. Acquisitions may also expose Pembina to additional risks, including risks relating to entry into markets or businesses in which Pembina has little or no direct prior experience, increased credit risks through the assumption of additional debt, costs and contingent liabilities and exposure to liabilities of the acquired business or assets.

As part its value proposition evaluation, Pembina may also desire to divest assets to optimize its operations and financial performance. Pembina may, however, be unable to sell certain assets or, if Pembina is able to sell certain assets, it may not receive the optimal or desired amount of proceeds from such asset sales. Additionally, the timing to close any asset sales could be significantly different than Pembina's expected timeline.

See "*General Risk Factors – Additional Financing and Capital Resources*" below.

Joint Ownership and Third-Party Operators

Certain of Pembina's assets are jointly owned and are governed by partnership or shareholder agreements entered into with third-parties. As a result, certain decisions relating to these assets require the approval of a simple majority of the owners, while others require unanimous approval of the owners. In addition, certain of these assets are operated by unrelated third-party entities. The success of these assets is, to some extent, dependent on the effectiveness of the business relationship and decision-making among Pembina and the other joint owner(s) and the expertise and ability of any third-party operators to operate and maintain the assets. While Pembina believes that there are prudent governance and other contractual rights in place, there can be no assurance that Pembina will not encounter disputes with joint owners or that assets operated by third parties may not perform as expected. Such events could impact operations or cash flows of these assets or cause them to not operate as Pembina expects which, in turn, could have a negative impact on Pembina's business operations and financial results, and could reduce Pembina's expected return on investment, thereby reducing the level of cash available for dividends and to service obligations under Pembina's debt securities and other debt obligations.

Reserve Replacement, Throughput and Product Demand

Pembina's pipeline revenue is based on a variety of tolling arrangements, including fee-for-service, cost-of-service agreements and market-based tolls. As a result, certain pipeline revenue is heavily dependent upon throughput levels of crude oil, condensate, NGL and natural gas. Future throughput on crude oil, NGL and natural gas pipelines and replacement of oil and gas reserves in the service areas will be dependent upon the activities of producers operating in those areas as they relate to exploiting their existing reserve bases and exploring for and developing additional reserves, and technological improvements leading to increased recovery rates. Similarly, the volumes of natural gas processed through Pembina's gas processing assets depends on the production of natural gas in the areas serviced by the gas processing business and associated pipelines. Without reserve additions, or expansion of the service areas, volumes on such pipelines and in such facilities would decline over time as reserves are depleted. As oil and gas reserves are depleted, production costs may increase relative to the value of the remaining reserves in place, causing producers to shut-in production or seek out lower cost alternatives for transportation. If, as a result, the level of tolls collected by Pembina decreases, cash flow available for dividends to Shareholders and to service obligations under Pembina's debt securities and Pembina's other debt obligations could be adversely affected.

Over the long-term, the ability and willingness of shippers to continue production will also depend, in part, on the level of demand and prices for crude oil, condensate, NGL and natural gas in the markets served by the crude oil, NGL and natural gas pipelines and gas processing and gathering infrastructure in which Pembina has an interest. Producers may shut-in production at lower product prices or higher production costs.

Global economic events may continue to have a substantial impact on the prices of crude oil, condensate, NGL and natural gas. Pembina cannot predict the impact of future supply/demand or economic conditions, fuel conservation measures, alternative fuel requirements, governmental regulation or technological advances in fuel efficiency and energy generation in the energy and petrochemical industries or future demand for and prices of natural gas, crude oil, condensate and NGL. A lower commodity price environment will generally reduce drilling activity and, as a result, the demand for midstream infrastructure could decline. Producers in the areas serviced by Pembina may not be successful in exploring for and developing additional reserves or achieving technological improvements to increase recovery rates and lower production costs during periods of lower commodity prices, which may also reduce demand for midstream infrastructure.

Future prices of these hydrocarbons are determined by supply and demand factors, including weather and general economic conditions as well as economic, political and other conditions in other crude oil and natural gas regions, all of which are beyond Pembina's control. The rate and timing of production from proven natural gas reserves tied into gas plants is at the discretion of producers and is subject to regulatory constraints. Producers have no obligation to produce from their natural gas reserves, which means production volumes are at the discretion of producers. Lower production volumes may increase the competition for natural gas supply at gas processing plants, which could result in higher shrinkage premiums being paid to natural gas producers. In addition, lower production volumes may lead to less demand for pipelines and processing capacity and could adversely impact Pembina's ability to re-contract on favourable terms with shippers as current agreements expire.

Pembina's gas processing assets are connected to various third-party trunk line systems. Operational disruptions or apportionment on those third-party systems may prevent the full utilization of Pembina's gas processing assets, which may have an adverse effect on Pembina's business.

Competition

Pembina competes with other pipeline, midstream, marketing and gas processing, fractionation and handling/storage service providers in its service areas as well as other transporters of crude oil, NGL and natural gas. The introduction of competing transportation alternatives into Pembina's service areas could limit Pembina's ability to adjust tolls as it may deem necessary and could result in the reduction of throughput in Pembina's pipelines. Additionally, potential pricing differentials on the components of NGL may result in these components being transported by competing gas pipelines. Pembina is determined to meet, and believes that it is prepared for, these existing and potential competitive pressures, including through agreements which provide for areas of dedication over the geographic areas in which Pembina's pipeline infrastructure is located. Pembina also competes with other businesses for growth and business opportunities, including competition related to potential greenfield development opportunities, which could impact its ability to grow through acquisitions and developments and could impact earnings and cash flow available to pay dividends and to service obligations under Pembina's debt securities and other debt obligations.

Reliance on Principal Customers

Pembina sells services and products to large customers within its area of operations and relies on several significant customers to purchase product for the Marketing business. If for any reason these parties are unable to perform their obligations under the various agreements with Pembina, the revenue and dividends of the Company and the operations of Pembina could be negatively impacted. See "*General Risk Factors – Counterparty Credit Risk*" below.

Customer Contracts

Throughput on Pembina's pipelines is governed by transportation contracts or tolling arrangements with various crude oil and natural gas producers. Pembina is party to numerous contracts of varying durations in respect of its gas gathering, processing and fractionation facilities as well as its terminalling and storage services. Any default by counterparties under such contracts or any expiration or early termination of such contracts or tolling arrangements without renewal or replacement, provided that such contracts are material to Pembina's business and operations, may have an adverse effect on Pembina's business and results from operations and there is no guarantee that any of the contracts that Pembina currently has in place will be renewed at the end of their term, including on terms favourable to Pembina, or replaced with other contracts in the event of early termination. Further, some contracts associated with the services described above are comprised of a mixture of firm and non-firm commitments. The revenue that Pembina earns on non-firm or firm commitments without take-or-pay service is dependent on the volume of crude oil, condensate, NGL and natural gas produced by producers in the relevant geographic areas. Accordingly, lower production volumes in these areas, including for reasons such as low commodity prices, may have an adverse effect on Pembina's revenue.

Risks Relating to Leases and Rights of Way Access

Certain Pembina facilities and associated infrastructure are located on lands leased or licensed from third parties that must be renewed from time to time. Failure to renew the leases or licenses on terms acceptable to Pembina could significantly reduce the operations of such facilities and could result in related decommissioning costs for Pembina, pursuant to the terms of such leases or licenses. Successful development of new pipelines or extensions to existing pipelines depends in part on securing leases, easements, rights-of-way, permits and/or licenses from landowners or governmental authorities allowing access for such purposes. The process of securing rights-of-way or similar access is becoming more complex, particularly in more densely populated, environmentally sensitive and other areas. The inability to secure such rights-of-way or similar access could have an adverse effect on Pembina's operations and financial results.

Reputation

Reputational risk is the potential risk that market- or company-specific events, or other factors, could result in the deterioration of Pembina's reputation with key stakeholders. Pembina's business and operations, projects and growth opportunities require us to have strong relationships with key stakeholders, including local communities, Indigenous communities and other groups directly impacted by the Company's activities, as well as governments and government agencies.

The potential for deterioration of Pembina's reputation exists in many business decisions, which may negatively impact Pembina's business and the value of its securities. Reputational risk cannot be managed in isolation from other forms of risk. Credit, market, operational, insurance, liquidity, regulatory and legal, and technology risks, among others, must all be managed effectively to safeguard Pembina's reputation. Pembina's reputation could also be impacted by the actions and activities of other companies operating in the energy industry, particularly other energy infrastructure providers, over which Pembina has no control. In particular, Pembina's reputation could be impacted by negative publicity related to pipeline incidents, expansion plans or new projects or due to opposition from civilians or organizations opposed to energy, oil sands and pipeline development and, particularly, with shipment of production from oil sands regions. Further, Pembina's reputation could be negatively impacted by changing public attitudes towards climate change and the perceived causes thereof, over which the Company has no control. Negative impacts resulting from a compromised reputation, whether caused by Pembina's actions or otherwise, could include revenue loss, reduction in customer base, delays in obtaining regulatory approvals with respect to growth projects, reduced access to capital or decreased value of Pembina's securities and reduced insurance capacity and coverage.

Environmental Costs and Liabilities

Pembina's operations, facilities and petroleum product shipments are subject to extensive national, regional and local environmental, health and safety laws and regulations governing, among other things, discharges to air, land and water, the handling and storage of petroleum products and hazardous materials, waste disposal, the protection of employee health, safety and the environment, and the investigation and remediation of contamination. Pembina's facilities may experience incidents, malfunctions or other unplanned events that may result in spills or emissions and/or result in personal injury, fines, penalties, other sanctions or property damage. Pembina may also incur liability for environmental contamination associated with past and present activities and properties.

Pembina's facilities and pipelines must maintain a number of environmental and other permits from various governmental authorities in order to operate, and these facilities are subject to inspection from time to time. Failure to maintain compliance with these requirements could result in operational interruptions, fines or penalties, or the need to install additional pollution control technology. Licenses and permits must be renewed from time to time and there is no guarantee that a license or permit will be renewed on the same or similar conditions as it was initially granted. There can be no assurance that Pembina will be able to obtain all licenses, permits, registrations, approvals and authorizations that may be required to conduct operations that it may wish to undertake. Further, if at any time regulatory authorities deem any of Pembina's pipelines or facilities unsafe or not in compliance with applicable laws, they may order such facilities to be shut down. Certain significant environmental legislative initiatives that may materially impact Pembina's business and financial results and conditions are outlined below.

On December 11, 2020, the federal government announced "A Healthy Environment and a Healthy Economy" ("New Federal Climate Plan"), which aims to exceed the federal government's previous 2030 target for national GHG emissions reductions and to set Canada on a track to net-zero GHG emissions by 2050. The upstream oil and gas industry is expected to contribute a significant amount of the reduction needed to achieve these goals. The New Federal Climate Plan implements a number of specific measures described below, but is also expected to affect the decision-making of all federal government bodies, including federal regulators, consistent with, for instance, the application of the SACC to projects subject to the IAA, as described above.

The federal government mandated a pan-Canadian carbon price beginning at \$20 per tonne in 2019, rising by \$10 per tonne per year to \$50 per tonne in 2022. Pursuant to the New Federal Climate Plan, past 2022 the price on carbon will rise by \$15 a year to \$170 in 2030. The Greenhouse Gas Pollution Pricing Act ("GGPPA") introduces a carbon pricing regime on those provinces that fail to impose adequate provincial carbon pricing measures. The New Federal Climate Plan indicates the federal government will review the standard for adequacy of provincial carbon pricing measures under the GGPPA. This may result in the GGPPA applying more broadly to the provinces and territories. In 2020, the Alberta Court of Appeal found the GGPPA unconstitutional, a decision which followed two unsuccessful constitutional challenges of the GGPPA by Saskatchewan and Ontario in 2019. The Alberta, Saskatchewan, and Ontario constitutional challenges were appealed to the Supreme Court of Canada, which heard the case in 2020 but has, at this time, yet to release a decision. Manitoba has also initiated a challenge to the GGPPA in Federal Court. The results of the challenges to the GGPPA could significantly impact how GHG emissions are regulated throughout Canada including in the provinces discussed below.

The federal Regulations Respecting Reduction in the Release of Methane and Certain Volatile Organic Compounds (Upstream Oil and Gas Sector) ("Federal Methane Regulations"), which require reduction of fugitive and vented gas emissions from the upstream oil and gas sector, came into force on January 1, 2020. According to the New Federal Climate Plan, the federal government will report on the effectiveness of the Federal Methane Regulations in 2021 and the stringency of the Federal Methane Regulations is expected to be increased in 2025, if not sooner. The Federal Methane Regulations may impose additional costs on the operations of Pembina and Pembina's customers.

The federal government is also developing a Clean Fuel Standard that will require all producers and importers of liquid fossil fuels in Canada to reduce or offset the carbon intensity of the fuels they produce or import. The final version of the regulations implementing the Clean Fuel Standard is expected in late 2021. Pembina will continue to monitor the development of regulations on liquid fossil fuels. The potential costs and benefits of the Clean Fuel Standard to Pembina and its customers are continuing to be assessed.

Alberta only partially satisfies federal requirements with respect to carbon pricing and is subject to the federal fuel charge pursuant to the GGPPA as of January 1, 2020. The fuel charge was \$20 per tonne on January 1, 2020 and rose to \$30 per tonne on April 1, 2020.

The Technology Innovation and Emissions Reduction ("TIER") Regulation replaced the Carbon Competitiveness Incentive Regulation ("CCIR") as Alberta's output-based emission allocations for large facility emitters on January 1, 2020. The TIER continues to facilitate emissions reductions relative to facilities that emitted 100,000 tonnes of GHGs or more in 2016 or any subsequent year. For facilities which are subject to the TIER, it replaces the federal output-based carbon price included in the GGPPA. Pembina has three natural gas processing facilities subject to the TIER. At present, the operational and financial impacts are minimal and are anticipated to not change substantially over the next few years. As more facilities expand and increase production, it is anticipated that additional facilities will become subject to the TIER. The potential costs and benefits to Pembina of those facilities under the TIER are continuing to be assessed.

By an equivalency agreement with the federal government, which came into force October 26, 2020, the Federal Methane Regulations do not currently apply in Alberta. The application of the Federal Methane Regulations in Alberta may change in 2023 or earlier as the federal government works to meet its desired gas emissions reduction targets. The Methane Emission Reduction Regulation came into force in Alberta on January 1, 2020, and, along with certain AER Directives, imposes largely the same constraints as the Federal Methane Regulations.

The Government of Alberta, in its climate change legislation and guidelines, has legislated an overall cap on oil sands GHG emissions. The legislated emissions cap on oil sands operations has been set to a maximum of 100 megatonnes in any year. Oil sands operations currently emit approximately 70 megatonnes per year. This legislated cap may limit oil sands production growth in the future.

Similar policy reviews on climate change are ongoing in British Columbia, Saskatchewan, Manitoba and Ontario. Subject to the outcome of the challenges to the GGPPA noted above, the carbon pricing regime in the GGPPA currently applies to different degrees in Saskatchewan, Manitoba and Ontario. British Columbia has a separate carbon pricing regime in place with a carbon price level largely equivalent to that in the GGPPA. The Federal Methane Regulations apply in Ontario and Manitoba but not currently, by equivalency agreements similar to that in effect in Alberta, in British Columbia or Saskatchewan. Ontario also made substantial amendments to the Ontario Environmental Assessment Act on July 21, 2020. The impact of these amendments has yet to be determined.

Through active participation with industry associations and direct engagement with regulatory bodies, Pembina will continue to monitor and assess for material impacts to Pembina's business as regulations and policies continue to be developed.

While Pembina believes its current operations are in compliance with all applicable environmental, health and safety laws, there can be no assurance that substantial costs or liabilities will not be incurred as a result of non-compliance with such laws. Moreover, it is possible that other developments, such as changes in environmental, health and safety laws, regulations and enforcement policies thereunder, including with respect to climate change, claims for damages to persons or property resulting from Pembina's operations, and the discovery of pre-existing environmental liabilities in relation to Pembina's existing or future properties or operations, could result in significant costs and liabilities to Pembina. If Pembina is not able to recover the resulting costs or increased costs through insurance or increased tolls, cash flow available to pay dividends to Shareholders and to service obligations under Pembina's debt securities and Pembina's other debt obligations could be adversely affected.

Changes in environmental, health and safety regulations and legislation, including with respect to climate change, may also impact Pembina's customers and could result in crude oil and natural gas development and production becoming uneconomical, which would impact throughput and revenue on Pembina's systems and in its facilities.

See *"Reserve Replacement, Throughput and Product Demand"* above.

While Pembina maintains insurance for damage caused by seepage or pollution from its pipelines or facilities in an amount it considers prudent and in accordance with industry standards, certain provisions of such insurance may limit the availability thereof in respect of certain occurrences unless they are discovered within fixed time periods, which typically range from 72 hours to 30 days. Although Pembina believes it has adequate pipeline monitoring systems in place to monitor for a significant spill of product, if Pembina is unaware of a problem or is unable to locate the problem within the relevant time period, insurance coverage may lapse and may not be available.

Abandonment Costs

Pembina is responsible for compliance with all applicable laws and regulations regarding the dismantling, decommissioning, environmental, reclamation and remediation activities on abandonment of its pipeline systems and other assets at the end of their economic life, and these abandonment costs may be substantial. An accounting provision is made for the estimated cost of site restoration and is capitalized in the relevant asset category. 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 benefits will be required to settle the obligation. Pembina's estimates of the costs of such abandonment or decommissioning could be materially different than the actual costs incurred. For more information with respect to Pembina's estimated net present value of decommissioning obligations, see Note 18 to the Consolidated Financial Statements, which note is incorporated by reference herein.

The proceeds from the disposition of certain assets, including in respect of certain pipeline systems and line fill, may be available to offset abandonment costs. Pembina may, in the future, determine it prudent or be required by applicable laws or regulations to establish and fund additional reclamation funds to provide for payment of future abandonment costs. Such reserves could decrease cash flow available to pay for dividends to Shareholders and to service obligations under Pembina's debt securities and Pembina's other debt obligations.

