UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 40-F

(Check One)

[ ] Registration statement pursuant to Section 12 of the Securities Exchange Act of 1934

or

[X] Annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended December 31, 2019

Commission file number **1-35563**

PEMBINA PIPELINE CORPORATION

(Exact name of registrant as specified in its charter)

Alberta, Canada	**4612**	**None**
(Province or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number (if applicable))	(I.R.S. Employer Identification Number (if Applicable))

Suite 4000, 585 – 8th Avenue S.W., Calgary, Alberta, Canada T2P 1G1
(403) 231-7500

(Address and Telephone Number of Registrant's Principal Executive Offices)

DL Services Inc., Columbia Center, 701 Fifth Avenue, Suite 6100, Seattle, Washington 98104-7043
(206) 903-8800
(Name, Address (Including Zip Code) and Telephone Number
(Including Area Code) of Agent For Service in the United States)

Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of each class	**Name of each exchange on which registered**
Common Shares	**New York Stock Exchange**

Securities registered or to be registered pursuant to Section 12(g) of the Act. **None**

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act. **None**

For annual reports, indicate by check mark the information filed with this Form:

[X] Annual Information Form [X] Audited Annual Financial Statements

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report: 547,753,878.

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the registrant was required to file such reports); and (2) has been subject to such filing requirements for the past 90 days.

Yes [X] No ____

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (s.232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files).

Yes [X] No ____

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 12b-2 of the Exchange Act.

Emerging growth company ____

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Principal Documents

The following documents, filed as Exhibits 99.1 and 99.2 to this Annual Report on Form 40-F of Pembina Pipeline Corporation ("Pembina"), are hereby incorporated by reference into this Annual Report on Form 40-F:

(a) Annual Information Form for the fiscal year ended December 31, 2019; and

(b) Management's Discussion and Analysis for the fiscal year ended December 31, 2019; and Audited Consolidated Financial Statements for the fiscal year ended December 31, 2019. Pembina's Audited Consolidated Financial Statements included in this Annual Report on Form 40-F have been prepared in accordance with International Financial Reporting Standards, as issued by the International Accounting Standards Board. Therefore, they are not comparable in all respects to financial statements of United States companies that are prepared in accordance with United States generally accepted accounting principles.

ADDITIONAL DISCLOSURE

Certifications and Disclosure Regarding Controls and Procedures.

(a) Certifications. See Exhibits 99.3, 99.4, 99.5 and 99.6 to this Annual Report on Form 40-F.

(b) Disclosure Controls and Procedures. As of the end of Pembina's fiscal year ended December 31, 2019, an evaluation of the effectiveness of Pembina's "disclosure controls and procedures" (as such term is defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) was carried out by Pembina's management, with the participation of its principal executive officer and principal financial officer. Based upon that evaluation, Pembina's principal executive officer and principal financial officer have concluded that as of the end of that fiscal year, Pembina's disclosure controls and procedures are effective to ensure that information required to be disclosed by Pembina in reports that it files or submits under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission (the "Commission") rules and forms and (ii) accumulated and communicated to Pembina's management, including its principal executive officer and principal financial officers, to allow timely decisions regarding required disclosure.

It should be noted that while Pembina's principal executive officer and principal financial officer believe that Pembina's disclosure controls and procedures provide a reasonable level of assurance that they are effective, they do not expect that Pembina's disclosure controls and procedures or internal control over financial reporting will prevent all errors or fraud. A control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

(c) Management's Annual Report on Internal Control Over Financial Reporting. The required disclosure is included in the "Management's Report" that accompanies Pembina's Consolidated Financial Statements for the fiscal year ended December 31, 2019, filed as Exhibit 99.2 to this Annual Report on Form 40-F.

(d) Attestation Report of the Registered Public Accounting Firm. The required disclosure is included in the "Report of Independent Registered Public Accounting Firm" that accompanies Pembina's Consolidated Financial Statements for the fiscal year ended December 31, 2019, filed as Exhibit 99.2 to this Annual Report on Form 40-F.