To the best of its knowledge, Pembina has complied with CER requirements on its wholly-owned CER-regulated pipelines for abandonment funding and has completed the compliance-based filings that are required under the applicable CER rules and regulations regarding the abandonment of its pipeline systems and assets. Pembina also has ownership in CER-regulated pipelines including in respect of the Alliance Pipeline, the Tupper pipelines and the Kerrobert pipeline, which are operated by or with its joint venture partners. Pembina and the joint venture partner in each case are responsible for the abandonment funding and the submission of the CER-compliance based filings for those CER-regulated pipelines. Pembina will continue to monitor any regulatory changes prior to the next five-year review and will complete the annual reporting as required by the CER.

Operating and Capital Costs

The operating and capital costs of Pembina's assets may vary considerably from current and forecasted values and rates and represent significant components of the cost of providing service. In general, as equipment ages, costs associated with such equipment may increase over time. In addition, operating and capital costs may increase as a result of a number of factors beyond Pembina's control, including general economic, business and market conditions and supply, demand and/or inflation in respect of required goods and/or services. Dividends may be reduced if significant increases in operating or capital costs are incurred and this may also impact the ability of Pembina to service obligations under its debt securities and other debt obligations.

Although certain operating costs are recaptured through the tolls charged on natural gas volumes processed and crude oil and NGL transported, respectively, to the extent such tolls escalate, producers may seek lower cost alternatives or stop production of their crude oil and/or natural gas.

Risks Relating to NGL by Rail

Pembina's operations include rail loading, offloading and terminalling facilities. Pembina relies on railroads and trucks to distribute its products for customers and to transport raw materials to its processing facilities. Costs for environmental damage, damage to property and/or personal injury in the event of a railway incident involving hydrocarbons have the potential to be significant. At this time, the *Railway Safety Act* (Canada), which governs the operation of railway equipment, does not contemplate regulatory enforcement proceedings against shippers, but consignors and shippers may be subject to regulatory proceedings under the *Transportation of Dangerous Goods Act* (Canada), which specifies the obligations of shippers to identify and classify dangerous goods, select appropriate equipment and prepare shipping documentation. While the *Canada Transportation Act* was amended in 2015 to preclude railway companies from shifting liability for third-party claims to shippers by tariff publication alone, major Canadian railways have adopted standard contract provisions designed to implement such a shift. Under various environmental statutes in both Canada and the U.S., Pembina could be held responsible for environmental damage caused by hydrocarbons loaded at its facilities or being carried on its leased rail cars. Pembina partially mitigates this risk by securing insurance coverage, but such insurance coverage may not be adequate in the event of an incident.

Railway incidents in Canada and the U.S. have prompted regulatory bodies to initiate reviews of transportation rules and publish various directives. Regulators in Canada and the U.S. have begun to phase-in more stringent engineering standards for tank cars used to move hydrocarbon products, which require all North American tank cars carrying crude oil or ethanol to be retrofitted and all tank cars carrying flammable liquids to be compliant in accordance with the required regulatory timelines. In addition, in 2020, the Government of Canada directed industry to review and update the rules regarding the transportation of crude oil and liquefied petroleum gas. While most legislative and regulatory changes apply directly to railway companies, costs associated with retrofitting locomotives and rail cars, implementing safety systems, increased inspection and reporting requirements may be indirectly passed on to Pembina through increased freight rates and car leasing costs. In addition, regulators in Canada and the U.S. have implemented changes that impose obligations directly on consignors and shippers, such as Pembina, relating to the certification of product, equipment procedures and emergency response procedures.

In the event that Pembina is ultimately held liable for any damages resulting from its activities relating to transporting NGL by rail, for which insurance is not available, or increased costs or obligations are imposed on Pembina as a result of new regulations, this could have an impact on Pembina's business, operations and prospects and could impact earnings and cash flow available to pay dividends and to service obligations under Pembina's debt securities and other debt obligations.

Risk Factors Relating to the Securities of Pembina

Dilution of Shareholders

Pembina is authorized to issue, among other classes of shares, an unlimited number of Common Shares for consideration on terms and conditions as established by the Board of Directors without the approval of Shareholders in certain instances. Existing Shareholders have no pre-emptive rights in connection with such further issuances. Any issuance of Common Shares may have a dilutive effect on existing Shareholders.

Risk Factors Relating to the Activities of Pembina and the Ownership of Securities

The following is a list of certain risk factors relating to the activities of Pembina and the ownership of its securities:

- the level of Pembina's indebtedness from time to time could impair Pembina's ability to obtain additional financing on a timely basis to take advantage of business opportunities that may arise, which may have an adverse effect on the value of Pembina's securities;
- the uncertainty of future dividend payments by Pembina and the level thereof, as Pembina's dividend policy and the funds available for the payment of dividends from time to time will be dependent upon, among other things, operating cash flow generated by Pembina and its subsidiaries, financial requirements for Pembina's operations, the execution of its growth strategy and the satisfaction of solvency tests imposed by the ABCA for the declaration and payment of dividends;
- Pembina may make future acquisitions or may enter into financings or other transactions involving the issuance of securities of Pembina which may be dilutive to the holders of Pembina's securities;
- the inability of Pembina to manage growth effectively, and realize the anticipated growth opportunities from acquisitions and new projects, could have an adverse impact on Pembina's business, operations and prospects, which may also have an adverse effect on the value of Pembina's securities; and
- the market value of the Common Shares may deteriorate materially if Pembina is unable to meet its cash dividend targets or make cash dividends in the future.

Market Value of Common Shares and Other Securities

Pembina cannot predict at what price the Common Shares, Class A Preferred Shares or other securities issued by Pembina will trade in the future. Common Shares, Class A Preferred Shares and other securities of Pembina will not necessarily trade at values determined solely by reference to the underlying value of Pembina's assets. One of the factors that may influence the market price of the Common Shares and the Class A Preferred Shares is the annual dividend yield of such securities. An increase in interest rates may lead holders and/or purchasers of Common Shares or Class A Preferred Shares to demand a higher annual dividend yield, which could adversely affect the market price of the Common Shares or Class A Preferred Shares. In addition, the market price for Common Shares and the Class A Preferred Shares may be affected by announcements of new developments, changes in Pembina's operating results, failure to meet analysts' expectations, changes in credit ratings, changes in general market conditions, fluctuations in the market for equity or debt securities and other factors beyond the control of Pembina.

Shareholders are encouraged to obtain independent legal, tax and investment advice with respect to the holding of Common Shares or Class A Preferred Shares and other securities issued by Pembina.

General Risk Factors

Health and Safety

The operation of Pembina's business is subject to hazards of gathering, processing, transporting, fractionating, storing and marketing hydrocarbon products. Such hazards include, but are not limited to: blowouts; fires; explosions; gaseous leaks, including sour natural gas; migration of harmful substances; oil spills; corrosion; and acts of vandalism and terrorism. These hazards may interrupt operations, impact Pembina's reputation, cause loss of life or personal injury to the Company's workers or contractors, result in loss of or damage to equipment, property, information technology systems, related data and control systems or cause environmental damage that may include polluting water, land or air. Further, several of the Company's pipeline systems and related assets are operated in close proximity to populated areas and a major incident could result in injury or loss of life to members of the public. A public safety incident could also result in reputational damage to the Company, material repair costs or increased costs of operating and insuring Pembina's assets.

Additional Financing and Capital Resources

The timing and amount of Pembina's capital expenditures and contributions to equity accounted investees, and the ability of Pembina to repay or refinance existing debt as it becomes due, directly affects the amount of cash available for Pembina to pay dividends. Future acquisitions, expansions of Pembina's assets, other capital expenditures and the repayment or refinancing of existing debt as it becomes due may be financed from sources such as cash generated from operations, the issuance of additional Common Shares, Class A Preferred Shares or other securities (including debt securities) of Pembina and borrowings. Dividends may be reduced, or even eliminated, at times when significant capital or other expenditures are made. There can be no assurance that sufficient capital will be available on terms acceptable to Pembina, or at all, to make additional investments, fund future expansions or make other required capital expenditures. During periods of weakness in the global economy, and in particular the commodity-related industry sectors, Pembina may experience restricted access to capital and increased borrowing costs. The ability of Pembina to raise capital depends on, among other factors, the overall state of capital markets, Pembina's credit rating, investor demand for investments in the energy industry and demand for Pembina's securities. To the extent that external sources of capital, including the issuance of additional Common Shares, Class A Preferred Shares or other securities or the availability of additional credit facilities, become limited or unavailable on acceptable terms, or at all, due to credit market conditions or otherwise, the ability of Pembina to make the necessary capital investments to maintain or expand its operations, to repay outstanding debt or to invest in assets, as the case may be, may be impaired. To the extent Pembina is required to use operating cash flow to finance capital expenditures or acquisitions or to repay existing debt as it becomes due, the level of dividends payable may be reduced.

Counterparty Credit Risk

Counterparty credit risk represents the financial loss Pembina may experience if a counterparty to a financial instrument or commercial agreement fails to meet its contractual obligations to Pembina in accordance with the terms and conditions of such instruments or agreements with Pembina. Counterparty credit risk arises primarily from Pembina's short-term investments, trade and other receivables, advances to related parties and from counterparties to its derivative financial instruments.

Pembina continues to closely monitor and reassess the creditworthiness of its counterparties, including financial institutions. Pembina may reduce or mitigate its exposure to certain counterparties where it is deemed warranted and permitted under contractual terms. Pembina manages counterparty credit risk through established credit management techniques, including conducting comprehensive financial and other assessments on all new counterparties and regular reviews of existing counterparties to establish and monitor counterparties' creditworthiness, set exposure limits, monitor exposure to these limits and seek to obtain financial assurances where warranted and permitted under contractual terms. 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 establishment of counterparty exposure limits is governed by a Board-designated counterparty exposure limit matrix which represents the maximum dollar amounts of counterparty exposure by debt rating that can be approved for a particular counterparty.

Financial assurances from counterparties may include guarantees, letters of credit and cash. As at December 31, 2020, letters of credit totaling approximately \$130 million (December 31, 2019: \$90 million) were held primarily in respect of customer trade receivables.

Pembina has typically collected its receivables in full. At December 31, 2020, approximately 94 percent (December 31, 2019: 95 percent) of receivables were current. 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. The risk of non-collection is considered to be low and no material impairment of trade and other receivables has been made as of the date hereof.

Pembina monitors and manages its concentration of counterparty credit risk on an ongoing basis. Pembina also evaluates counterparty risk from the perspective of future exposure with existing or new counterparties that support future capital expansion projects. Pembina believes these measures are prudent and allow for effective management of its counterparty credit risk but there is no certainty that they will protect Pembina against all material losses. As part of its ongoing operations, Pembina must balance its market and counterparty credit risks when making business decisions.

Debt Service

As at December 31, 2020, Pembina had exposure to floating interest rates on approximately \$1.2 billion (2019: \$2.1 billion) in debt. Certain borrowings which occur under floating rates have been swapped to fixed rates using derivative financial instruments.

Variations in interest rates and scheduled principal repayments, if required under the terms of Pembina's banking agreements could result in significant changes in the amounts required to be applied to debt service before payment of any dividends. Certain covenants in the Company's agreements with its lenders may also limit certain payments and dividends paid by Pembina.

Pembina and its subsidiaries are permitted to borrow funds to finance the purchase of pipelines and other energy infrastructure assets, to fund capital expenditures or other financial obligations or expenditures in respect of such assets and for working capital purposes. Amounts paid in respect of interest and principal on debt incurred in respect of those assets reduce the amount of cash flow available for dividends on Common Shares. Pembina is also required to meet certain financial covenants under the Credit Facilities and is subject to customary restrictions on its operations and activities, including restrictions on the granting of security, incurring indebtedness and the sale of its assets.

The lenders under Pembina's Credit Facilities have been provided with guarantees and subordination agreements. If Pembina becomes unable to pay its debt service charges or otherwise commits an event of default, payments to the lenders under its Credit Facilities will rank in priority to dividends.

Although Pembina believes its existing Credit Facilities are sufficient for its immediate liquidity requirements, there can be no assurance that the amount available thereunder will be adequate for the future financial obligations of Pembina or that additional funds will be able to be obtained on terms acceptable to Pembina, or at all.

Credit Ratings

Rating agencies regularly evaluate Pembina and base their ratings of Pembina's long-term and short-term debt and Class A Preferred Shares on a number of factors. These factors include Pembina's financial strength as well as factors not entirely within Pembina's control, including conditions affecting the industry in which Pembina operates generally and the wider state of the economy. There can be no assurance that one or more of Pembina's credit ratings will not be downgraded. A credit rating downgrade could also limit Pembina's access to debt and preferred share markets.

Pembina's borrowing costs and ability to raise funds are directly impacted by its credit ratings. Credit ratings may be important to suppliers or counterparties when they seek to engage in certain transactions with Pembina. A credit rating downgrade may impair Pembina's ability to enter into arrangements with suppliers or counterparties, engage in certain transactions, limit Pembina's access to private and public credit markets or increase the costs of borrowing under its existing Credit Facilities. A credit rating downgrade could also limit Pembina's access to debt and preferred share markets.

Reliance on Management, Key Individuals and a Skilled Workforce

Pembina is dependent on senior management and directors of the Company in respect of the governance, administration and management of all matters relating to Pembina and its operations and administration. The loss of the services of key individuals could have a detrimental effect on Pembina. In addition, Pembina's operations require the retention and recruitment of a skilled workforce, including engineers, technical personnel and other professionals. Pembina competes with other companies in the energy industry for this skilled workforce. If the Company is unable to retain current employees and/or recruit new employees or comparable skill, knowledge and experience, Pembina's business and operations could be negatively impacted. The costs associated with retaining and recruiting key individuals and a skilled workforce could adversely affect Pembina's business opportunities and financial results and there is no assurance that Pembina will continue to attract and retain all personnel necessary for the development and operation of its business.

Indigenous Land Claims and Consultation Obligations

Indigenous people have claimed title and rights to a considerable portion of the lands in western Canada. The successful assertion of Indigenous title or other Indigenous rights claims may have an adverse effect on western Canadian crude oil and natural gas production or oil sands development and may result in reduced demand for Pembina's assets and infrastructure that service those areas, which could have a material adverse effect on Pembina's business and operations.

In Canada, the federal and provincial governments (the "Crown") have a duty to consult and, when appropriate, accommodate Indigenous people when the interests of the Indigenous peoples may be affected by a Crown action or decision. Crown actions include the decision to issue a regulatory approval relating to activities that may impact Indigenous rights, interests or lands. The Crown may rely on steps undertaken by a regulatory agency to fulfill its duty to consult and accommodate in whole or in part. Therefore, the processes established by regulatory bodies, such as the AER, the BCOGC, the BCEAO and the CER, often include an assessment of Indigenous rights claims and consultation obligations. While the Crown holds ultimate responsibility for ensuring consultation is adequate, this issue is often a major aspect of regulatory permitting processes. If a regulatory body, or the Crown itself, determines that the duty to consult has not been appropriately discharged relative to the issuance of regulatory approvals required by Pembina, the issuance of such approvals may be delayed or denied, thereby impacting Pembina's Canadian operations.

As described in "*Regulation and Legislation*" above, the CER Act, IAA, and associated amendments to the *Fisheries Act* (Canada) and the *Canadian Navigable Waters Act* (Canada) replaced previous applicable regimes in 2019. A number of the federal regulatory process amendments pertain to the participation of Indigenous groups and the protection of Indigenous and treaty rights. The new legislation generally codifies existing law and practice with respect to these matters. For example, decision makers are now expressly required to consider the effects (positive or negative) of a proposed project on constitutionally-protected Indigenous rights, as well as Indigenous peoples themselves, and ensure that consultation is undertaken during the planning phase of impact assessment processes. The new legislation also creates a larger role for Indigenous governing bodies in the impact assessment process (enabling the delegation of certain aspects of the impact assessment process to such groups) and requires decision makers to consider Indigenous traditional knowledge in certain cases.

The federal government is advancing changes to the recognition of Indigenous rights across Canada. As part of these efforts, on December 3, 2020, the federal government introduced 2020 Bill C-15, the *United Nations Declaration on the Rights of Indigenous Peoples* ("UNDRIP") Act. The purpose of the legislation is to affirm the application of the UNDRIP in Canadian law, but the practical effects of the legislation are yet to be determined as it will only require the government to prepare and implement an action plan for this application, and annually report on its progress. Pembina will continue to monitor and assess the impacts Bill C-15 and other federal government initiatives on Indigenous rights may have on its business as legislation and/or policies continue to be developed.

In 2018, the British Columbia government enacted the 2018 *Environmental Assessment Act* (the "EA Act") as part of its commitment to revitalize environmental assessment in the province and facilitate its commitment to implementing the UNDRIP. The EA Act came into force in late 2019. The EA Act is designed as a "consent-based" environmental assessment model and is intended to support reconciliation with Indigenous peoples and the implementation of the UNDRIP. The legislation requires the BCEAO to seek participating Indigenous groups' consent with respect to, among other things, the decision to issue an environmental assessment certificate to a given project. While the EA Act does not strictly require consent in most cases, the legislation creates significant new participation opportunities for participating Indigenous groups during the course of environmental assessments, which may increase the time required to obtain regulatory approvals and thereby impact Pembina's operations in British Columbia. In 2019, British Columbia enacted its own legislation, the *Declaration on the Rights of Indigenous Peoples Act* ("DRIPA") to implement UNDRIP, which is structurally similar to the federal Bill C-15. The DRIPA further provides the British Columbia government with the ability to enter into joint decision-making agreements with Indigenous governments. Pembina continues to actively monitor the development of the regulations required to facilitate the implementation of the EA Act and the DRIPA.

Potential Conflicts of Interest

Shareholders and other security holders of Pembina are dependent on senior management and the directors of Pembina for the governance, administration and management of Pembina. Certain directors and officers of Pembina may be directors or officers of entities in competition to Pembina or may be directors or officers of certain entities in which Pembina holds an equity investment in. As such, certain directors or officers of Pembina may encounter conflicts of interest in the administration of their duties with respect to Pembina. Pembina mitigates this risk by requiring directors and officers to disclose the existence of potential conflicts in accordance with Pembina's Code of Ethics and in accordance with the ABCA.

Litigation

In the course of their business, Pembina and its various subsidiaries and affiliates may be subject to lawsuits and other claims, including with respect to Pembina's growth or expansion projects. Defence and settlement costs associated with such lawsuits and claims may be substantial, even with respect to lawsuits and claims that have no merit. Due to the inherent uncertainty of the litigation process, the resolution of any particular legal or other proceeding may have a material adverse effect on the financial position or operating results of Pembina.

Changes in Tax Legislation

Tax legislation that Pembina is subject to may be amended (or the interpretation of such legislation may change), retroactively or prospectively, resulting in tax consequences that materially differ from those contemplated by Pembina in the jurisdictions in which Pembina has operations, which may create a risk of non-compliance and re-assessment. While Pembina believes that its tax filing positions are appropriate and supportable, it is possible that governing tax authorities may: (i) amend tax legislation (or its interpretation of such legislation may change), or (ii) successfully challenge Pembina's interpretation of tax legislation, either of which could expose Pembina to additional tax liabilities and may affect Pembina's estimate of current and future income taxes and could have an adverse effect on the financial condition and prospects of Pembina and the distributable cash flow available to pay dividends and to service obligations under Pembina's debt securities and other debt obligations.

Foreign Exchange Risk

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

Cyber Security

Pembina's infrastructure, technologies and data are becoming increasingly integrated. Such integration creates a risk that the failure of one system could lead to failure of other systems which may also have an impact on the Company's physical assets and its ability to safely operate such assets. Furthermore, Pembina and its third-party vendors collect and store sensitive data in the ordinary course of business, including personal identification information of employees as well as proprietary business information and that of the Company's customers, suppliers, investors and other stakeholders. There is an increasing risk of a cyber-attack targeting the industry and any breach in the security or failure of Pembina's information technology could result in operational outages, delays, damage to assets or the environment, reputational harm, lost profits, lost data and other adverse outcomes for which Pembina could be held liable, all of which could adversely affect Pembina's reputation, business, operations or financial results. As a result of a cyber-attack or security breach, Pembina could also be liable under laws that protect the privacy of personal information or subject to regulatory penalties.

Political Uncertainty

Recent political and social events and decisions made in Canada, the U.S. and elsewhere, including changes to federal, provincial, state or municipal governments in Canada and the U.S., have, and can continue to create future uncertainty on global financial and economic markets. This uncertainty may impact the energy industry in Canada and may have an adverse effect on Pembina's business and financial results.

Risks Relating to Breach of Confidentiality

Pembina regularly enters into confidentiality agreements with third parties prior to the disclosure of any confidential information when discussing potential business relationships or other transactions. Breaches of confidentiality could put Pembina at competitive risk and may cause significant damage to its business. There is no assurance that, in the event of a breach of confidentiality, Pembina will be able to obtain equitable remedies from a court of competent jurisdiction in a timely manner, if at all, in order to prevent or mitigate any damage to its business that such a breach of confidentiality may cause.

Concentration of Assets in the Western Canadian Sedimentary Basin

The majority of Pembina's assets are concentrated in the WCSB, which leaves the company exposed to the economic conditions of that area. Pembina mitigates this risk through a diversity of business activities within the area and by owning and operating assets in the U.S.

Risks Related to Climate Change

Risks Relating to Changing Investor Sentiment in the Oil and Gas Industry

A number of factors, including the concerns of the effects of the use of fossil fuels on climate change, concerns of the impact of oil and gas operations on the environment, concerns of environmental damage relating to spills of petroleum products during transportation and concerns of Indigenous rights, have affected certain investors' sentiments towards investing in the oil and gas industry. As a result of these concerns, some institutional, retail and public investors have announced that they are no longer willing to fund or invest in oil and gas properties or companies and/or are reducing the amount of such investments over time. In addition, certain institutional investors are requesting that issuers develop and implement more robust social, environmental and governance policies and practices. Developing and implementing such policies and practices can involve significant costs and require a significant time commitment from Pembina's Board of Directors, management and employees. Failure to implement the policies and practices as requested by institutional investors may result in such investors reducing their investment in Pembina or not investing in Pembina at all. Any reduction in the investor base interested or willing to invest in the oil and gas industry and, more specifically, Pembina may result in limits on Pembina's ability to access capital, increases to the cost of capital, a downgrade in Pembina's credit ratings and outlooks, and a decrease in the price and liquidity of Pembina's securities even if Pembina's operating results, underlying asset values or prospects have not changed. Additionally, these factors, as well as other related factors, may cause a decrease in the value of an asset which may result in an impairment charge.

Energy Market Transition

Changing consumer preferences, new technologies, government regulation or other external factors may result in a rapid transition from fossil-based sources of energy, including energy derived from crude oil and natural gas, to renewable and other alternative sources of energy. This may lead to lower global demand for crude oil and natural gas and related commodities and, in turn, may lead to lower prices for crude oil, natural gas and NGL and related commodities. This could negatively impact the Company's producing customers and lead to less demand for Pembina's services, which could negatively impact the revenue the Company receives from, and the value of, its pipeline, facilities and other infrastructure assets.

In addition, Pembina may invest in opportunities related to an energy transition, which may involve investments in businesses, operations or assets relating to renewable or other alternative forms of energy. Such investments may involve certain risks and uncertainties in addition to those identified herein in respect of Pembina's existing businesses, operations and assets, including the obligation to comply with additional regulatory and other legal requirements associated with such businesses, operations or assets and the potential requirement for additional sources of capital to make, develop and/or maintain such investments and Pembina's ability to access such sources of capital. In the event Pembina were to complete such investments, there can be no guarantee that Pembina will realize a return on those investments or businesses, operations or assets that is similar to the returns it receives in respect of its existing business, operations and assets or that would offset any loss in revenue from, or the value of, the Company's existing pipeline, facilities and other infrastructure assets resulting from the impact of the potential energy transition. As a result, any such investment could reduce the level of cash available for dividends and to service obligations under Pembina's debt securities and other debt obligations and may also negatively impact the trading price of Pembina's securities.

Risks Relating to Weather Conditions

Weather conditions (including those associated with climate change) can affect the demand for and price of natural gas and NGL. As a result, changes in weather patterns may affect Pembina's gas processing business. For example, colder winter temperatures generally increase demand for natural gas and NGL used for heating which tends to result in increased throughput volume on the Alliance Pipeline and at the Company's gas processing facilities and higher prices in the processing and storage businesses. Pembina has capacity to handle any such increased volume of throughput and storage at its facilities to meet changes in seasonal demand; however, at any given time, processing and storage capacity is finite.

Weather conditions (including those associated with climate change) may impact Pembina's ability to complete capital projects, repairs or facility turnarounds on time, potentially resulting in delays and increased costs. Weather may also affect access to Pembina's facilities, and the operations and projects of Pembina's customers or shippers, which may impact the supply and/or demand for Pembina's services. With respect to construction activities, in areas where construction can be conducted in non-winter months, Pembina attempts to schedule its construction timetables so as to minimize potential delays due to cold winter weather.

Changes and/or extreme variability in weather patterns, as well as increases in the frequency of extreme weather events, such as floods, cyclones, hurricanes, droughts and forest fires, increases the potential risk for Pembina's assets, including operational disruptions, transportation difficulties, supply chain disruptions, employee safety incidents, and damage to assets, which may result in lower revenues, higher costs or project delays.

12. NON-GAAP MEASURES

Throughout this MD&A, Pembina has used the following terms that are not defined by GAAP but are used by management to evaluate the performance of Pembina and its businesses. Since non-GAAP measures do not have a standardized meaning prescribed by IFRS and are therefore unlikely to be comparable to similar measures presented by other companies, applicable securities regulations require that non-GAAP measures be clearly defined, qualified and reconciled to the most directly comparable GAAP measure. These non-GAAP measures are calculated and disclosed on a consistent basis from period to period.

The intent of non-GAAP measures is to provide additional useful information with respect to Pembina's operational and financial performance to investors and analysts, though the measures do not have any standardized meaning under IFRS. The measures should not, therefore, be considered in isolation or used in substitute for measures of performance prepared in accordance with IFRS. Other issuers may calculate these non-GAAP measures differently or use different non-GAAP measures.

Investors should be cautioned that net revenue, adjusted EBITDA, adjusted EBITDA per common share, adjusted cash flow from operating activities, cash flow from operating activities per common share, and adjusted cash flow from operating activities per common share should not be construed as alternatives to revenue, earnings, cash flow from operating activities, gross profit or other measures of financial results determined in accordance with GAAP as indicators of Pembina's performance.

Non-GAAP Proportionate Consolidation of Investments in Equity Accounted Investees Results

In accordance with IFRS, Pembina's jointly controlled investments are accounted for using equity accounting. Under equity accounting, the assets and liabilities of the investment are presented net in a single line item in the Consolidated Statement of Financial Position, "Investments in Equity Accounted Investees". Net earnings from investments in equity accounted investees are recognized in a single line item in the Consolidated Statement of Earnings and Comprehensive Income "Share of Profit from Equity Accounted Investees". Cash contributions and distributions from investments in equity accounted investees represent Pembina's share paid and received in the period to and from the investments in equity accounted investees.

To assist in understanding and evaluating the performance of these investments, Pembina is supplementing the IFRS disclosure with non-GAAP proportionate consolidation of Pembina's interest in the investments in equity accounted investees. Pembina's proportionate interest in equity accounted investees has been included in adjusted EBITDA.

Net Revenue

Net revenue is a non-GAAP financial measure which is defined as total revenue less cost of goods sold including product purchases. Management believes that net revenue provides investors with a single measure to indicate the margin on sales before non-product operating expenses that is comparable between periods. Management utilizes net revenue to compare consecutive results, in Marketing & New Ventures and Facilities, to aggregate revenue generated by each of the Company's divisions and to set comparable objectives.

3 Months Ended December 31										
<i>(\$ millions)</i>										
	Pipelines		Facilities		Marketing & New Ventures ⁽¹⁾		Corporate & Inter-segment Eliminations		Total ⁽¹⁾	
	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
Revenue	603	487	326	287	882	1,006	(131)	(112)	1,680	1,668
Cost of goods sold, including product purchases	—	—	4	2	809	903	(87)	(74)	726	831
Net revenue	603	487	322	285	73	103	(44)	(38)	954	837

⁽¹⁾ 2020 period and comparative 2019 period have been restated. See "Restatement of Revenue and Cost of Goods Sold" and Note 3 to the Consolidated Financial Statements.

12 Months Ended December 31								Corporate & Inter-segment Eliminations		Total⁽¹⁾	
<i>(\$ millions)</i>		Pipelines		Facilities		Marketing & New Ventures⁽¹⁾					
		2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
Revenue		2,251	1,787	1,231	1,121	2,956	3,946	(485)	(482)	5,953	6,372
Cost of goods sold, including product purchases		—	—	11	4	2,815	3,559	(317)	(311)	2,509	3,252
Net revenue		2,251	1,787	1,220	1,117	141	387	(168)	(171)	3,444	3,120

⁽¹⁾ 2020 period and comparative 2019 period have been restated. See "Restatement of Revenue and Cost of Goods Sold" and Note 3 to the Consolidated Financial Statements.

Adjusted Earnings Before Interest, Taxes, Depreciation and Amortization ("Adjusted EBITDA")

Adjusted EBITDA is a non-GAAP measure and is calculated as earnings for the year before net finance costs, income taxes, depreciation and amortization (included in operations and general and administrative expense) and unrealized gains or losses on commodity-related derivative financial instruments. The exclusion of unrealized gains or losses on commodity-related derivative financial instruments eliminates the non-cash impact of such gains or losses.

Adjusted EBITDA also includes adjustments to earnings for losses (gains) on disposal of assets, transaction costs incurred in respect of acquisitions, impairment charges or reversals in respect of goodwill, intangible assets, investments in equity accounted investees and property, plant and equipment, certain non-cash provisions and other amounts not reflective of ongoing operations. The adjustments made to earnings are also made to share of profit from investments in equity accounted investees. In addition, Pembina's proportionate share of results from investments in equity accounted investees with a preferred interest is presented in Adjusted EBITDA as a 50 percent common interest. These additional adjustments are made to exclude various non-cash and other items that are not reflective of ongoing operations.

Management believes that Adjusted EBITDA provides useful information to investors as it is an important indicator of an issuer's ability to generate liquidity through cash flow from operating activities and equity accounted investees. Management also believes that Adjusted EBITDA provides an indicator of operating income generated from capital invested, which includes operational finance income from lessor lease arrangements. Adjusted EBITDA is also used by investors and analysts for assessing financial performance and for the purpose of valuing an issuer, including calculating financial and leverage ratios. Management utilizes Adjusted EBITDA to set objectives and as a key performance indicator of the Company's success. Pembina presents Adjusted EBITDA as management believes it is a measure frequently used by analysts, investors and other stakeholders in evaluating the Company's financial performance.

3 Months Ended December 31								Corporate & Inter-segment Eliminations		Total	
<i>(\$ millions, except per share amounts)</i>		Pipelines		Facilities		Marketing & New Ventures					
		2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
Earnings (loss) before income tax ⁽¹⁾		(992)	31	143	163	(684)	94	(114)	(136)	(1,647)	152
Adjustments to share of profit from equity accounted investees and other ⁽¹⁾		60	68	32	37	28	2	—	—	120	107
Net finance costs ⁽¹⁾		7	1	8	5	(15)	(8)	59	60	59	58
Depreciation and amortization ⁽¹⁾		102	66	50	49	13	8	15	15	180	138
Unrealized loss on commodity-related derivative financial instruments		—	—	10	—	76	23	—	—	86	23
Canadian Emergency Wage Subsidy		—	—	—	—	—	—	(2)	—	(2)	—
(Gain) loss on disposal of assets		(1)	1	—	—	1	—	(1)	(2)	(1)	(1)
Transaction costs incurred in respect of acquisitions		—	—	—	—	—	—	2	10	2	10
Impairment charges and non-cash provisions		1,401	300	12	—	656	1	—	(1)	2,069	300
Adjusted EBITDA		577	467	255	254	75	120	(41)	(54)	866	787
Adjusted EBITDA per common share – basic <i>(dollars)</i>										1.57	1.52

⁽¹⁾ Comparative 2019 period has been restated. See "Voluntary Change in Accounting Policy" and Note 3 to the Consolidated Financial Statements.

12 Months Ended December 31								Corporate & Inter-segment Eliminations		Total	
<i>(\$ millions, except per share amounts)</i>		Pipelines		Facilities		Marketing & New Ventures					
		2020	2019	2020	2019	2020	2019				
Earnings (loss) before income tax ⁽¹⁾		128	1,043	642	623	(646)	376	(540)	(500)	(416)	1,542
Adjustments to share of profit from equity accounted investees and other ⁽¹⁾		240	261	135	145	43	21	—	—	418	427
Net finance costs ⁽¹⁾		31	6	24	21	(13)	(8)	378	270	420	289
Depreciation and amortization ⁽¹⁾		402	243	199	166	50	51	49	47	700	507
Unrealized (gain) loss on commodity-related derivative financial instruments		—	—	(4)	—	88	13	—	—	84	13
Arbitration award payment		—	—	—	—	—	(33)	—	—	—	(33)
Canadian Emergency Wage Subsidy		—	—	—	—	—	—	(39)	—	(39)	—
COVID-19 restructuring		3	—	2	—	1	—	4	—	10	—
Loss (gain) on disposal of assets		—	1	1	—	1	—	(2)	—	—	1
Transaction costs incurred in respect of acquisitions		—	—	—	—	—	—	18	12	18	12
Impairment charges and non-cash provisions		1,404	300	13	—	669	3	—	—	2,086	303
Adjusted EBITDA		2,208	1,854	1,012	955	193	423	(132)	(171)	3,281	3,061
Adjusted EBITDA per common share – basic <i>(dollars)</i>										5.97	5.97

⁽¹⁾ Comparative 2019 period has been restated. See "Voluntary Change in Accounting Policy" and Note 3 to the Consolidated Financial Statements.

Adjusted Cash Flow from Operating Activities, Cash Flow from Operating Activities per Common Share and Adjusted Cash Flow from Operating Activities per Common Share

Adjusted cash flow from operating activities is a non-GAAP measure which is defined as cash flow from operating activities adjusting for the change in non-cash operating working capital, adjusting for current tax and share-based payment expenses, and deducting preferred share dividends paid. Adjusted cash flow from operating activities deducts preferred share dividends paid because they are not attributable to common shareholders. The calculation has been modified to include current tax and share-based payment expense as it allows management to better assess the obligations discussed below. Management believes that adjusted cash flow from operating activities provides comparable information to investors for assessing financial performance during each reporting period. Management utilizes adjusted cash flow from operating activities to set objectives and as a key performance indicator of the Company's ability to meet interest obligations, dividend payments and other commitments. Per common share amounts are calculated by dividing cash flow from operating activities, or adjusted cash flow from operating activities, as applicable, by the weighted average number of common shares outstanding.

	3 Months Ended December 31		12 Months Ended December 31	
<i>(\$ millions, except per share amounts)</i>	2020	2019	2020	2019
Cash flow from operating activities	766	728	2,252	2,532
Cash flow from operating activities per common share – basic <i>(dollars)</i>	1.39	1.41	4.10	4.94
Add (deduct):				
Change in non-cash operating working capital	(75)	(99)	93	(106)
Current tax expense	(45)	(32)	(240)	(210)
Taxes paid, net of foreign exchange	7	23	296	141
Accrued share-based payments	(13)	(13)	(7)	(50)
Share-based payments	—	—	45	50
Preferred share dividends paid	(37)	(31)	(150)	(123)
Adjusted cash flow from operating activities	603	576	2,289	2,234
Adjusted cash flow from operating activities per common share – basic <i>(dollars)</i>	1.10	1.11	4.16	4.36

13. ABBREVIATIONS

The following is a list of abbreviations that may be used in this MD&A:

Other	
AECO	Alberta Energy Company benchmark price for natural gas
B.C.	British Columbia
GAAP	Canadian generally accepted accounting principles
IFRS	International Financial Reporting Standards
LNG	Liquefied natural gas
LPG	Liquefied petroleum gas
NGL	Natural gas liquids
U.S.	United States
WCSB	Western Canadian Sedimentary Basin
Deep cut	Ethane-plus capacity extraction gas processing capabilities
Shallow cut	Sweet gas processing with propane and/or condensate-plus extraction capabilities
Kinder Acquisition	Pembina's acquisition of Kinder Morgan Canada Limited and the U.S. portion of the Cochin Pipeline system on December 16, 2019
Volumes	Volumes for Pipelines and Facilities are revenue volumes, defined as physical volumes plus volumes recognized from take-or-pay commitments. Volumes for Marketing & New Ventures are marketed NGL volumes. Volumes are stated in mboe/d, with natural gas volumes converted to mboe/d from MMcf/d at a 6:1 ratio.