(e) Changes in Internal Control Over Financial Reporting. During the fiscal year ended December 31, 2019, no changes were made in Pembina's internal control over financial reporting that have materially affected or are reasonably likely to materially affect Pembina's internal control over financial reporting.

Notices Pursuant to Regulation BTR.

None.

Audit Committee Financial Expert.

Pembina's board of directors has determined that David M.B. LeGresley, and Gordon J. Kerr, members of Pembina's audit committee, each qualify as an "audit committee financial expert" (as such term is defined in Form 40-F) and are "independent" as that term is defined in the rules of the New York Stock Exchange.

Code of Ethics.

Pembina has adopted a Code of Ethics that meets the definition of a "code of ethics" set forth in Form 40-F, and that applies to principal executive officer, principal financial officer, principal accounting officer or controller, and persons performing similar functions.

On October 31, 2018, Pembina amended its Code of Ethics to clarify its expectations and guidelines for its personnel with respect to conflicts of interest, personal enrichments and benefits received from third parties, lobbying and political contributions and it also sets out the additional responsibilities of management.

The description above is qualified in its entirety by reference to the amended Code of Conduct which is attached hereto as Exhibit 99.8 and incorporated herein by reference.

The Code of Ethics is available for viewing on Pembina's website at www.pembina.com, and is available in print to any shareholder who requests it. Requests for copies of the Code of Ethics should be made by contacting: Investor Relations by phone at (855) 880-7404 or by e-mail at investor-relations@pembina.com.

Since the date on which Pembina became subject to the reporting requirements of Section 13(a) or 15(d) of the Exchange Act, there have not been any other amendments to, or waivers, including implicit waivers, granted from, any provision of the Code of Ethics.
If any amendment to the Code of Ethics is made, or if any waiver from the provisions thereof is granted, Pembina may elect to disclose the information about such amendment or waiver required by Form 40-F to be disclosed, by posting such disclosure on Pembina's website, which may be accessed at www.pembina.com.

Principal Accountant Fees and Services.

The required disclosure is included under the heading "Audit Committee Information-External Auditor Service Fees" in Pembina's Annual Information Form for the fiscal year ended December 31, 2019, filed as Exhibit 99.1 to this Annual Report on Form 40-F.

Pre-Approval Policies and Procedures.

(a) Pembina's full audit committee pre-approves all audit and non-services provided to Pembina by its external auditor, KPMG LLP. Also see "Audit Committee Information-Pre-Approval Policies and Procedures for Audit and Non-Audit Services" in Pembina's Annual Information Form for the fiscal year ended December 31, 2019, filed as Exhibit 99.1 to this Annual Report on Form 40-F.

(b) Of the fees reported in Exhibit 99.1 to this Annual Report on Form 40-F under the heading "Audit Committee Information-External Auditor Service Fees", none of the fees billed by KPMG LLP were approved by Pembina's audit committee pursuant to the *de minimis* exception provided by Section (c)(7)(i)(C) of Rule 2-01 of Regulation S-X.

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 its financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to investors.

Tabular Disclosure of Contractual Obligations.

The required disclosure is included under the heading "Contractual Obligations" in Pembina's Management's Discussion and Analysis for the fiscal year ended December 31, 2019, filed as Exhibit 99.2 to this Annual Report on Form 40-F.

Identification of the Audit Committee.

Pembina has a separately-designated standing audit committee established in accordance with Section 3(a)(58)(A) of the Exchange Act. The members of the audit committee are: Gordon J. Kerr, Maureen E. Howe, David M.B. LeGresley, Bruce D. Rubin and Henry W. Sykes.

Mine Safety Disclosure.

Not applicable.

New York Stock Exchange Disclosure.

Presiding Director at Meetings of Non-Management Directors

Pembina schedules regular executive sessions in which Pembina's "non-management directors" (as that term is defined in the rules of the New York Stock Exchange) meet without management participation. Mr. Randall J. Findlay serves as the presiding director (the "Presiding Director") at such sessions. Each of Pembina's non-management directors is "independent" within the meaning of the rules of the New York Stock Exchange.