Measurement		Regulators & Acts	
bpd	barrels per day	ABCA	Business Corporations Act (Alberta)
mbbls	thousands of barrels	AER	Alberta Energy Regulator
mbpd	thousands of barrels per day	BCEAO	British Columbia Environmental Assessment Office
mmbpd	millions of barrels per day	BCOGC	British Columbia Oil and Gas Commission
mmbbls	millions of barrels	BCUC	British Columbia Utilities Commission
mboe/d	thousands of barrels of oil equivalent per day	CER	Canadian Energy Regulator
mmboe/d	millions of barrels of oil equivalent per day	FERC	United States Federal Energy Regulatory Commission
MMcf/d	millions of cubic feet per day	ICA	Interstate Commerce Act of 1887 (United States)
bcf/d	billions of cubic feet per day	NEB	National Energy Board
km	kilometer	NGA	Natural Gas Act of 1938 (United States)
		PHMSA	Pipeline and Hazardous Material Safety Administration

Investments in Equity Accounted Investees	
Pipelines:	
Alliance	50 percent interest in both Alliance Pipeline Limited Partnership and Alliance Pipeline L.P.
Ruby	50 percent convertible, cumulative preferred interest in the Ruby Pipeline Holding Company L.L.C.
Facilities:	
Veresen Midstream	45 percent interest in Veresen Midstream Limited Partnership, which owns assets in western Canada serving the Montney geological play in northwestern Alberta and northeastern B.C. including gas processing plants and gas gathering pipelines and compression
Fort Corp	50 percent interest in Fort Saskatchewan Ethylene Storage Limited Partnership and Fort Saskatchewan Ethylene Corporation
Marketing & New Ventures:	
Aux Sable	An ownership interest in Aux Sable (approximately 42.7 percent in Aux Sable U.S. and 50 percent in Aux Sable Canada), which includes an NGL fractionation facility and gas processing capacity near Chicago, Illinois and other natural gas and NGL processing facilities, logistics and distribution assets in the U.S. and Canada, as well as transportation contracts on Alliance
CKPC	50 percent interest in the PDH/PP Facility

Readers are referred to the AIF dated February 25, 2021 on www.sedar.com for additional descriptions.

14. FORWARD-LOOKING STATEMENTS & INFORMATION

In the interest of providing Pembina's security holders and potential investors with information regarding Pembina, including management's assessment of the Company's future plans and operations, certain statements contained in this MD&A constitute forward-looking statements or forward-looking information (collectively, "forward-looking statements"). Forward-looking statements are typically identified by words such as "anticipate", "continue", "estimate", "expect", "may", "will", "project", "should", "could", "would", "believe", "plan", "intend", "design", "target", "undertake", "view", "indicate", "maintain", "explore", "entail", "schedule", "objective", "strategy", "likely", "potential", "outlook", "aim", "purpose", "goal" and similar expressions suggesting future events or future performance.

By their nature, such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking statements. Pembina believes the expectations reflected in those forward-looking statements are reasonable but no assurance can be given that these expectations will prove to be correct and such forward-looking statements included in this MD&A should not be unduly relied upon. These forward-looking statements speak only as of the date of the MD&A.

In particular, this MD&A contains forward-looking statements pertaining to the following:

- the potential impacts of the COVID-19 pandemic on Pembina, and Pembina's response thereto;
- future levels and sustainability of cash dividends that Pembina intends to pay to its shareholders, the dividend payment date;
- planning, construction, locations, capital expenditure estimates, schedules, regulatory and environmental applications and anticipated approvals, expected capacity, incremental volumes, completion and in-service dates, rights, sources of product, activities, benefits and operations with respect to new construction of, or expansions on existing, pipelines, systems, gas services facilities, processing and fractionation facilities, terminalling, storage and hub facilities and other facilities or energy infrastructure, as well as the impact of Pembina's new projects on its future financial performance;
- pipeline, processing, fractionation and storage facility and system operations and throughput levels;
- treatment under governmental regulatory regimes in Canada and the U.S., including taxes and tax regimes, environmental and greenhouse gas regulations and related abandonment and reclamation obligations, and Indigenous, landowner and other stakeholder consultation requirements;
- Pembina's strategy and the development and expected timing of new business initiatives and growth opportunities and the impact thereof;
- increased throughput potential, processing capacity and fractionation capacity due to increased oil and gas industry activity and new connections and other initiatives on Pembina's pipelines and Pembina's facilities;
- expected future cash flows and the sufficiency thereof, financial strength, sources of and access to funds at attractive rates, future contractual obligations, future financing options, future renewal of credit facilities, availability of capital for capital projects and contributions to investments in equity accounted investees, operating obligations and dividends and the use of proceeds from financings;
- Pembina's capital structure, including the sufficiency of the amount of leverage employed therein and future actions that may be taken with respect thereto;
- Pembina's expectations regarding the creditworthiness of its counterparties;
- Pembina's expectations regarding involvement of partners on Jordan Cove;
- current ratings targets on Pembina's debt and the likelihood of a downgrade below investment-grade ratings;
- tolls and tariffs and processing, transportation, fractionation, storage and services commitments and contracts;
- operating risks (including the amount of future liabilities related to pipelines spills and other environmental incidents) and related insurance coverage and inspection and integrity programs;
- expectations regarding Pembina's NGL storage positions and its intentions with respect thereto;
- the expected demand for, and prices and inventory levels of, crude oil and other petroleum products, including NGL; and
- the impact of current market conditions on Pembina.

Various factors or assumptions are typically applied by Pembina in drawing conclusions or making the forecasts, projections, predictions or estimations set out in forward-looking statements based on information currently available to Pembina. These factors and assumptions include, but are not limited to:

- oil and gas industry exploration and development activity levels and the geographic region of such activity;
- the success of Pembina's operations;
- prevailing commodity prices, interest rates and exchange rates;
- the ability of Pembina to maintain current credit ratings;
- the availability of capital to fund future capital requirements relating to existing assets and projects;
- expectations regarding Pembina's pension plan;
- future operating costs including geotechnical and integrity costs being consistent with historical costs;
- oil and gas industry compensation levels remaining consistent;

- in respect of current developments, expansions, planned capital expenditures, completion dates and capacity expectations: that third parties will provide any necessary support; that any third-party projects relating to growth projects will be sanctioned and completed as expected; that any required commercial agreements can be reached; that all required regulatory and environmental approvals can be obtained on the necessary terms in a timely manner; that counterparties will comply with contracts in a timely manner; that there are no unforeseen events preventing the performance of contracts or the completion of the relevant facilities, and that there are no unforeseen material costs relating to the facilities which are not recoverable from customers;
- in respect of the stability of Pembina's dividends: prevailing commodity prices, margins and exchange rates; that Pembina's future results of operations will be consistent with past performance and management expectations in relation thereto; the continued availability of capital at attractive prices to fund future capital requirements relating to existing assets and projects, including but not limited to future capital expenditures relating to expansion, upgrades and maintenance shutdowns; the success of growth projects; future operating costs; that counterparties to material agreements will continue to perform in a timely manner; that there are no unforeseen events preventing the performance of contracts; and that there are no unforeseen material construction or other costs related to current growth projects or current operations;
- prevailing regulatory, tax and environmental laws and regulations and tax pool utilization; and
- the amount of future liabilities relating to lawsuits and environmental incidents and the availability of coverage under Pembina's insurance policies (including in respect of Pembina's business interruption insurance policy).

The actual results of Pembina could differ materially from those anticipated in these forward-looking statements as a result of the material risk factors set forth below:

- the regulatory environment and decisions and Indigenous and landowner consultation requirements;
- the impact of competitive entities and pricing;
- labour and material shortages;
- reliance on third parties to successfully operate and maintain certain assets;
- reliance on key relationships, joint venture partners, and agreements and the outcome of stakeholder engagement;
- the strength and operations of the oil and natural gas production industry and related commodity prices;
- non-performance or default by counterparties to agreements which Pembina or one or more of its subsidiaries has entered into in respect of its business;
- actions by joint venture partners or other partners which hold interests in certain of Pembina's assets;
- actions by governmental or regulatory authorities including changes in tax laws and treatment, changes in royalty rates, climate change initiatives or policies or increased environmental regulation;
- fluctuations in operating results;
- adverse general economic and market conditions in Canada, North America and elsewhere, including changes, or prolonged weakness, as applicable, in interest rates, foreign currency exchange rates, commodity prices, supply/demand trends and overall industry activity levels;
- risks relating to the current and potential adverse impacts of the COVID-19 pandemic;
- constraints on, or the unavailability of adequate infrastructure;
- the political environment, in North America and elsewhere, and public opinion;
- ability to access various sources of debt and equity capital;
- changes in credit ratings;
- technology and security risks;
- natural catastrophes; and
- the other factors discussed under "Risk Factors" herein and in Pembina's MD&A and AIF for the year ended December 31, 2020, which are available at www.sedar.com, www.sec.gov and through Pembina's website at www.pembina.com.

These factors should not be construed as exhaustive. Unless required by law, Pembina does not undertake any obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Any forward-looking statements contained herein are expressly qualified by this cautionary statement.

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

Pembina maintains internal control over financial reporting ("ICFR") which is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS, and include policies and procedures that: (a) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of Pembina; (b) are designed to provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRS, and that receipts and expenditures of Pembina are being made only in accordance with authorizations of management and directors of Pembina; and (c) are designed to provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of Pembina's assets that could have a material effect on Pembina's financial statements. Management is responsible for establishing and maintaining disclosure controls and procedures ("DC&P") and ICFR, as defined in National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings* and Rule 13a – 15(e) and 15(d) – 15(e) under the United States *Securities Exchange Act of 1934*.

Under the supervision and with the participation of the Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO"), management has designed 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. A material weakness is a deficiency, or a combination of deficiencies, in ICFR, such that there is a reasonable possibility that a material misstatement of the annual financial statements, or interim financial statements, will not be prevented or detected on a timely basis.

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, 2020 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.

As at December 31, 2020, the Company has 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 has restated revenue and cost of goods sold for the years ended December 31, 2020 and December 31, 2019 with no impact on earnings, cash flows or financial position. Refer to Note 3 in these consolidated financial statements for details of the restatement.

Remediation of Material Weakness

The control deficiency described above was detected by management during the third quarter of 2021 prior to the filing of Pembina's interim financial statements for the three and nine months ended September 30, 2021. The Company has prioritized the remediation of the material weakness described above and is working under the oversight of the Audit Committee to resolve the issue.

Specific actions to remediate this material weakness include the following:

- i. Revision of the process of identifying contracts to consult with internal experts to assist in the evaluation of technical accounting matters; and
- ii. Enhance contract analysis, including revision of the process used to assess accounting implications for complex contracts.

As the conclusion regarding the material weakness in ICFR was reached in late October 2021, Pembina has not had adequate time to implement and evaluate the controls and procedures described above, as limited complex and material transactions requiring an application of the foregoing remediation actions have occurred in this period. Pembina has, therefore, not had adequate time or opportunity to apply its proposed remediation actions to evidence the remediation of the material weakness described above and the material weakness will continue to be addressed throughout the remainder of 2021.

Changes in Internal Control over Financial Reporting

Pembina previously excluded business processes acquired through the Kinder Acquisition on December 16, 2019, from the Company's evaluation of internal control over financial reporting as permitted by applicable securities laws in Canada and the United States. Effective May 1, 2020, Pembina completed the integration of the Kinder Acquisition into its existing enterprise resource planning ("ERP") system. As a result of the ERP system integration, certain processes supporting Pembina's ICFR for the Kinder Acquisition changed in the second quarter of 2020. The Company completed the evaluation of ICFR of the Kinder Acquisition in the fourth quarter of 2020 and the overall controls and procedures we follow in establishing ICFR were not significantly impacted.

Other than the Kinder Acquisition and the material weakness described above, there has been no change in Pembina's ICFR that occurred during the year ended December 31, 2020 that has materially affected, or are reasonably likely to materially affect, Pembina's internal control over financial reporting.

"M. H. Dilger"

M. H. Dilger
President and Chief Executive Officer

"J. Scott Burrows"

J. Scott Burrows
Senior Vice President and Chief Financial Officer

November 18, 2021

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, 2020 and 2019, 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, 2020 and 2019, 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, 2020, 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 November 18, 2021 expressed an adverse opinion on the effectiveness of the Company's internal control over financial reporting.

Change in Accounting Principle

As discussed in Note 3 to the consolidated financial statements, the Company has elected to change its method of accounting for decommissioning obligations as at December 31, 2020 and included the presentation of the statement of financial position as of January 1, 2019.

Correction of a Misstatement

As discussed in Note 3 to the consolidated financial statements, the 2020 and 2019 financial statements have been restated to correct a misstatement.

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 11 to the consolidated financial statements, the goodwill balance as of December 31, 2020 was \$4,694 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 5 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 as a critical audit matter. A high degree of subjective auditor judgment was required to evaluate the significant revenue assumptions such as contracted volumes and rates, projected commodity volumes and pricing, and growth rates ("forecasted cash flow assumptions") and discount rates 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 segments.

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 rates used in the determination of the recoverable amounts. 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, including contracted volumes and rates, and projected commodity volumes, to actual results to assess the Company's ability to accurately forecast and to assess the long-term growth rates. 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 each operating segment using the operating segment's forecasted cash flow assumptions and discount rate, and comparing the result to the Company's calculated recoverable amounts
- evaluating the discount rates used in the valuation for each operating segment by comparing the inputs against publicly available market data for comparable entities and assessing the resulting discount rates
- evaluating the historical and forecasted cash flow multiples implied in the valuation for each operating segment by comparing them against publicly available historical and forecasted cash flow multiples for comparable entities.

The logo for KPMG LLP, featuring the letters 'KPMG' in a large, bold, sans-serif font, with 'LLP' in a smaller, similar font to the right.

Chartered Professional Accountants

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

Calgary, Canada
November 18, 2021

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, 2020, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, because of the effect of the material weakness, described below, on the achievement of the objectives of the control criteria, the Company has not maintained effective internal control over financial reporting as of December 31, 2020, 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, 2020 and 2019, 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 November 18, 2021 expressed an unqualified opinion on those consolidated financial statements.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. A material weakness related to controls over contract assessment in the Marketing business has been identified and included in management's assessment. 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. The material weakness was considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2020 consolidated financial statements, and this report does not affect our report 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.

The image shows a handwritten signature in dark ink that reads "KPMG LLP". The letters are written in a cursive, slightly slanted style. The "K" and "P" are large and prominent, while the "M" and "G" are smaller and more compact. The "LLP" is written in a simpler, more upright style at the end of the signature.

Chartered Professional Accountants

Calgary, Canada
November 18, 2021

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

As at (\$ millions)	December 31, 2020	December 31, 2019 (Restated Note 4)	January 1, 2019 (Restated Note 4)
Assets			
Current assets			
Cash and cash equivalents	81	129	157
Trade receivables and other (Note 8)	662	694	605
Inventory (Note 9)	221	126	198
Derivative financial instruments (Note 27)	25	40	54
	989	989	1,014
Non-current assets			
Property, plant and equipment (Note 10)	18,549	18,362	14,408
Intangible assets and goodwill (Note 11)	6,340	6,444	4,409
Investments in equity accounted investees (Note 12)	4,377	5,974	6,383
Right-of-use assets (Note 16)	651	691	427
Finance lease receivable (Note 16)	138	145	—
Deferred tax assets (Note 14)	322	—	—
Advances to related parties and other assets (Note 30)	50	150	170
	30,427	31,766	25,797
Total assets	31,416	32,755	26,811
Liabilities and equity			
Current liabilities			
Trade payables and other (Note 15)	780	1,005	796
Loans and borrowings (Note 17)	600	74	472
Dividends payable	115	110	97
Lease liabilities	99	112	64
Contract liabilities (Note 20)	62	39	37
Taxes payable	56	103	67
Derivative financial instruments (Note 27)	69	6	6
	1,781	1,449	1,539
Non-current liabilities			
Loans and borrowings (Note 17)	10,276	10,078	7,046
Lease liabilities	675	707	416
Decommissioning provision (Note 18)	348	337	158
Contract liabilities (Note 20)	230	192	131
Deferred tax liabilities (Note 14)	2,925	2,945	2,814
Other liabilities	166	179	198
	14,620	14,438	10,763
Total liabilities	16,401	15,887	12,302
Equity			
Attributable to shareholders	14,955	16,808	14,449
Attributable to non-controlling interest	60	60	60
Total equity	15,015	16,868	14,509
Total liabilities and equity	31,416	32,755	26,811

See accompanying notes to the consolidated financial statements

Approved on behalf of the Board of Directors:

"Gordon J. Kerr"
Gordon J. Kerr
Director

"Randall J. Findlay"
Randall J. Findlay
Director

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

For the years ended December 31	2020	2019
(\$ millions, except per share amounts)	(Restated Note 3)	(Restated Note 3)
Revenue (Note 20)	5,953	6,372
Cost of sales (Note 22)	3,883	4,325
Loss (gain) on commodity-related derivative financial instruments (Note 27)	30	(20)
Share of profit from equity accounted investees - operations (Note 12)	282	375
Impairment in share of profit from equity accounted investees (Note 12)	(314)	—
Gross profit	2,008	2,442
General and administrative	246	296
Other (income) expense	(18)	15
Impairment expense (Note 13)	1,776	300
Results from operating activities	4	1,831
Net finance costs (Note 21)	420	289
Earnings (loss) before income tax	(416)	1,542
Current tax expense (Note 14)	240	210
Deferred tax recovery (Note 14)	(340)	(175)
Income tax (recovery) expense (Note 14)	(100)	35
Earnings (loss)	(316)	1,507
Other comprehensive income (loss), net of tax (Note 26 & 27)		
Exchange loss on translation of foreign operations	(117)	(213)
Impact of hedging activities	31	—
Re-measurement of defined benefit liability (Note 24)	(10)	(6)
Total comprehensive income (loss) attributable to shareholders	(412)	1,288
Earnings (loss) attributable to common shareholders, net of preferred share dividends (Note 23)	(476)	1,376
Earnings (loss) per common share – basic (dollars) (Note 23)	(0.86)	2.69
Earnings (loss) per common share – diluted (dollars) (Note 23)	(0.86)	2.68
Weighted average number of common shares (millions)		
Basic (Note 23)	550	512
Diluted (Note 23)	550	514

See accompanying notes to the consolidated financial statements

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(\$ millions)	Attributable to Shareholders of the Company					Non-Controlling Interest	Total Equity (Restated Note 4)
	Common Share Capital	Preferred Share Capital	Deficit (Restated Note 4)	AOCI ⁽¹⁾	Total (Restated Note 4)		
December 31, 2019	15,539	2,956	(1,785)	98	16,808	60	16,868
Total comprehensive (loss) income							
Loss	—	—	(316)	—	(316)	—	(316)
Other comprehensive loss (Note 26)	—	—	—	(96)	(96)	—	(96)
Total comprehensive loss	—	—	(316)	(96)	(412)	—	(412)
Transactions with shareholders of the Company							
Part VI.1 tax on preferred shares (Note 19)	—	(10)	—	—	(10)	—	(10)
Share-based payment transactions (Note 19)	105	—	—	—	105	—	105
Dividends declared – common (Note 19)	—	—	(1,385)	—	(1,385)	—	(1,385)
Dividends declared – preferred (Note 19)	—	—	(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
Opening value January 1, 2019	13,662	2,423	(1,953)	317	14,449	60	14,509
Total comprehensive income							
Earnings	—	—	1,507	—	1,507	—	1,507
Other comprehensive income							
Exchange loss on translation of foreign operations	—	—	—	(213)	(213)	—	(213)
Remeasurements of defined benefit liability, net of tax (Note 24)	—	—	—	(6)	(6)	—	(6)
Total comprehensive income	—	—	1,507	(219)	1,288	—	1,288
Transactions with shareholders of the Company							
Common shares issued, net of issue costs (Note 19)	1,710	—	—	—	1,710	—	1,710
Preferred shares issued, net of issue costs (Note 19)	—	533	—	—	533	—	533
Share-based payment transactions (Note 19)	167	—	—	—	167	—	167
Dividends declared – common (Note 19)	—	—	(1,213)	—	(1,213)	—	(1,213)
Dividends declared – preferred (Note 19)	—	—	(126)	—	(126)	—	(126)
Total transactions with shareholders of the Company	1,877	533	(1,339)	—	1,071	—	1,071
December 31, 2019	15,539	2,956	(1,785)	98	16,808	60	16,868

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

See accompanying notes to the consolidated financial statements

CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended December 31 (\$ millions)	2020	2019 (Restated Note 3)
Cash provided by (used in)		
Operating activities		
Earnings (loss)	(316)	1,507
Adjustments for:		
Share of profit from equity accounted investees - operations (Note 12)	(282)	(375)
Impairment in share of profit from equity accounted investees (Note 12)	314	—
Distributions from equity accounted investees (Note 12)	459	575
Depreciation and amortization	700	507
Impairment expense (Note 13)	1,776	300
Unrealized loss on commodity-related derivative financial instruments (Note 27)	84	13
Net finance costs (Note 21)	420	289
Net interest paid (Note 21)	(383)	(269)
Income tax (recovery) expense (Note 14)	(100)	35
Taxes paid	(295)	(141)
Share-based compensation expense (Note 25)	28	66
Share-based compensation payment	(45)	(50)
Net change in contract liabilities	(1)	(30)
Other	(14)	(1)
Change in non-cash operating working capital	(93)	106
Cash flow from operating activities	2,252	2,532
Financing activities		
Bank borrowings and issuance of debt (Note 17)	1,581	2,153
Repayment of loans and borrowings	(2,421)	(1,866)
Repayment of lease liability	(94)	(68)
Issuance of medium-term notes (Note 17)	1,578	2,318
Issue costs and financing fees	(11)	(14)
Exercise of stock options	88	151
Dividends paid	(1,530)	(1,323)
Cash flow (used in) provided by financing activities	(809)	1,351
Investing activities		
Capital expenditures	(1,029)	(1,645)
Contributions to equity accounted investees (Note 12)	(202)	(206)
Acquisitions (Note 7)	—	(2,009)
Receipt of finance lease payments	9	—
Interest paid during construction (Note 21)	(46)	(42)
Advances to related parties	(32)	(63)
Changes in non-cash investing working capital and other	(183)	55
Cash flow used in investing activities	(1,483)	(3,910)
Change in cash and cash equivalents	(40)	(27)
Effect of movement in exchange rates on cash held	(8)	(1)
Cash and cash equivalents, beginning of period	129	157
Cash and cash equivalents, end of period	81	129

See accompanying notes to the 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 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, 2020.

Pembina owns an integrated system of pipelines that transport various hydrocarbon liquids and natural gas products produced primarily in western Canada. Pembina also owns gas gathering and processing facilities and an oil and natural gas liquids infrastructure, storage and logistics business; and is growing an 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

a. Basis of Measurement and Statement of Compliance

The consolidated financial statements have been prepared on a historical cost basis with some exceptions, as detailed in the accounting policies set out below in accordance with International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board ("IASB"). Except for the changes described in Note 3, these accounting policies have been applied consistently for all periods presented in these consolidated financial statements.

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

These consolidated financial statements were authorized for issue by Pembina's Board of Directors on November 18, 2021.

b. Functional and Presentation Currency

The consolidated financial statements are presented in Canadian dollars. All financial information presented in Canadian dollars has been disclosed in millions, except where noted. 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 to be a pandemic, many governments have imposed restrictions on individuals and businesses, resulting in a significant slowdown of the global economy. While these restrictions have been relaxed in certain jurisdictions, a resurgence of COVID-19 cases (including cases resulting from variants of the COVID-19 virus) in certain geographic areas and the risk that this could occur in other areas has caused governments in certain jurisdictions to sustain and, in some cases, re-impose restrictions. In addition, while vaccines are beginning to be distributed, there is ongoing uncertainty as to the timing, level of adoption, duration of efficacy and overall effectiveness of the vaccine, including against variants of the COVID-19 virus. As a result, there remains significant uncertainty as to the extent and duration of the global economic slowdown. This uncertainty has created volatility in asset and commodity prices, currency exchange rates and a marked decline in long-term interest rates. In addition, the resulting decrease in demand for crude oil has resulted in a decline in global crude oil prices. Management applied judgment and will continue to assess the situation in determining the impact of the significant uncertainties created by these events and conditions on the carrying amounts of assets and liabilities in the Consolidated Financial Statements.

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

Judgments

(i) Business Combinations

Business combinations are accounted for using the acquisition method of accounting. The determination of fair value often requires management to make judgments about future possible events. The assumptions with respect to lease identification, classification and measurement, the fair value of property plant and equipment, intangible assets, decommissioning provisions and contract liabilities acquired, as well as the determination of deferred taxes, generally require the most judgment.

(ii) Depreciation and Amortization

Depreciation and amortization of property, plant and equipment and intangible assets are based on management's judgment of the most appropriate method to reflect the pattern of an asset's future economic benefit expected to be consumed by Pembina. Among other factors, these judgments are based on industry standards and historical experience.

(iii) 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. In addition, management applies judgment to assign goodwill acquired as part of a business combination to the CGU or group of CGUs that is expected to benefit from the synergies of the business combination for purposes of impairment testing. 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.

(iv) Assessment of 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.

(v) Pattern of Revenue Recognition

The pattern of revenue recognition is impacted by management's judgments as to the nature of Pembina's performance obligations, the amount of consideration allocated to performance obligations that are not sold on a stand-alone basis, the valuation of material rights and the timing of when those performance obligations have been satisfied.

(vi) Leases

Management applies judgment to determine whether a contract is, or contains, a lease from both a lessee and lessor perspective. This assessment is based on whether the contract conveys a right to control the use of an identified asset for a period of time in exchange for consideration. Key judgments include whether a contract identifies an asset (or portion of an asset), whether the lessee obtains substantially all the economic benefits of the asset over the contract term and whether the lessee has the right to direct the asset's use. Judgment is also applied in determining the rate used to discount the lease payments.

Estimates

(i) Business Combinations

Estimates of future cash flows, forecast prices, interest rates, discount rates, cost, market values and useful lives are made in determining the fair value of assets acquired and liabilities assumed. Changes in any of the assumptions or estimates used in determining the fair value of acquired assets and liabilities could impact the amounts assigned to assets, liabilities, intangible assets, goodwill and deferred taxes in the purchase price equation. Future earnings can be affected as a result of changes in future depreciation and amortization, asset or goodwill impairment.

(ii) Provisions and Contingencies

Management uses judgment in determining the likelihood of realization of contingent assets and liabilities to determine the outcome of contingencies. Provisions recognized are based on management's best estimate of the timing, scope and amount of expected future cash outflows to settle the obligation.

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 and the timing of when these costs will occur.

(iii) 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. The assessment of future recoverability involves significant estimates to be made by management.

(iv) Depreciation and Amortization

Estimated useful lives of property, plant and equipment and intangible assets are based on management's assumptions and estimates of the physical useful lives of the assets, the economic lives, which may be associated with the reserve lives and commodity type of the production area, in addition to the estimated residual value.

(v) 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, 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.

(vi) Impairment of Financial Assets

The measurement of financial assets carried at amortized cost includes management's estimates regarding the expected credit losses that will be realized on these financial assets.

(vii) Revenue from Contracts with Customers

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. Management's 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 or services being provided, the market environment, and customer specific considerations.

(viii) Fair Value of Financial Instruments

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.

(ix) Employee Benefit Obligations

An actuarial valuation is prepared to measure Pembina's net employee benefit obligations using management's best estimates with respect to longevity, discount and inflation rates, compensation increases, market returns on plan assets, retirement and termination rates.

(x) Leases

In measuring its 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 exercise in determining the lease term.

3. CHANGES IN ACCOUNTING POLICIES & RESTATEMENT

Voluntary change in accounting policy

Pembina re-assessed its policy for the measurement of its decommissioning provision. Previously, Pembina's decommissioning provision was measured at the present value of the expected costs to settle the obligations using a risk-free interest rate based on the Government of Canada's benchmark long-term bond yield. Effective December 31, 2020, Pembina elected to change its policy for the measurement of its decommissioning obligations to utilize a credit-adjusted risk-free interest rate. As a result of this change in policy, Pembina's decommissioning provision is now measured using a risk-free interest rate based on the Government of Canada's benchmark long-term bond yield, adjusted for Pembina's credit risk. The use of a credit-adjusted risk-free rate results in reliable and more relevant information for the readers of the Company's Consolidated Financial Statements as this methodology results in a more accurate representation of the value at which such liabilities could be transferred to a third party, provides a better indication of the risk associated with such obligations, and increases the comparability of Pembina's financial statements to those of its peers.

Management has applied the change in accounting policy retrospectively. The Consolidated Financial Statements have been restated to reflect adjustments made as a result of this change in accounting policy. The following tables present the impacts of the change in accounting policy for decommissioning provisions to the statement of financial position, the statement of earnings (loss) and comprehensive income (loss), and the statement of cash flows, for each of the line items affected.

i. Impacts on the Consolidated Statements of Financial Position

As at (\$ millions)	December 31, 2020 Policy change	December 31, 2019 Policy change	January 1, 2019 Policy change
Assets			
Property, plant and equipment	(546)	(372)	(304)
Investments in equity accounted investees	24	20	15
Right-of-use assets	(51)	(39)	—
Advances to related parties and other assets	(7)	(7)	(7)
Total assets	(580)	(398)	(296)
Liabilities			
Decommissioning provision	(734)	(527)	(411)
Deferred tax liabilities	37	31	32
Total liabilities	(697)	(496)	(379)
Equity			
Deficit	117	98	83
Total equity attributable to Shareholders	117	98	83

A reconciliation for each of the line items affected in the restated Consolidated Statements of Financial Position is presented in Note 4.

ii. Reconciliation of the Consolidated Statements of Earnings (Loss) and Comprehensive Income (Loss)

For the years ended December 31 (\$ millions, except per share amounts)	2020	2019		
	Policy change	Previously reported	Policy change	Restated
Cost of sales	(18)	5,187	(4)	5,183
Share of profit from equity accounted investees	4	370	5	375
Gross profit	22	2,433	9	2,442
Net finance costs	(3)	294	(5)	289
Earnings (loss) before income tax	25	1,528	14	1,542
Deferred tax (recovery) expense	6	(174)	(1)	(175)
Earnings (loss) attributable to shareholders	19	1,492	15	1,507
Total comprehensive income (loss) attributable to shareholders	19	1,273	15	1,288
Earnings (loss) attributable to common shareholders, net of preferred share dividends	19	1,361	15	1,376
Earnings (loss) per common share - basic	0.04	2.66	0.03	2.69
Earnings (loss) per common share - diluted	0.04	2.65	0.03	2.68

iii. Reconciliation of the Consolidated Statement of Cash Flows

For the years ended December 31 (\$ millions)	2020	2019		
	Policy change	Previously reported	Policy change	Restated
Earnings (loss)	19	1,492	15	1,507
Share of profit from equity accounted investees	(4)	(370)	(5)	(375)
Adjustments for depreciation and amortization	(18)	511	(4)	507
Adjustments for net finance costs	(3)	294	(5)	289
Adjustments for income tax expense	6	36	(1)	35
Cash flow from operating activities	—	2,532	—	2,532

Restatement of revenue and cost of goods sold

During the third quarter of 2021, Pembina identified certain contract types that were recorded incorrectly within Marketing & New Ventures. Revenue and cost of goods sold associated with the contracts were recorded on a gross basis but should have been recorded on a net basis. As a result, Pembina restated its 2020 Consolidated Statements of Earnings (Loss) and Comprehensive Income (Loss) and the associated comparative periods by decreasing revenue and cost of goods sold, with no impact to earnings, cash flows or financial position.

i. Reconciliation of the Consolidated Statements of Earnings (Loss) and Comprehensive Income (Loss)

For the years ended December 31 (\$ millions, except per share amounts)	2020			2019		
	Previously reported	Restatement adjustment	Restated	Previously reported	Restatement adjustment	Restated
Revenue	6,202	(249)	5,953	7,230	(858)	6,372
Cost of sales	4,132	(249)	3,883	5,183	(858)	4,325
Gross profit	2,008	—	2,008	2,442	—	2,442
Earnings (loss) per common share - basic	0.86	—	0.86	2.69	—	2.69
Earnings (loss) per common share - diluted	0.86	—	0.86	2.68	—	2.68

4. CONSOLIDATED RESTATEMENT OF COMPARATIVE PERIOD STATEMENT OF FINANCIAL POSITION

The following table presents the combined impact on the Company's Consolidated Statement of Financial Position of the change in accounting policy for decommissioning provisions presented in Note 3, and the acquisition adjustments related to the finalization of the purchase price allocation presented in Note 7.

As at (\$ millions)	December 31, 2019				January 1, 2019			
	Previously reported	Accounting policy change adjustments (Note 3)	Acquisition adjustments (Note 7)	Restated	Previously reported	Accounting policy change adjustments (Note 3)	Restated	
Assets								
Trade receivables and other	692	—	2	694	605	—	605	
Property, plant and equipment	18,775	(372)	(41)	18,362	14,712	(304)	14,408	
Intangible assets and goodwill	6,429	—	15	6,444	4,409	—	4,409	
Investments in equity accounted investees	5,954	20	—	5,974	6,368	15	6,383	
Right-of-use assets	822	(39)	(92)	691	427	—	427	
Finance lease receivable	29	—	116	145	—	—	—	
Advances to related parties and other assets	157	(7)	—	150	177	(7)	170	
Total assets	33,153	(398)	—	32,755	27,107	(296)	26,811	
Liabilities								
Trade payables and other	1,013	—	(8)	1,005	796	—	796	
Decommissioning provision	864	(527)	—	337	569	(411)	158	
Deferred tax liabilities	2,906	31	8	2,945	2,782	32	2,814	
Total liabilities	16,383	(496)	—	15,887	12,681	(379)	12,302	
Equity								
Deficit	(1,883)	98	—	(1,785)	(2,036)	83	(1,953)	
Total equity	16,770	98	—	16,868	14,426	83	14,509	

5. SIGNIFICANT ACCOUNTING POLICIES

The accounting policies as set out below have been applied consistently to all periods presented in these Consolidated Financial Statements.

a. Basis of Consolidation

i) Business Combinations

Pembina measures goodwill as the fair value of the consideration transferred including the recognized amount of any non-controlling interest in the acquiree, less the fair value of the identifiable assets acquired and liabilities assumed, all measured as of the acquisition date. When the excess is negative, a bargain purchase gain is recognized immediately in earnings.

Non-controlling interests represent existing outside owned equity interests in an acquired 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.

Transaction costs, other than those associated with the issue of debt or equity securities, that Pembina incurs in connection with a business combination are expensed as incurred.

ii) 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.

Changes in Pembina's ownership interest in subsidiaries that do not result in a loss of control are accounted for as equity transactions. No adjustments are made to goodwill and no gain or loss is recognized in earnings.

iii) 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.

iv) 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.

v) 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.

b. 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.

c. 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. 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.

d. 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 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 as 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 the following: 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.

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.

e. Property, Plant and Equipment

i) Recognition and Measurement

Items of property, plant and equipment are measured initially at cost, unless they are acquired as part of a business combination in which case they are initially measured at fair value. 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. Depreciation commences once an asset is available for use.

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

f. Intangible Assets

i) Goodwill

Goodwill that arises upon acquisitions is included in intangible assets and goodwill. See Note 5(a)(i) for the policy on measurement of goodwill at initial recognition.