Pembina also holds executive sessions at least once per year in which Pembina's independent directors meet without participation from management or non-independent directors.

Communication with Non-Management Directors

Shareholders may send communications to Pembina's non-management directors by writing to Jeffrey T. Smith, Chair of the governance committee of the board of directors, c/o Investor Relations, Pembina Pipeline Corporation, 4000, 585 – 8th Avenue S.W., Calgary, Alberta T2P 1G1. Communications will be referred to the Presiding Director for appropriate action. The status of all outstanding concerns addressed to the Presiding Director will be reported to the board of directors as appropriate.

Corporate Governance Guidelines

In accordance with Section 303A.09 of the NYSE Listed Company Manual, Pembina has adopted a set of corporate governance guidelines with respect to certain specified matters. Such guidelines are available for viewing on Pembina's website at www.pembina.com.

Board Committee Mandates

The Charters of Pembina's audit committee, human resources, health and compensation committee, safety and environment committee and governance, nominating and corporate social responsibility committee are each available for viewing on Pembina's website at www.pembina.com.

NYSE Statement of Governance Differences

As a Canadian corporation listed on the NYSE, Pembina is not required to comply with most of the NYSE corporate governance standards, so long as it complies with Canadian corporate governance practices. In order to claim such an exemption, however, Pembina must disclose the significant difference between its corporate governance practices and those required to be followed by U.S. domestic companies under the NYSE's corporate governance standards. Pembina has included a description of such significant differences in corporate governance practices on its website, which may be accessed at www.pembina.com.

UNDERTAKING AND CONSENT TO SERVICE OF PROCESS

A. Undertaking.

Pembina undertakes to make available, in person or by telephone, representatives to respond to inquiries made by the Commission staff, and to furnish promptly, when requested to do so by the Commission staff, information relating to: the securities registered pursuant to Form 40-F; the securities in relation to which the obligation to file an annual report on Form 40-F arises; or transactions in said securities.

B. Consent to Service of Process.

Pembina has previously filed a Form F-X in connection with the class of securities in relation to which the obligation to file this report arises.

Any change to the name or address of the agent for service of process of Pembina shall be communicated promptly to the Commission by an amendment to the Form F-X referencing the file number of Pembina.

SIGNATURES

Pursuant to the requirements of the Exchange Act, the registrant certifies that it meets all of the requirements for filing on Form 40-F and has duly caused this annual report to be signed on its behalf by the undersigned, thereunto duly authorized, on February 27, 2020.

Pembina Pipeline Corporation

By: /s/ "*M.H. Dilger*"
Name: M.H. Dilger
Title: President & Chief Executive Officer

EXHIBIT INDEX

Exhibit	Description
99.1	Annual Information Form for the fiscal year ended December 31, 2019
99.2	Management's Discussion and Analysis for the fiscal year ended December 31, 2019 and Audited Consolidated Financial Statements for the fiscal year ended December 31, 2019, prepared in accordance with International Financial Reporting Standards, as issued by the International Accounting Standards Board
99.3	Certification of Chief Executive Officer pursuant to Rule 13a-14 or 15d-14 of the Securities Exchange Act of 1934
99.4	Certification of Chief Financial Officer pursuant to Rule 13a-14 or 15d-14 of the Securities Exchange Act of 1934
99.5	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350
99.6	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350
99.7	Calculation of Earnings Coverage
99.8	Consent of KPMG LLP
99.9	Pembina Pipeline Corporation's Code of Ethics Policy
101	Interactive Data Files



PEMBINA PIPELINE CORPORATION

ANNUAL INFORMATION FORM

For the Year Ended December 31, 2019

February 27, 2020

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GLOSSARY OF TERMS

Terms used in this Annual Information Form and not otherwise defined have the meanings set forth below:

"**2015 Base Shelf Prospectus**" means the final short form base shelf prospectus filed with the securities commissions or similar regulatory authorities in each of the provinces of Canada on March 18, 2015 allowing Pembina to offer and issue, from time to time: (i) Common Shares; (ii) Class A Preferred Shares; (iii) debt securities; (iv) warrants to purchase Common Shares and debt securities; and (v) subscription receipts of Pembina (together with the foregoing, collectively, the "**2015 Securities**") of up to $5,000,000,000 aggregate initial offering price of 2015 Securities (or the equivalent thereof in one or more foreign currencies or composite currencies, including U.S. dollars) during the 25 month period that the 2015 Base Shelf Prospectus was valid;

"**2017 Base Shelf Prospectus**" means the final short form base shelf prospectus filed with the securities commissions or similar regulatory authorities in each of the provinces of Canada on July 27, 2017 allowing Pembina to offer and issue, from time to time: (i) Common Shares; (ii) Class A Preferred Shares; (iii) warrants to purchase Common Shares; (iv) subscription receipts of Pembina; and (v) units comprising any combination of the foregoing (together with the foregoing, collectively, the "**2017 Securities**") of up to $3,000,000,000 aggregate initial offering price of 2017 Securities (or the equivalent thereof in one or more foreign currencies or composite currencies, including U.S. dollars) during the 25 month period that the 2017 Base Shelf Prospectus is valid, which 2017 Securities may be offered separately or together, in amounts, at prices and on terms to be determined based on market conditions at the time of the sale and set forth in one or more shelf prospectus supplements;

"**2017 MTN Prospectus**" means the final short form base shelf prospectus filed with the securities commissions or similar regulatory authorities in each of the provinces of Canada on July 27, 2017 allowing Pembina to offer and issue, from time to time, Pembina Medium Term Notes of up to $3,000,000,000 aggregate principal amount or, if offered at an original issue discount, aggregate offering price, of Medium Term Notes (or the equivalent thereof in one or more foreign currencies or composite currencies, including U.S. dollars) during the 25 month period that the 2017 MTN Prospectus is valid, which Medium Term Notes may be offered at rates of interest, prices and on terms to be determined based on market conditions at the time of the sale and set forth in one or more shelf prospectus supplement or pricing supplements;

"**2019 Base Shelf Prospectus**" means the final short form base shelf prospectus filed with the securities commissions or similar regulatory authorities in each of the provinces of Canada on August 30, 2019 allowing Pembina to offer and issue, from time to time: (i) Common Shares; (ii) Class A Preferred Shares; (iii) warrants to purchase Common Shares; (iv) subscription receipts of Pembina; and (v) units comprising any combination of the foregoing (together with the foregoing, collectively, the "**2019 Securities**") of up to $3,000,000,000 aggregate initial offering price of 2019 Securities (or the equivalent thereof in one or more foreign currencies or composite currencies, including U.S. dollars) during the 25 month period that the 2019 Base Shelf Prospectus is valid, which 2019 Securities may be offered separately or together, in amounts, at prices and on terms to be determined based on market conditions at the time of the sale and set forth in one or more shelf prospectus supplements;

"**2019 MTN Prospectus**" means the final short form base shelf prospectus filed with the securities commissions or similar regulatory authorities in each of the provinces of Canada on August 30, 2019 allowing Pembina to offer and issue, from time to time, Pembina Medium Term Notes of up to $5,000,000,000 aggregate principal amount or, if offered at an original issue discount, aggregate offering price, of Medium Term Notes (or the equivalent thereof in one or more foreign currencies or composite currencies, including U.S. dollars) during the 25 month period that the 2019 MTN Prospectus is valid, which Medium Term Notes may be offered at rates of interest, prices and on terms to be determined based on market conditions at the time of the sale and set forth in one or more shelf prospectus supplement or pricing supplements;

"**ABCA**" means the *Business Corporations Act* (Alberta), R.S.A. 2000, c. B-9, as amended from time to time, including the regulations promulgated thereunder;

"**ABSA**" means the Alberta Boilers Safety Association;

"**AEGS**" means the Alberta Ethane Gathering System comprised of 1,330 km of integrated pipeline legs that span the southern and central portions of Alberta;