Subsequent Measurement

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, unless they are acquired as part of a business combination in which case they are initially measured at fair value. 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.

g. 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 recognized as a result of business combination are initially measured in the same manner, plus an adjustment to reflect favourable or unfavourable lease terms compared to market terms. 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. 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.

h. 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.

i. 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. 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.

j. 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. 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.

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.

Decommissioning obligations assumed in a business combination are initially recorded at fair value and remeasured using a credit-adjusted risk-free rate subsequent to acquisition. This remeasurement is added to or deducted from the cost of the related asset.

k. 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.

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 is 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, 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 legal title to the product is transferred to the customer. Certain commodity buy/sell arrangements where control of the product has not transferred to Pembina are recognized on a net basis.

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.

l. 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.

m. 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.

n. 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.

o. 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.

p. 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 Chief Executive Officer ("CEO"), 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.

q. New Standards and Interpretations Not Yet Adopted

The International Accounting Standards Board have issued a standard and amendments to existing standards that are effective for periods on or after January 1, 2021, 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.

- Interbank Offered Rates ("IBOR") Reform - Phase 2 (Amendments to IFRS 9, IFRS 7, and IFRS 16);
- Property, Plant and Equipment: Proceeds before Intended Use (Amendments to IAS 16);
- 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;
- Classification of Liabilities as Current or Non-Current (Amendments to IAS 1); and
- IFRS 17: *Insurance Contracts*.

6. 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.

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 these 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) Intangible Assets

The fair value of intangible assets acquired in a business combination is determined by an active market value or using the multi-period excess earnings method, whereby the subject asset is valued after deducting a fair return on all other assets that are part of creating the related cash flows.

iv) Derivatives

Fair value of derivatives are estimated by reference to independent monthly forward prices, interest rate yield curves, and currency rates at the reporting dates.

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.

v) 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) Decommissioning Provision

The fair value of decommissioning obligations assumed as part of a business combination are measured as the present value 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. The obligation is discounted using a risk adjusted rate corresponding to the underlying assets to which the obligation relates.

vii) 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 for 20 days ending at the reporting date of Pembina's shares.

7. ACQUISITION

On December 16, 2019, Pembina acquired all of the issued and outstanding shares of Kinder Morgan Canada Limited ("Kinder Morgan Canada") by way of a plan of arrangement and the U.S. portion of the Cochin Pipeline system (collectively, the "Kinder Acquisition") for total consideration of \$4.3 billion.

During the year ended December 31, 2020, Pembina continued to obtain and verify information required to determine the fair value of certain assets and liabilities and the amount of deferred income taxes arising on their recognition. Pembina adjusted the purchase price allocation to reflect updated assumptions for the identification and classification of leases and the verification of information supporting the valuation of certain assets, provisions and liabilities.

The purchase price allocation is based on assessed fair values, including adjustments determined during the year ended December 31, 2020 is as follows:

As at December 16, 2019 (\$ millions)	Previously Reported	Adjustments	Restated
Purchase price consideration			
Common shares	1,710	—	1,710
Cash (net of cash acquired)	2,009	—	2,009
Preferred shares	536	—	536
	4,255	—	4,255
Current assets	68	2	70
Property, plant and equipment	2,660	(41)	2,619
Intangible assets	1,254	—	1,254
Right-of-use assets	348	(92)	256
Finance lease receivable	—	116	116
Goodwill	809	15	824
Other assets	9	—	9
Current liabilities	(124)	8	(116)
Deferred tax liabilities	(281)	(8)	(289)
Decommissioning provision	(74)	—	(74)
Lease liability	(348)	—	(348)
Other liabilities	(66)	—	(66)
	4,255	—	4,255

8. TRADE RECEIVABLES AND OTHER

As at December 31 (\$ millions)	2020	2019 (Restated Note 4)
Trade receivables from customers	578	575
Other receivables	60	94
Prepayments	24	25
Total trade receivables and other	662	694

9. INVENTORY

As at December 31 (\$ millions)	2020	2019
Crude oil and NGL	127	42
Materials, supplies and other	94	84
Total inventory	221	126

10. PROPERTY, PLANT AND EQUIPMENT

(\$ millions)	Land and Land Rights	Pipelines	Facilities and Equipment	Cavern Storage and Other	Assets Under Construction ⁽¹⁾	Total
Cost						
Balance at December 31, 2018 (<i>Restated Note 4</i>)	340	7,174	6,807	1,478	939	16,738
Reclassification on adoption of IFRS 16	—	—	—	(44)	—	(44)
Additions and transfers	32	215	691	203	534	1,675
Acquisition (<i>Note 7</i>)	70	1,434	772	315	28	2,619
Change in decommissioning provision	—	(13)	98	(3)	—	82
Foreign exchange adjustments	(2)	(17)	(4)	—	(11)	(34)
Disposals and other	—	(3)	(31)	(12)	3	(43)
Balance at December 31, 2019 (<i>Restated Note 4</i>)	440	8,790	8,333	1,937	1,493	20,993
Additions and transfers	8	454	622	57	(40)	1,101
Impairment (<i>Note 13</i>)	(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
Depreciation						
Balance at December 31, 2018 (<i>Restated Note 4</i>)	12	1,223	827	250	—	2,312
Reclassification on adoption of IFRS 16	—	—	—	(26)	—	(26)
Depreciation	4	155	174	59	—	392
Disposals and other	—	(13)	(34)	—	—	(47)
Balance at December 31, 2019 (<i>Restated Note 4</i>)	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
Carrying amounts						
Balance at December 31, 2019 (<i>Restated Note 4</i>)	424	7,425	7,366	1,654	1,493	18,362
Balance at December 31, 2020	408	7,659	7,789	1,584	1,109	18,549
Assets subject to operating leases						
Balance at December 31, 2019 (<i>Restated Note 4</i>)	9	295	542	191	—	1,037
Balance at December 31, 2020	8	301	537	185	—	1,031

⁽¹⁾ Includes capitalized borrowing costs.

Property, Plant and Equipment Under Construction

For the year ended December 31, 2020, included in additions and transfers are capitalized borrowing costs related to the construction of new pipelines or facilities amounting to \$46 million (2019: \$42 million), with capitalization rates ranging from 3.63 percent to 3.91 percent (2019: 3.91 percent to 4.05 percent).

Depreciation

Pipeline assets are depreciated using the straight-line method over three to 75 years with the majority of assets depreciated over 40 years. 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.

11. INTANGIBLE ASSETS AND GOODWILL

(\$ millions)	Intangible Assets				Total Goodwill & Intangible Assets
	Goodwill	Purchase and Sale Contracts and Other	Customer Relationships	Total	
Cost					
Balance at December 31, 2018	3,878	227	639	866	4,744
Additions and other	—	13	—	13	13
Acquisition (Note 7)	824	—	1,254	1,254	2,078
Foreign exchange adjustments	(3)	—	(12)	(12)	(15)
Balance at December 31, 2019 (Restated Note 4)	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
Amortization					
Balance at December 31, 2018	—	164	171	335	335
Amortization	—	10	31	41	41
Balance at December 31, 2019	—	174	202	376	376
Amortization	—	6	102	108	108
Balance at December 31, 2020	—	180	304	484	484
Carrying amounts					
Balance at December 31, 2019 (Restated Note 4)	4,699	66	1,679	1,745	6,444
Balance at December 31, 2020	4,694	81	1,565	1,646	6,340

Intangible assets have a finite useful life and are amortized using the straight-line method over 7 to 40 years.

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

As at December 31		2019
(\$ millions)	2020	(Restated Note 4)
Pipelines	2,713	2,718
Facilities	541	541
Marketing & New Ventures	1,440	1,440
Total goodwill	4,694	4,699

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 (2019: 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:

2020 (Percent)	Operating Segments		
	Pipelines	Facilities	Marketing & New Ventures
Key assumptions used			
After-tax discount rate	5.9	5.9	10.1
Long-term growth rate	0.6	0.8	1.8
Incremental change in rates that would result in carrying value equal to recoverable amount			
Increase in after-tax discount rate	2.7	3.2	1.6

12. INVESTMENTS IN EQUITY ACCOUNTED INVESTEEES

Ownership Interest at December 31 <i>(percent)</i>			Share of Profit (Loss) from Equity Investments		Investment in Equity Accounted Investees at December 31	
			12 Months Ended December 31			
<i>(\$ millions)</i>	2020	2019	2020	2019 <i>(Restated Note 3)</i>	2020	2019 <i>(Restated Note 4)</i>
Alliance	50	50	105	153	2,498	2,638
Aux Sable	42.7 - 50	42.7 - 50	—	51	401	426
Ruby ⁽¹⁾	—	—	122	120	—	1,273
Veresen Midstream	45	45.3	50	49	1,374	1,350
CKPC ⁽²⁾	50	50	(314)	(1)	—	171
Other	50 - 75	50 - 75	5	3	104	116
			(32)	375	4,377	5,974

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

⁽²⁾ Includes \$314 million (2019: nil) of 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 \$98 million (2019: \$98 million) Goodwill, \$2.8 billion (2019: \$2.9 billion) in property, plant and equipment and intangibles and \$33 million in long-term debt (2019: \$42 million).

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, 2020 of \$51 million (2019: \$169 million loss) has been included in Other Comprehensive Income.

In December 2020, Pembina recognized impairment on its 50 percent convertible, cumulative preferred interest in Ruby and within its investment in CKPC. Refer to Note 13 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	
	2020	2019	2020	2019
Alliance	217	268	—	13
Aux Sable	19	84	3	4
Ruby	122	121	—	—
Veresen Midstream	97	96	69	73
CKPC	—	—	152	173
Other	4	6	—	—
Total	459	575	224	263

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 a minimum debt service coverage ratio requirement.

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 and 2019 contributions include the conversion of \$57 million in related party advances to CKPC into equity contributions.

Financing Activities

On December 31, 2020, CKPC provided notice to cancel its U.S. \$1.7 billion term facility and its U.S. \$150 million revolving credit facility. As a result, Pembina accelerated the recognition of the previously recorded financial guarantee liability.

On April 27, 2020, Ruby fully repaid its 364-day term loan. Concurrent to repayment, Ruby entered into a new amortizing term loan that matures on March 31, 2021. At December 31, 2020, U.S. \$32 million (U.S. \$16 million net to Pembina) remained outstanding.

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). Differences between the equity accounted investee's earning (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 (\$ millions)	2020	2019
Earnings and Comprehensive Income		
Revenue	840	965
Expenses	(296)	(262)
Depreciation and amortization	(141)	(108)
Finance costs and other ⁽¹⁾⁽²⁾	(61)	(58)
Earnings	342	537
Earnings attributable to Pembina	105	153

⁽¹⁾ Includes interest income of \$2 million (2019:\$4 million).

⁽²⁾ Includes interest expense of \$66 million (2019: \$81 million).

As at December 31 (\$ millions)	2020	2019
Statements of Financial Position		
Current assets ⁽¹⁾	122	132
Non-current assets	1,816	1,944
Current liabilities ⁽²⁾	206	21
Non-current liabilities ⁽³⁾	1,121	1,147

⁽¹⁾ Includes cash and cash equivalents of \$25 million (2019:\$29 million).

⁽²⁾ Includes trade, other payables and provisions of \$71 million (2019: \$77 million).

⁽³⁾ Includes trade, other payables and provisions of \$128 million (2019:\$106 million).

Aux Sable

For the years ended December 31 (\$ millions)	2020	2019
Earnings and Comprehensive Income		
Revenue	1,059	1,028
Expenses	(1,019)	(868)
Depreciation and amortization	(49)	(55)
Earnings (loss)	(9)	105
Earnings attributable to Pembina	—	51
As at December 31 (\$ millions)	2020	2019
Statements of Financial Position		
Current assets ⁽¹⁾	162	153
Non-current assets	757	816
Current liabilities ⁽²⁾	107	105
Non-current liabilities ⁽³⁾	155	148

⁽¹⁾ Includes cash and cash equivalents of \$50 million (2019: \$20 million).

⁽²⁾ Includes trade, other payables and provisions of \$103 million (2019: \$98 million).

⁽³⁾ Includes trade, other payables and provisions of \$5 million (2019: \$5 million).

Ruby

For the years ended December 31 (\$ millions)	2020	2019
Earnings and Comprehensive Income		
Revenue	432	453
Expenses	(29)	(19)
Depreciation and amortization	(143)	(142)
Impairment	(2,953)	—
Finance costs and other ⁽¹⁾	(130)	(117)
Earnings (loss)	(2,823)	175
Earnings attributable to Pembina	122	120
As at December 31 (\$ millions)	2020	2019
Statements of Financial Position		
Current assets ⁽¹⁾	50	93
Non-current assets	688	3,705
Current liabilities ⁽²⁾	77	177
Non-current liabilities ⁽³⁾	928	1,003

⁽¹⁾ Includes cash and cash equivalents of \$6 million (2019: \$38 million).

⁽²⁾ Includes trade, other payables and provisions of \$2 million (2019: \$3 million).

⁽³⁾ Includes trade, other payables and provisions of \$278 million (2019: \$223 million).

Veresen Midstream

For the years ended December 31 (\$ millions)	2020	2019
Earnings and Comprehensive Income		
Revenue	561	615
Expenses	(177)	(213)
Depreciation and amortization	(173)	(165)
Finance costs and other ⁽¹⁾	(84)	(111)
Earnings	127	126
Earnings attributable to Pembina	50	49

⁽¹⁾ Includes interest expense of \$80 million (2019: \$109 million).

As at December 31 (\$ millions)	2020	2019
Statements of Financial Position		
Current assets ⁽¹⁾	167	166
Non-current assets	4,658	4,501
Current liabilities ⁽²⁾	109	106
Non-current liabilities ⁽³⁾	2,681	2,593

⁽¹⁾ Includes cash and cash equivalents of nil (2019: \$3 million).

⁽²⁾ Includes trade, other payables and provisions of \$80 million (2019: \$106 million).

⁽³⁾ Includes trade, other payables and provisions of \$46 million (2019: \$43 million).

CKPC

For the years ended December 31 (\$ millions)	2020	2019
Earnings (Loss) and Comprehensive Income (Loss)		
Expenses	(4)	(4)
Impairment	(589)	—
Finance costs ⁽¹⁾	(33)	4
Earnings (loss)	(626)	—
Earnings (loss) attributable to Pembina	(314)	(1)

⁽¹⁾ Includes interest income of \$1 million (2019: \$1 million).

As at December 31 (\$ millions)	2020	2019
Statements of Financial Position		
Current assets ⁽¹⁾	83	246
Non-current assets	—	283
Current liabilities ⁽²⁾	99	188
Non-current liabilities ⁽³⁾	11	12

⁽¹⁾ Includes cash and cash equivalents of \$75 million (2019: \$118 million).

⁽²⁾ Includes trade, other payables and provisions of \$99 million (2019: \$76 million).

⁽³⁾ Includes trade, other payables and provisions of \$11 million (2019: nil).

Other

For the years ended December 31 <i>(\$ millions)</i>	2020	2019
Earnings and Comprehensive Income		
Revenue	51	52
Expenses	(16)	(16)
Depreciation and amortization	(16)	(16)
Finance costs and other ⁽¹⁾	(5)	(4)
Earnings	14	16
Earnings attributable to Pembina	5	3

⁽¹⁾ Includes interest expense of \$2 million (2019: \$3 million).

As at December 31 <i>(\$ millions)</i>	2020	2019
Statements of Financial Position		
Current assets ⁽¹⁾	6	8
Non-current assets	117	131
Current liabilities ⁽²⁾	25	28
Non-current liabilities ⁽³⁾	64	84

⁽¹⁾ Includes cash and cash equivalents of \$1 million (2019: \$1 million).

⁽²⁾ Includes trade, other payables and provisions of \$3 million (2019: \$4 million).

⁽³⁾ Includes trade, other payables and provisions of \$1 million (2019: \$1 million).

13. IMPAIRMENTS

The following table summarizes impairments recognized for the year ended December 31, 2020:

(\$ millions)	Property, Plant & Equipment (Note 10)	Equity Accounted Investees (Note 12)	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 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 PDH/PP 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 remains under a force majeure condition. 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).

14. INCOME TAXES

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

(\$ millions)	Balance at December 31, 2019 (Restated Note 4)	Recognized in Earnings (Loss)	Recognized in Other Comprehensive Income (Loss)	Acquisition	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	2,945	(340)	—	—	2	(4)	2,603

(\$ millions)	Balance at December 31, 2018 (Restated Note 3)	Recognized in Earnings (Loss)	Recognized in Other Comprehensive Income (Loss)	Acquisition	Equity	Other	Balance at December 31, 2019 (Restated Note 4)
Deferred income tax assets							
Derivative financial instruments	(18)	5	—	—	—	—	(13)
Employee benefits	9	(1)	1	—	—	—	9
Share-based payments	26	(2)	—	—	—	—	24
Provisions	46	16	—	17	—	—	79
Benefit of loss carryforwards	153	256	—	13	—	(22)	400
Other deductible temporary differences	67	(40)	—	28	(3)	—	52
Deferred income tax liabilities							
Property, plant and equipment	1,587	286	—	163	—	—	2,036
Intangible assets	118	(14)	—	159	—	—	263
Investments in equity accounted investees	1,263	(154)	—	—	—	—	1,109
Taxable limited partnership income deferral	122	(46)	—	25	—	—	101
Other taxable temporary differences	7	(13)	—	—	—	(7)	(13)
Total net deferred tax liabilities	2,814	(175)	(1)	289	3	15	2,945

Reconciliation of Effective Tax Rate

For the years ended December 31 (\$ millions, except as noted)	2020	2019 (Restated Note 3)
Earnings (loss) before income tax	(416)	1,542
Canadian statutory tax rate (percent)	24.6	26.7
Income tax at statutory rate	(102)	412
Tax rate changes and foreign rate differential	(5)	(349)
Changes in estimate and other	(5)	(35)
Permanent items	12	7
Income tax (recovery) expense	(100)	35

In 2019, the enactment of Alberta Bill 3 reduced corporate income tax rate from 12 percent to 8 percent over a four-year period which resulted in a deferred tax recovery of \$305 million. In the fourth quarter of 2020, the Alberta government enacted Bill 35 that accelerated the Alberta corporate income tax rate from 10 percent to 8 percent effective July 1, 2020.