"**AEGS Notes**" has the meaning ascribed thereto under "*General Developments of the Business – Developments in 2018*";

"**AER**" means the Alberta Energy Regulator;

"**Alliance**" means Alliance Canada and Alliance U.S.;

"**Alliance Canada**" means Alliance Pipeline Limited Partnership;

"**Alliance Canada Marketing**" means Alliance Canada Marketing L.P.;

"**Alliance Pipeline**" means the entire Alliance pipeline system of approximately 3,850 km, including the approximately 3,000 km high-pressure transmission pipeline that runs from northeastern British Columbia to delivery points near Chicago, Illinois, approximately 730 km of lateral pipelines in Canada, the approximately 130 km Tioga lateral, and related infrastructure;

"**Alliance U.S.**" means Alliance Pipeline L.P.;

"**AUC**" means the Alberta Utilities Commission;

"**Aux Sable**" means collectively, Aux Sable Canada, Aux Sable U.S. and Alliance Canada Marketing;

"**Aux Sable Canada**" means Aux Sable Canada LP and Aux Sable Canada Ltd.;

"**Aux Sable U.S.**" means, collectively, Aux Sable Liquids Products Inc., Aux Sable Liquid Products LP and Aux Sable Midstream LLC;

"**B.C. Pipelines**" means, collectively, the NEBC Pipeline and the Western Pipeline, as well as certain connector pipelines and provincially regulated pipelines located in British Columbia;

"**BCEAO**" means the British Columbia Environmental Assessment Office;

"**BCOGC**" means the British Columbia Oil and Gas Commission;

"**BCUC**" means the British Columbia Utilities Commission;

"**Board**" or "**Board of Directors**" means the board of directors of Pembina from time to time;

"**Brazeau Pipeline**" means the Brazeau NGL pipeline system, which includes approximately 500 km of pipelines, including gathering laterals, that transport NGL from natural gas processing plants southwest of Edmonton, Alberta to Fort Saskatchewan, Alberta;

"**Canadian Diluent Hub**" or "**CDH**" has the meaning ascribed thereto under "*Description of Pembina's Business and Operations – Overview of Pembina's Business – Pipelines Division*";

"**CER**" means the Canadian Energy Regulator;

"**Channahon Facility**" means Aux Sable's 2.1 bcf/d NGL extraction and fractionation facility in Channahon, Illinois;

"**Cheecham Lateral**" means the lateral pipeline and related facilities, as expanded, delivering synthetic crude oil from a pump station on the Syncrude Pipeline to a terminalling facility located near Cheecham, Alberta;

"**Chevron**" means Chevron Canada Limited;

"**CICA**" means the Canadian Institute of Chartered Professional Accountants;

"**CKPC**" means Canada Kuwait Petrochemical Limited Partnership;

"**Class A Preferred Shares**" means class A preferred shares of Pembina, issuable in series, and, where the context requires, includes the Series 1 Class A Preferred Shares, the Series 2 Class A Preferred Shares, the Series 3 Class A Preferred Shares, the Series 4 Class A Preferred Shares, the Series 5 Class A Preferred Shares, the Series 6 Class A Preferred Shares, the Series 7 Class A Preferred Shares, the Series 8 Class A Preferred Shares, the Series 9 Class A Preferred Shares, the Series 10 Class A Preferred Shares, the Series 11 Class A Preferred Shares, the Series 12 Class A Preferred Shares, the Series 13 Class A Preferred Shares, the Series 14 Class A Preferred Shares, the Series 15 Class A Preferred Shares, the Series 16 Class A Preferred Shares, the Series 17 Class A Preferred Shares, the Series 18 Class A Preferred Shares, the Series 19 Class A Preferred Shares, the Series 20 Class A Preferred Shares, the Series 21 Class A Preferred Shares, the Series 22 Class A Preferred Shares, the Series 23 Class A Preferred Shares, the Series 24 Class A Preferred Shares, the Series 25 Class A Preferred Shares and the Series 26 Class A Preferred Shares;