Income Tax Expense

For the years ended December 31 (\$ millions)	2020	2019 (Restated Note 3)
Current tax expense	240	210
Deferred tax expense		
Origination and reversal of temporary differences	(485)	392
Tax rate changes on deferred tax balances	32	(345)
Decrease (increase) in tax loss carry forward	113	(222)
Total deferred tax (recovery)	(340)	(175)
Total income tax (recovery) expense	(100)	35

Deferred Tax Items Recovered Directly in Equity

For the years ended December 31 (\$ millions)	2020	2019
Share issue costs	(2)	(3)
Other comprehensive income (loss):		
Change in fair value of net investment hedges (Note 26)	(4)	—
Remeasurements of defined benefit liability (Note 24)	4	1
Deferred tax items recovered directly in equity	(2)	(2)

Pembina has temporary differences associated with its investments in subsidiaries. At December 31, 2020, Pembina has not recorded a deferred tax asset or liability for these temporary differences (2019: 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, 2020, Pembina had U.S. \$758 million (2019: U.S. \$1.1 billion) of U.S. tax losses that do not expire and \$43 million (2019: \$67 million) of Canadian tax losses that will expire after 2037. Pembina has determined that it is probable that future taxable profits will be sufficient to utilize these losses.

15. TRADE PAYABLES AND OTHER

As at December 31 (\$ millions)	2020	2019 (Restated Note 4)
Trade payables	434	717
Other payables & accrued liabilities	346	288
Total trade payables and other	780	1,005

16. 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 \$131 million for the year ended December 31, 2020 (2019: \$83 million).

Right-of-Use Assets

(\$ millions)	Terminals	Rail	Buildings	Land & Other	Total
Balance at January 1, 2019 (Restated Note 4)	—	221	127	79	427
Additions (Restated Note 3)	—	54	1	19	74
Acquisition (Note 7)	225	—	7	24	256
Amortization	—	(37)	(17)	(12)	(66)
Balance at December 31, 2019 (Restated Note 4)	225	238	118	110	691
Additions	—	24	22	—	46
Amortization	(12)	(41)	(19)	(14)	(86)
Balance at December 31, 2020	213	221	121	96	651

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 tanks and caverns. See Note 10 for carrying value of property, plant and equipment under operating leases. Assets under finance leases include office sub-leases and terminal assets.

Maturity of Lease Receivables

As at December 31 (\$ millions)	2020		2019 (Restated Note 4)	
	Operating Leases	Finance Leases	Operating Leases	Finance Leases
Less than one year	146	23	168	23
One to two years	142	23	150	24
Two to three years	139	22	145	23
Three to four years	121	22	139	22
Four to five years	109	22	124	22
More than five years	874	224	983	246
Total undiscounted lease receipts	1,531	336	1,709	360
Unearned finance income on lease receipts		(199)		(215)
Discounted unguaranteed residual value		8		7
Finance lease receivable		145		152
Less current portion ⁽¹⁾		(7)		(7)
Total non-current		138		145

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

17. LOANS AND BORROWINGS

This note provides information about the contractual terms of Pembina's interest-bearing loans and borrowings, which are measured at amortized cost.

Carrying Value, Terms and Conditions, and Debt Maturity Schedule

(\$ millions)	Authorized at December 31, 2020	Nominal Interest Rate	Year of Maturity	Carrying Value	
				December 31, 2020	December 31, 2019
Senior unsecured credit facilities ⁽¹⁾⁽³⁾⁽⁴⁾	4,138	1.61 ⁽²⁾	Various ⁽¹⁾	1,530	2,097
Senior unsecured notes series A	—	5.57	2020	—	74
Senior unsecured notes series C	—	5.58	2020	—	199
Senior unsecured medium-term notes series 1	250	4.89	2021	250	250
Senior unsecured medium-term notes series 2	450	3.77	2022	449	449
Senior unsecured medium-term notes series 3	450	4.75	2043	447	446
Senior unsecured medium-term notes series 4	600	4.81	2044	597	596
Senior unsecured medium-term notes series 5	450	3.54	2025	449	449
Senior unsecured medium-term notes series 6	500	4.24	2027	498	498
Senior unsecured medium-term notes series 7	600	3.71	2026	603	498
Senior unsecured medium-term notes series 8	650	2.99	2024	647	646
Senior unsecured medium-term notes series 9	550	4.74	2047	542	542
Senior unsecured medium-term notes series 10	650	4.02	2028	661	398
Senior unsecured medium-term notes series 11	800	4.75	2048	842	298
Senior unsecured medium-term notes series 12	650	3.62	2029	654	398
Senior unsecured medium-term notes series 13	700	4.54	2049	713	714
Senior unsecured medium-term notes series 14	600	2.56	2023	599	598
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	—
Senior unsecured medium-term notes series 3A	50	5.05	2022	51	52
Senior unsecured medium-term notes series 5A	350	3.43	2021	350	353
Total interest bearing liabilities				10,876	10,152
Less current portion				(600)	(74)
Total non-current				10,276	10,078

⁽¹⁾ Pembina's unsecured credit facilities include a \$2.5 billion revolving facility that matures in May 2024, a \$500 million non-revolving term loan that matures in August 2022, a \$800 million revolving facility that matures in April 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 2021, 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, 2020. 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, 2020 (December 31, 2019: U.S. \$454 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 27 for foreign exchange risk management.

On January 10, 2020, Pembina closed an offering of \$1.0 billion of senior unsecured medium-term notes. The offering was conducted in three tranches, consisting of \$250 million issued through a re-opening of Pembina's senior unsecured medium-term notes, series 10, having a fixed coupon of 4.02 percent per annum, payable semi-annually and maturing on March 27, 2028; \$500 million issued through a re-opening of Pembina's senior unsecured medium-term notes, series 11, having a fixed coupon of 4.75 percent per annum, payable semi-annually and maturing on March 26, 2048; and \$250 million issued through a re-opening of Pembina's senior unsecured medium-term notes, series 12, having a fixed coupon of 3.62 percent per annum, payable semi-annually and maturing on April 3, 2029.

On April 6, 2020, Pembina entered into an unsecured \$800 million revolving credit facility with certain existing lenders, which provided additional liquidity and flexibility in Pembina's capital structure in light of current market conditions. The unsecured revolving credit facility matures April 3, 2022. The other terms and conditions of the credit facility, including financial covenants, are substantially similar to Pembina's unsecured \$2.5 billion revolving credit facility.

On May 7, 2020, Pembina entered into an unsecured U.S. \$250 million non-revolving term loan with a global bank, which provided additional liquidity and flexibility in Pembina's capital structure in light of current market conditions. The term loan matures May 7, 2025. The other terms and conditions of the credit facility, including financial covenants, are substantially similar to Pembina's unsecured \$2.5 billion revolving credit facility.

On May 28, 2020, Pembina closed an offering of \$500 million of senior unsecured medium-term notes. The offering was conducted in two tranches, consisting of the issuance of \$400 million in senior unsecured medium-term notes, series 16, having a fixed coupon of 4.76 percent per annum, payable semi-annually, and maturing on May 28, 2050 and \$100 million issued through a re-opening of Pembina's senior unsecured medium-term notes, series 7, having a fixed coupon of 3.71 percent per annum, payable semi-annually and maturing on August 11, 2026.

On July 10, 2020, Pembina's \$200 million senior unsecured notes, series C, were fully repaid through an early redemption, of which notice was provided to holders on June 5, 2020. The senior unsecured notes, series C, were originally set to mature in September 2021.

Subsequent to year-end, on January 25, 2021, Pembina closed an offering of \$600 million of fixed-to-fixed rate subordinated notes, series 1 (the "Subordinated Notes, Series 1"). The Subordinated Notes, Series 1 have a fixed coupon of 4.80 percent per annum, payable semi-annually, and mature on January 25, 2081.

Subsequent to year-end, on March 25, 2021, Pembina cancelled its \$800 million revolving credit facility. No balance was outstanding on the cancellation date.

Subsequent to year-end, on April 30, 2021, Pembina extended the maturity dates of its revolving and operating credit facilities to June 2026 and May 2022, respectively.

For more information about Pembina's exposure to interest rate, foreign currency and liquidity risk, see Note 27 *Financial Instruments*.

18. 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 (2019: 3.3 percent to 4.7 percent) and an inflation rate of 1.8 percent (2019: 1.8 percent).

(\$ millions)	2020	2019 (Restated Note 4)
Balance at January 1 ⁽²⁾	340	162
Unwinding of discount rate	15	9
Change in rates	—	90
Acquisition (Note 7)	—	74
Additions	11	8
Change in cost estimates and other	(16)	(3)
Total	350	340
Less current portion ⁽¹⁾	(2)	(3)
Balance at December 31	348	337

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

⁽²⁾ January 1, 2019 opening balance includes \$4 million relating to the current portion of the liability previously classified as trade payables and other.

19. 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

	Number of Common Shares (millions)	Common Share Capital
<i>(\$ millions, except as noted)</i>		
Balance at December 31, 2018	508	13,662
Issued on Acquisition, net of issue costs (Note 7)	36	1,710
Share-based payment transactions	4	167
Balance at December 31, 2019	548	15,539
Share-based payment transactions	2	105
Balance at December 31, 2020	550	15,644

Preferred Share Capital

	Number of Preferred Shares (millions)	Preferred Share Capital
<i>(\$ millions, except as noted)</i>		
Balance at December 31, 2018	100	2,423
Class A, Series 23 Preferred shares issued on Acquisition, net of issue costs (Note 7)	12	293
Class A, Series 25 Preferred shares issued on Acquisition, net of issue costs (Note 7)	10	243
Part VI.1 tax	—	(3)
Balance at December 31, 2019	122	2,956
Part VI.1 tax	—	(10)
Balance at December 31, 2020	122	2,946

On March 1, 2019, none of the six million Cumulative Redeemable Rate Reset Class A Preferred Series 3 shares outstanding were converted into Cumulative Redeemable Floating Rate Class A Preferred Series 4 shares.

On March 31, 2019, none of the six million Cumulative Redeemable Rate Reset Class A Preferred Series 17 shares outstanding were converted into Cumulative Redeemable Floating Rate Class A Preferred Series 18 shares.

On June 3, 2019, none of the 10 million Cumulative Redeemable Rate Reset Class A Preferred Series 5 shares outstanding were converted into Cumulative Redeemable Floating Rate Class A Preferred Series 6 shares.

On December 2, 2019, none of the 10 million Cumulative Redeemable Rate Reset Class A Preferred Series 7 shares outstanding were converted into Cumulative Redeemable Floating Rate Class A Preferred Series 8 shares.

On December 16, 2019, in connection with the Kinder Acquisition, the outstanding preferred shares of Kinder Morgan Canada were exchanged for Series 23 and 25 Class A preferred shares with similar terms and conditions as the shares previously issued by Kinder Morgan Canada. Dividends on the Series 23 and 25 Class A preferred shares will continue to be paid on the 15th of February, May, August and November in each year, if, as and when declared by the Board of Directors.

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.

Subsequent to year end, on January 25, 2021 in conjunction 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.

Subsequent to year end, 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 for a redemption price equal to \$25.00 per Series 11 Class A Preferred Share.

Subsequent to year end, 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 for a redemption price equal to \$25.00 per Series 13 Class A Preferred Share.

Dividends

The following dividends were declared by Pembina:

For the years ended December 31 <i>(\$ millions)</i>	2020	2019
Common shares		
\$2.52 per common share (2019: \$2.36)	1,385	1,213
Preferred shares		
\$1.23 per Series 1 preferred share (2019: \$1.23)	12	12
\$1.12 per Series 3 preferred share (2019: \$1.13)	7	7
\$1.14 per Series 5 preferred share (2019: \$1.19)	11	12
\$1.10 per Series 7 preferred share (2019: \$1.12)	11	11
\$1.18 per Series 9 preferred share (2019: \$1.19)	11	11
\$1.44 per Series 11 preferred share (2019: \$1.44)	10	10
\$1.44 per Series 13 preferred share (2019: \$1.44)	14	14
\$1.12 per Series 15 preferred share (2019: \$1.12)	9	9
\$1.21 per Series 17 preferred share (2019: \$1.22)	7	7
\$1.21 per Series 19 preferred share (2019: \$1.25)	10	10
\$1.23 per Series 21 preferred share (2019: \$1.23)	20	20
\$1.31 per Series 23 preferred share (2019: \$0.16)	16	2
\$1.30 per Series 25 preferred share (2019: \$0.16)	13	1
	151	126

On January 6, 2021, Pembina announced that its Board of Directors had declared a dividend of \$0.21 per common share in the total amount of \$115 million, payable on February 12, 2021 to shareholders of record on January 25, 2021.

On February 3, 2021, Pembina announced that its Board of Directors had declared a dividend of \$0.21 per common share in the total amount of \$115 million, payable on March 15, 2021 to shareholders of record on February 25, 2021.

Pembina's Board of Directors also declared quarterly dividends for Pembina's preferred shares on January 6, 2021 as outlined in the following table:

Series	Record Date	Payable Date	Per Share Amount	Dividend Amount (\$ millions)
Series 1	February 1, 2021	March 1, 2021	\$0.306625	3
Series 3	February 1, 2021	March 1, 2021	\$0.279875	2
Series 5	February 1, 2021	March 1, 2021	\$0.285813	3
Series 7	February 1, 2021	March 1, 2021	\$0.273750	3
Series 9	February 1, 2021	March 1, 2021	\$0.296875	3
Series 11	February 1, 2021	March 1, 2021	\$0.359375	2
Series 13	February 1, 2021	March 1, 2021	\$0.359375	4
Series 15	March 15, 2021	March 31, 2021	\$0.279000	2
Series 17	March 15, 2021	March 31, 2021	\$0.301313	2
Series 19	March 15, 2021	March 31, 2021	\$0.292750	2
Series 21	February 1, 2021	March 1, 2021	\$0.306250	5
Series 23	February 1, 2021	February 16, 2021	\$0.328125	4
Series 25	February 1, 2021	February 16, 2021	\$0.325000	3
				38

20. 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)	2020				2019			
	Pipelines	Facilities	Marketing & New Ventures	Total	Pipelines	Facilities	Marketing & New Ventures	Total
Take-or-pay ⁽¹⁾	1,664	740	—	2,404	1,200	625	—	1,825
Fee-for-service ⁽¹⁾	295	117	—	412	387	117	—	504
Product sales ⁽²⁾⁽³⁾	—	—	2,956	2,956	—	5	3,946	3,951
Revenue from contracts with customers	1,959	857	2,956	5,772	1,587	747	3,946	6,280
Operational finance lease income	15	—	—	15	—	—	—	—
Fixed operating lease income	131	35	—	166	63	29	—	92
Total external revenue	2,105	892	2,956	5,953	1,650	776	3,946	6,372

⁽¹⁾ Revenue recognized over time.

⁽²⁾ Revenue recognized at a point in time.

⁽³⁾ 2020 period and comparative 2019 period have been restated. See Note 3 to the Consolidated Financial Statements.

b. Contract Liabilities

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

For the years ended December 31 (\$ millions)	2020			2019		
	Take-or-Pay	Other Contract Liabilities	Total Contract Liabilities	Take-or-Pay	Other Contract Liabilities	Total Contract Liabilities
Opening balance	8	223	231	9	159	168
Additions (net in the period)	3	117	120	4	35	39
Acquisition (Note 7)	—	—	—	—	77	77
Revenue recognized from contract liabilities ⁽¹⁾	(8)	(51)	(59)	(5)	(48)	(53)
Closing balance	3	289	292	8	223	231
Less current portion ⁽²⁾	(3)	(59)	(62)	(8)	(31)	(39)
Ending balance	—	230	230	—	192	192

⁽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, 2020, 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 \$8.5 billion (2019: \$9.3 billion). Over the next five years, this remaining performance obligation will be recognized annually ranging from \$1.1 billion (2019: \$1.1 billion) declining to \$969 million (2019: \$983 million). Subsequently, up to 2039 (2019: 2039), Pembina will recognize from \$870 million (2019: \$977 million) to \$22 million (2019: \$13 million) per year.

In preparing the above figures, Pembina has taken the practical expedient to exclude contracts that are being accounted for using the practical expedient to recognize revenue in an amount equal to Pembina's right to invoice, as well as 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.

21. NET FINANCE COSTS

For the years ended December 31 <i>(\$ millions)</i>	2020	2019 <i>(Restated Note 3)</i>
Interest expense on financial liabilities measured at amortized cost:		
Loans and borrowings	362	291
Leases	39	17
Unwinding of discount rate	15	8
Gain in fair value of non-commodity-related derivative financial instruments	(5)	(4)
Foreign exchange losses (gains) and other	9	(23)
Net finance costs	420	289

Net interest paid of \$429 million (2019: \$311 million) includes interest paid during construction and capitalized of \$46 million (2019: \$42 million).

22. 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 that provide Pembina's customers with natural gas and NGL services that are highly integrated with Pembina's other businesses and 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 Chief Executive Officer, 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, 2020 (Restated Note 3) (\$ millions)					
	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	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

For the year ended December 31, 2019 (Restated Note 3) (\$ millions)					
	Pipelines ⁽¹⁾	Facilities	Marketing & New Ventures ⁽²⁾	Corporate & Inter-segment Eliminations	Total
Revenue from external customers	1,650	776	3,946	—	6,372
Inter-segment revenue	137	345	—	(482)	—
Total revenue ⁽³⁾	1,787	1,121	3,946	(482)	6,372
Operating expenses ⁽⁴⁾	436	344	—	(178)	602
Cost of goods sold, including product purchases	—	4	3,559	(311)	3,252
Depreciation and amortization included in operations	243	166	51	11	471
Cost of sales	679	514	3,610	(478)	4,325
Realized gain on commodity-related derivative financial instruments	—	—	(33)	—	(33)
Share of profit from equity accounted investees	274	51	50	—	375
Unrealized loss on commodity-related derivative financial instruments	—	—	13	—	13
Gross profit (loss)	1,382	658	406	(4)	2,442
Depreciation included in general and administrative	—	—	—	36	36
Other general and administrative ⁽⁴⁾	30	14	35	181	260
Other expense	3	—	3	9	15
Impairment expense	300	—	—	—	300
Reportable segment results from operating activities	1,049	644	368	(230)	1,831
Net finance costs (income)	6	21	(8)	270	289
Reportable segment earnings (loss) before tax	1,043	623	376	(500)	1,542
Capital expenditures	892	569	157	27	1,645
Contributions to equity accounted investees	13	73	177	—	263

⁽¹⁾ Pipelines transportation revenue includes \$228 million (2019: \$33 million) associated with U.S. pipeline revenue.