"**Class B Preferred Shares**" means class B preferred shares of Pembina;

"**Cochin U.S. Acquisition**" has the meaning ascribed thereto under "*General Developments of Pembina - Developments in 2019*";

"**Common Shares**" means the common shares of Pembina;

"**Company**" or "**Pembina**" means Pembina Pipeline Corporation, an ABCA corporation, and, unless the context otherwise requires, includes its subsidiaries;

"**condensate**" means a hydrocarbon mixture consisting primarily of pentanes and heavier hydrocarbon liquids;

"**Credit Facilities**" has the meaning ascribed thereto under "*Description of the Capital Structure of Pembina – Credit Facilities*";

"**CRP**" means Cutbank Ridge Partnership, a partnership between Ovintiv and Cutbank Dawson Gas Resources Ltd., a subsidiary of Mitsubishi Corporation;

"**Cutbank Complex**" has the meaning ascribed thereto under "*Description of Pembina's Business and Operations – Overview of Pembina's Business – Facilities Division*";

"**Cutbank Gas Plant**" means Pembina's shallow cut sweet gas processing facility located at 07-16-062-08 W6M;

"**DBRS**" means DBRS Limited;

"**deep cut**" means ethane-plus extraction gas processing capabilities;

"**Drayton Valley Pipeline**" means the Drayton Valley pipeline system, which includes approximately 1,100 km of pipelines, including gathering laterals, that transport crude oil and condensate from the area southwest of Edmonton, Alberta to Edmonton;

"**DRIP**" means Pembina's Premium Dividend™ and Dividend Reinvestment Plan and all associated agreements, which were amended and restated effective January 6, 2016, and suspended effective April 25, 2017;

"**Duvernay I**" has the meaning ascribed thereto under "*General Developments of Pembina – Developments in 2017*";

"**Duvernay II**" has the meaning ascribed thereto under "*General Developments of Pembina – Developments in 2018*";

"**Duvernay III**" has the meaning ascribed thereto under "*Description of Pembina's Business and Operations – Overview of Pembina's Business – Facilities Division – Gas Services*";

"**Duvernay Complex**" has the meaning ascribed thereto under "*Description of Pembina's Business and Operations – Overview of Pembina's Business – Facilities Division – Gas Services*";

"**Duvernay Sour Treatment Facilities**" has the meaning ascribed thereto under "*General Development of Pembina – Developments in 2019*";

"**EDGAR**" means the Electronic Data Gathering, Analysis and Retrieval system;

"**Edmonton Terminals**" has the meaning ascribed thereto under the heading "*Description of Pembina's Business and Operations – Overview of Pembina's Business – Pipelines Division*";

"**Empress**" has the meaning ascribed thereto under the heading "*Description of Pembina's Business and Operations – Overview of Pembina's Business – Facilities Division – Gas Services*";

"**Empress Co-generation Facility**" has the meaning ascribed thereto under the heading "*Description of Pembina's Business and Operations – Overview of Pembina's Business – Facilities Division – Gas Services";*

"**Empress Infrastructure Project**" has the meaning ascribed thereto under the heading "*Description of Pembina's Business and Operations – Overview of Pembina's Business – Facilities Division – Gas Services";*

"**ENT**" has the meaning ascribed thereto under the heading " *Description of Pembina's Business and Operations – Overview of Pembina's Business – Pipelines Division*";

"**Equity Accounted Investees**" means Pembina's working interest in Alliance, Aux Sable, Ruby Pipeline Holding Company, LLC, CKPC, Veresen Midstream, Grand Valley I Limited Partnership and Fort Corp;

"**FEED**" means front end engineering and design;

"**FERC**" means the United States Federal Energy Regulatory Commission;

"**Financial Statements**" means Pembina's audited consolidated financial statements for the period ended December 31, 2019;

"**Form 40-F**" means Pembina's annual report on Form 40-F for the fiscal year ended December 31, 2019 filed with the SEC;