⁽²⁾ Marketing & New Ventures includes revenue of \$143 million (2019: \$182 million) associated with U.S. midstream sales.

⁽³⁾ During 2020, no one customer accounted for 10 percent or more of total revenues reported throughout all segments. During 2019, one customer accounted for 10 percent or more of total revenues with \$718 million reported throughout all segments.

⁽⁴⁾ Pembina incurred \$370 million (2019: \$339 million) of employee costs, of which \$244 million (2019: \$182 million) was recorded in operating expenses and \$126 million (2019: \$157 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 (\$ millions)		2019 (Restated Note 4)
	2020	
Canada	26,504	26,222
United States	3,601	5,543
Total non-current assets⁽¹⁾	30,105	31,765

⁽¹⁾ Excludes deferred income tax assets.

23. EARNINGS (LOSS) PER COMMON SHARE

Basic Earnings (Loss) Per Common Share

The calculation of basic loss per common share at December 31, 2020 was based on the loss attributable to common shareholders of \$476 million (2019: \$1.4 billion⁽¹⁾ earnings) and a weighted average number of common shares outstanding of 550 million (2019: 512 million).

Diluted Earnings (Loss) Per common Share

The calculation of diluted loss per common share at December 31, 2020 was based on loss attributable to common shareholders of \$476 million (2019: \$1.4 billion⁽¹⁾ earnings), and weighted average number of common shares outstanding after adjustment for the effects of all dilutive potential common shares of 550 million (2019: 514 million).

Earnings (Loss) Attributable to Common Shareholders

For the years ended December 31 (\$ millions)	2020	2019 (Restated Note 3)
Earnings (loss)	(316)	1,507
Dividends on preferred shares	(148)	(123)
Cumulative dividends on preferred shares, not yet declared	(12)	(8)
Basic and diluted earnings (loss) attributable to common shareholders	(476)	1,376

Weighted Average Number of Common Shares

(In millions of shares, except as noted)	2020	2019 (Restated Note 3)
Issued common shares at January 1	548	508
Effect of shares issued on Acquisition	—	1
Effect of shares issued on exercise of options	2	3
Basic weighted average number of common shares at December 31	550	512
Dilutive effect of share options on issue ⁽¹⁾	—	2
Diluted weighted average number of common shares at December 31	550	514
Basic earnings (loss) per common share (dollars)	(0.86)	2.69
Diluted earnings (loss) per common share (dollars)	(0.86)	2.68

⁽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, 2019 was based on quoted market prices for the period during which the options were outstanding.

For the year ended December 31, 2020, 277 thousand (2019: nil) stock options were excluded from the calculation of diluted earnings (loss) per common share as the impact of these options are anti-dilutive.

24. PENSION PLAN

As at December 31 <i>(\$ millions)</i>	2020	2019
Registered defined benefit net obligation	26	19
Supplemental defined benefit net obligation	18	16
Net employee benefit obligations	44	35

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 \$12 million in expense for the defined contribution plan during the year (2019: \$11 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, 2019. 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>	2020		2019	
	Registered Plans	Supplemental Plan	Registered Plan	Supplemental Plan
Present value of unfunded obligations	—	18	—	16
Present value of funded obligations	278	—	250	—
Total present value of obligations	278	18	250	16
Fair value of plan assets	252	—	231	—
Recognized liability for defined benefit obligations	(26)	(18)	(19)	(16)

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, 2020 (2019: \$20 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, 2020 (December 31, 2019: nil).

Registered Defined Benefit Pension Plan Assets Comprise

As at December 31 <i>(Percent)</i>	2020	2019
Equity securities	63	62
Debt	37	38
	100	100

Movement in the Present Value of the Defined Benefit Pension Obligation

(\$ millions)	2020		2019	
	Registered Plans	Supplemental Plan	Registered Plan	Supplemental Plan
Defined benefits obligations at January 1	250	16	212	12
Benefits paid by the plan	(28)	(2)	(12)	—
Current service costs	18	1	15	1
Interest expense	8	1	8	—
Actuarial losses in other comprehensive income	30	2	27	3
Defined benefit obligations at December 31	278	18	250	16

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

(\$ millions)	2020	2019
Fair value of plan assets at January 1	231	193
Contributions paid into the plan	23	20
Benefits paid by the plan	(28)	(12)
Return on plan assets	18	22
Interest income	8	8
Fair value of registered plan assets at December 31	252	231

Expense Recognition in Earnings (Loss)

For the years ended December 31	2020	2019
(\$ millions)		
Registered Plan		
Current service costs	19	15
Interest on obligation	9	8
Interest on plan assets	(8)	(8)
	20	15

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

For the years ended December 31	2020	2019
(\$ millions)		
Registered Plan		
Operating expenses	10	7
General and administrative expense	10	8
	20	15

Expense recognized for the Supplemental Plan was less than \$2 million for each of the years ended December 31, 2020 and 2019.

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

(\$ millions)	2020			2019		
	Registered Plans	Supplemental Plan	Total	Registered Plan	Supplemental Plan	Total
Balance at January 1	(33)	(2)	(35)	(28)	(1)	(29)
Remeasurements:						
Financial assumptions	(13)	(1)	(14)	(21)	(1)	(22)
Experience adjustments	(10)	(1)	(11)	—	—	—
Return on plan assets excluding interest income	15	—	15	16	—	16
Recognized loss during the period after tax	(8)	(2)	(10)	(5)	(1)	(6)
Balance at December 31	(41)	(4)	(45)	(33)	(2)	(35)

Principal actuarial assumptions used:

As at December 31 <i>(weighted average percent)</i>	2020	2019
Discount rate	2.6	3.1
Future pension earning increases	4.0	4.0

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

As at December 31 <i>(years)</i>	2020	2019
Longevity at age 65 for current pensioners		
Males	21.9	21.8
Females	24.3	24.2
Longevity at age 65 for current member aged 45		
Males	22.9	22.8
Females	25.2	25.1

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 2.6 percent by 100 basis points at December 31, 2020 is considered reasonably possible in the next financial year. An increase by 100 basis points would result in a \$40 million addition to the obligation whereas, a decrease would lead to a \$51 million reduction to the obligation.

Pembina expects to contribute \$23 million to the defined benefit plans in 2021.

25. SHARE-BASED PAYMENTS

At December 31, 2020, 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 non-officers. 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.

Long-Term Share Unit Award Incentive Plan⁽¹⁾

Grant date RSUs, PSUs and DSUs to Officers, Non-Officers⁽²⁾ and Directors <i>(thousands of units, except as noted)</i>	PSUs⁽³⁾	RSUs⁽³⁾	DSUs	Total
January 1, 2019	475	460	36	971
January 1, 2020	469	487	31	987

⁽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⁾ Non-Officers defined as senior selected positions within Pembina.

⁽³⁾ 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. 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:

<i>(thousands of options, except as noted)</i>	Number of Options	Weighted Average Exercise Price (dollars)
Outstanding at December 31, 2018	17,928	\$42.12
Granted	5,470	\$48.27
Exercised	(3,979)	\$37.95
Forfeited	(655)	\$45.29
Expired	(180)	\$48.98
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

As of December 31, 2020, the following options are outstanding:

<i>(thousands of options, except as noted)</i>	Number Outstanding at December 31, 2020	Options Exercisable	Weighted Average Remaining Life
Exercise Price (dollars)			
\$26.83 – \$36.32	4,451	681	6.0
\$36.33 – \$43.06	4,349	3,813	3.3
\$43.07 – \$45.29	4,362	1,138	5.0
\$45.30 – \$48.08	3,402	2,039	4.9
\$48.09 – \$52.01	5,212	2,800	3.9
Total	21,776	10,471	4.6

Options are exercised regularly throughout the year. Therefore, the weighted average share price during the year of \$49.79 (2019: \$48.87) 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)	2020	2019
Weighted average		
Fair value at grant date	3.82	4.12
Expected volatility (percent)	36.61	18.7
Expected option life (years)	3.67	3.67
Expected annual dividends per option	2.52	2.36
Expected forfeitures (percent)	6.9	6.6
Risk-free interest rate (based on government bonds)(percent)	0.5	1.6

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, 2020 of \$32.53 (2019: \$47.52). Actual payment may differ from amount valued based on market price and company performance.

Employee Expenses

For the years ended December 31 ((\$ millions)	2020	2019
Share option plan, equity settled	17	16
Long-term share unit award incentive plan	11	50
Share-based compensation expense	28	66
Total carrying amount of liabilities for cash settled arrangements	60	95
Total intrinsic value of liability for vested benefits	39	57

26. ACCUMULATED OTHER COMPREHENSIVE INCOME

(\$ millions)	Currency Translation Reserve	Cash Flow Hedge Reserve	Pension and other Post-Retirement Benefit Plan Adjustments ⁽²⁾	Total
Balance at December 31, 2018	347	—	(30)	317
Other comprehensive loss before hedging activities	(213)	—	(6)	(219)
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

⁽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 27).

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

27. 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 establishment of counterparty exposure limits is governed by a Board of Directors designated counterparty exposure limit matrix which represents the maximum dollar amounts of counterparty exposure by debt rating that can be approved for a counterparty. 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, 2020 letters of credit totaling \$130 million (December 31, 2019: \$90 million) were held primarily in respect of customer trade receivables.

Pembina typically has collected its trade receivables in full and at December 31, 2020, 94 percent were current (2019: 95 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:

(\$ millions)	2020	2019
31-60 days past due	3	1
Greater than 61 days past due	8	7
	11	8

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, 2020 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.

As a result of the assessment leading to the impairment of Pembina's preferred interest in Ruby, Pembina further impaired its remaining related party advance of \$139 million to Ruby. See Note 13 for additional details.

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.

December 31, 2020 (\$ 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	780	780	780	—	—	—
Loans and borrowings	10,876	16,275	1,058	2,262	2,708	10,247
Dividends payable	115	115	115	—	—	—
Derivative financial liabilities	69	69	69	—	—	—
Lease liabilities	774	1,064	131	217	174	542

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, 2020 (\$ millions)	15 Percent Price Increase	15 Percent Price Decrease
Crude oil	(30)	28
Natural gas	9	(9)
NGL ⁽²⁾	(32)	32

⁽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, 2020 (\$ millions)	\$0.10 Rate Increase	\$0.10 Rate Decrease
U.S. to Canadian dollars	(26)	26

⁽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 London Interbank Offered Rate ("LIBOR"). This rate is expected to be phased out following 2021 and will likely be replaced by a secured overnight financing rate. LIBOR will cease to be published at the end of 2023. 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 (\$ millions)	2020	2019
Carrying amounts of financial liability		
Fixed rate instruments ⁽¹⁾	10,120	8,874
Variable rate instruments ⁽²⁾	1,530	2,097
	11,650	10,971

⁽¹⁾ Includes lease liabilities.

⁽²⁾ At December 31, 2020, 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, 2019: nil).

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, 2020 (\$ millions)	100 Basis Point Increase	100 Basis Point Decrease
Variable rate instruments	(13)	13

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 and trade payables and other 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)	2020				2019			
	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⁾	53	—	53	—	48	—	48	—
Financial liabilities carried at fair value								
Derivative financial instruments ⁽³⁾	69	—	69	—	9	—	9	—
Financial liabilities carried at amortized cost								
Loans and borrowings ⁽²⁾	10,876	—	11,902	—	10,152	—	10,729	—

⁽¹⁾ The basis for determining fair value is disclosed in Note 6.

⁽²⁾ Carrying value of current and non-current balances.

⁽³⁾ At December 31, 2020 all derivative financial instruments are carried at fair value through earnings.

Pembina's financial instruments carried at fair value are valued using Level 2 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.

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 (percent)	2020	2019
Derivatives	0.5 - 0.7	2.0 - 2.5
Loans and borrowings	0.5 - 3.9	2.3 - 4.0

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

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 (loss) income.

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

For the Years ended December 31		
<i>(\$ millions)</i>	2020	2019
Notional amount of U.S. debt designated (in U.S. dollars)	250	—
Carrying value of U.S. debt designated	317	—
Maturity date	2025	NA

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 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, which is consistent with the gross balances:

As at December 31 <i>(\$ millions)</i>	2020				2019				
	Current Asset	Non-Current Asset	Current Liability	Total	Current Asset	Non-Current Asset	Current Liability	Non-Current Liability	Total
Commodity, power, storage and rail financial instruments	11	27	(68)	(30)	34	5	(6)	(3)	30
Interest rate	—	1	(1)	—	—	—	—	—	—
Foreign exchange	14	—	—	14	6	3	—	—	9
Net derivative financial instruments	25	28	(69)	(16)	40	8	(6)	(3)	39

Notional and Maturity Summary

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

<i>(\$ millions)</i>	Liquids (bpd)	Natural Gas (GJ/d)	Power (MWh)	Foreign Exchange	Interest Rate
As at December 31, 2020					
Purchases ⁽¹⁾	1,756	73,557	6	—	—
Sales ⁽¹⁾	25,284	—	—	—	—
Millions of U.S. dollars	—	—	—	260	250
Maturity dates	2021	2021	2021	2021	2025
As at December 31, 2019					
Purchases ⁽¹⁾	409	94,727	—	—	—
Sales ⁽¹⁾	24,839	—	—	—	—
Millions of U.S. dollars	—	—	—	470	—
Maturity dates	2020-2021	2020-2021	NA	2020-2021	NA

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

Gains and Losses on Derivative Instruments

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

For the years ended December 31 (\$ millions)	2020	2019
Derivative instruments held at FVTPL⁽¹⁾		
Realized (gain) loss		
Commodity-related	(54)	(33)
Foreign exchange	2	3
Unrealized loss (gain)		
Commodity-related	84	13
Foreign exchange	5	4

⁽¹⁾ Realized and unrealized (gains) losses on commodity derivative instruments held at FVTPL are included in (gain) loss on commodity-related derivative financial instruments in the consolidated statements of (loss) earnings and comprehensive (loss) income. Realized and unrealized (gains) losses on foreign exchange derivative instruments held at FVTPL are included in net finance costs in the consolidated statements of (loss) earnings and comprehensive (loss) income.

28. 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, 2020.

Note 19 of these financial statements shows the change in share capital for the year ended December 31, 2020.

29. 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
PKM Canada North 40 Limited Partnership	Manitoba	100

30. 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 investee Alliance, advances funds to support operations 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

<i>(\$ millions)</i>	2020	2019
For the years ended December 31:		
Services provided	136	82
Services received	14	2
Interest income	14	10
As at December 31:		
Advances to related parties ⁽¹⁾	13	131
Trade receivables and other	19	17
Trade payables and accrued liabilities	2	—

⁽¹⁾ During the year ended December 31, 2020, Pembina advanced U.S. \$24 million (2019: U.S. \$31 million) to Ruby and \$5 million (2019: \$17 million), net of repayments, to Fort Corp. In December 31, 2020, Pembina recognized an impairment of U.S. \$110 million on its advances to Ruby (Note 13). During the year ended December 31, 2019, Pembina converted \$57 million in advances to CKPC into equity contributions.

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 <i>(\$ millions)</i>	2020	2019
Short-term employee benefits	10	10
Share-based compensation and other	10	13
Total compensation of key management	20	23

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, 2020 (December 31, 2019: nil).

(\$ millions)		Transaction Value Years Ended December 31	
Post-employment benefit plan	Transaction	2020	2019
Defined benefit plan	Funding	23	20

31. COMMITMENTS AND CONTINGENCIES

Commitments

Pembina had the following contractual obligations outstanding at December 31, 2020:

Contractual Obligations ⁽¹⁾ (\$ millions)	Payments Due by Period				
	Total	Less than 1 Year	1 – 3 Years	3 – 5 Years	After 5 Years
Leases ⁽²⁾	1,064	131	217	174	542
Loans and borrowings ⁽³⁾	16,275	1,058	2,262	2,708	10,247
Construction commitments ⁽⁴⁾	1,208	523	149	43	493
Other	569	112	145	75	237
Total contractual obligations	19,116	1,824	2,773	3,000	11,519

⁽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 35 and 175 mbpd of NGL each year up to and including 2029. Power purchase agreements range from one to 24 years and involve the purchase of power from electrical service providers. Pembina has secured up to 80 megawatts per day each year up to and including 2044.

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

⁽³⁾ Excluding deferred financing costs. Including interest payments on Pembina's senior unsecured notes.

⁽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.

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.

At December 31, 2020, Pembina had \$91 million (December 31, 2019: \$103 million) in letters of credit issued to facilitate commercial transactions with third parties and to support regulatory requirements.

32. SUBSEQUENT EVENTS

On June 1, 2021, Pembina announced that it had entered into an arrangement agreement with Inter Pipeline Ltd. ("Inter Pipeline"), pursuant to which Pembina proposed to acquire all of the issued and outstanding common shares of Inter Pipeline by way of a plan of arrangement under the *Business Corporations Act* (Alberta) (the "Inter Pipeline Arrangement"). Pursuant to the Inter Pipeline Arrangement, holders of Inter Pipeline common shares (other than dissenting holders of Inter Pipeline common shares) would have received 0.5 of a common share of Pembina for each common share of Inter Pipeline that they owned. On July 25, 2021, the arrangement agreement was terminated and Pembina received the termination fee of \$350 million.

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. Pembina's initial investment of \$129 million included \$76 million of accrued contingent consideration payable on achievement of certain conditions. Under the terms of the agreement, 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.

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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.K,
PPL.PR.M, PPL.PR.O, PPL.PR.Q, PPL.PR.S, PPL.PF.A, PPL.PF.C and PPL.PF.E

New York Stock Exchange listing symbol for:

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