"**Fort Corp**" means, collectively, Fort Saskatchewan Ethylene Storage Corporation and Fort Saskatchewan Ethylene Storage Limited Partnership;

"Fox Creek" refers to the Peace Pipeline pump station and terminal located near Fox Creek, Alberta;

"**Fund**" has the meaning ascribed thereto under " *Corporate Structure – Name, Address and Formation* ";

"**GAAP**" means the generally accepted accounting principles established by the CICA or any successor thereto which are in effect from time to time in Canada;

"Gordondale" refers to the Peace Pipeline pump station and terminal located near Gordondale, Alberta;

"**Horizon Pipeline**" means the pipeline system and related facilities, including the upgraded mainline pump station and other facility modifications, designed to deliver synthetic crude oil from the Horizon Project into the Edmonton, Alberta area. See "*Description of Pembina's Business and Operations – Overview of Pembina's Business – Pipelines Division*";

"**Horizon Project**" means the Horizon Oil Sands Project located approximately 70 km north of Fort McMurray, Alberta;

"**HSE**" has the meaning ascribed thereto under the heading " *Other Information Relating to Pembina's Business – Corporate Governance* ";

"**HVP**" means high vapour pressure;

"**Hythe Gas Plant**" has the meaning ascribed thereto under " *General Developments of Pembina – Developments in 2018* ";

"**IFRS**" means the International Financial Reporting Standards, including International Accounting Standards and Interpretations, together with their accompanying documents, which are set by the International Accounting Standards Board, the independent standard-setting body of the International Accounting Standards Committee Foundation (the "**IASC Foundation**"), and the International Financial Reporting Interpretations Committee, the interpretative body of the IASC Foundation, but only to the extent the same are adopted by the CICA as GAAP in Canada and then subject to such modifications thereto as are agreed by CICA;

"**Imperial**" means Imperial Oil Limited;

"**Jordan Cove**" means Jordan Cove Energy Project L.P.;

"**Jordan Cove LNG Project**" means the proposed development, construction and operation of a liquefied natural gas production and export facility and related infrastructure on the west coast of the U.S.;

"Kakwa" refers to the Peace Pipeline pump station and terminal located west of the Kakwa River Deep Cut Plant;

"**Kakwa Gas Plant**" means Pembina's 50 percent interest in the shallow cut sweet gas processing facility located at 01-35-060-05 W6M;

"**Kakwa River Deep Cut Plant**" means Pembina's raw to deep cut sour gas processing facility located at 01-35-060-05 W6M;

"**Kakwa River Shallow Cut Plant**" means Pembina's shallow cut sweet gas processing facility located at 01-35-060-05 W6M;

"**Kinder Acquisition**" means, collectively, the Kinder Morgan Canada Acquisition and the Cochin U.S. Acquisition;

"**Kinder Morgan Canada Acquisition**" has the meaning ascribed thereto under "*General Developments of Pembina - Developments in 2019*";

"**KML**" means PKM Canada Limited, formerly Kinder Morgan Canada Limited;

"**KML Preferred Shares**" means, collectively, the KML Series 1 Preferred Shares, the KML Series 2 Preferred Shares, the KML Series 3 Preferred Shares and the KML Series 4 Preferred Shares;

"**KML Restricted Voting Shares**" means the restricted voting shares in the capital of KML;

"**KML Special Voting Shares**" means the special voting shares in the capital of KML;

"**KML Series 1 Preferred Shares**" means the cumulative redeemable minimum rate reset preferred shares, series 1 in the capital of KML;

"**KML Series 2 Preferred Shares**" means the cumulative redeemable floating rate preferred shares, series 2 in the capital of KML, which were issuable on conversion of the KML Series 1 Preferred Shares;

"**KML Series 3 Preferred Shares**" means the cumulative redeemable minimum rate reset preferred shares, series 3 in the capital of KML;

"**KML Series 4 Preferred Shares**" means the cumulative redeemable floating rate preferred shares, series 4 in the capital of KML, which were issuable on conversion of the KML Series 3 Preferred Shares;

"**KML Voting Shares**" means, collectively, KML Restricted Voting Shares and the KML Special Voting Shares;

"**KRIA Agreement**" has the meaning ascribed thereto under "*General Developments of Pembina – Developments in 2017*";

"**KUFPEC**" means Kuwait Foreign Petroleum Exploration Company;

"La Glace" refers to the Peace Pipeline pump station and terminal located near La Glace, Alberta;

"Lator" refers to the Peace Pipeline pump station and terminal located east of the Kakwa River Deep Cut Plant;

"**LGS**" means the Liquids Gathering Pipeline System, which includes approximately 400 km of pipelines, including gathering laterals, that transport NGL from northeastern British Columbia to Gordondale;

"**LIBOR**" means London Inter-Bank Offered Rate;

"**LPG**" means liquified petroleum gas;

"**MD&A**" means Pembina's management's discussion and analysis for the year ended December 31, 2019, an electronic copy of which is available on Pembina's profile on the SEDAR website at www.sedar.com, in Pembina's annual report on Form 40-F filed on the EDGAR website at www.sec.gov, or at www.pembina.com;

"**Medium Term Notes**" means, collectively, the Pembina Medium Term Notes and the Veresen Medium Term Notes;

"**Medium Term Notes, Series 1** " means the $250 million aggregate principal amount of medium term notes of Pembina issued March 29, 2011. See "*Description of the Capital Structure of Pembina – Medium Term Notes*";

"**Medium Term Notes, Series 2** " means the $450 million aggregate principal amount of medium term notes of Pembina issued October 22, 2012. See "*Description of the Capital Structure of Pembina – Medium Term Notes*";

"**Medium Term Notes, Series 3**" means, collectively, the $200 million, $150 million and $100 million aggregate principal amount of medium term notes of Pembina issued April 30, 2013, February 2, 2015 and June 16, 2015, respectively. See "*Description of the Capital Structure of Pembina – Medium Term Notes*";

"**Medium Term Notes, Series 4**" means the $600 million aggregate principal amount of medium term notes of Pembina issued April 4, 2014. See "*Description of the Capital Structure of Pembina – Medium Term Notes*";

"**Medium Term Notes, Series 5**" means the $450 million aggregate principal amount of medium term notes of Pembina issued February 2, 2015. See "*Description of the Capital Structure of Pembina – Medium Term Notes*";

"**Medium Term Notes, Series 6**" means the $500 million aggregate principal amount of medium term notes of Pembina issued June 16, 2015. See "*Description of the Capital Structure of Pembina – Medium Term Notes*";

"**Medium Term Notes, Series 7**" means the $500 million aggregate principal amount of medium term notes of Pembina issued August 11, 2016. See "*Description of the Capital Structure of Pembina – Medium Term Notes*";

"**Medium Term Notes, Series 8**" means, collectively, the $300 million and $350 million aggregate principal amount of medium term notes of Pembina issued January 20, 2017 and August 16, 2017, respectively. See "*Description of the Capital Structure of Pembina – Medium Term Notes*";

"**Medium Term Notes, Series 9**" means, collectively, the $300 million and $250 million aggregate principal amount of medium term notes of Pembina issued January 20, 2017 and August 16, 2017, respectively. See "*Description of the Capital Structure of Pembina – Medium Term Notes*";

"**Medium Term Notes, Series 10**" means the $650 million aggregate principal amount of medium term notes of Pembina issued March 26, 2018 and January 10, 2020. See "*Description of the Capital Structure of Pembina – Medium Term Notes*";

"**Medium Term Notes, Series 11**" means the $800 million aggregate principal amount of medium term notes of Pembina issued March 26, 2018 and January 10, 2020. See "*Description of the Capital Structure of Pembina – Medium Term Notes*";

"**Medium Term Notes, Series 12**" means the $650 million aggregate principal amount of medium term notes of Pembina issued April 3, 2019 and January 10, 2020. See "*Description of the Capital Structure of Pembina - Medium Term Notes*";

"**Medium Term Notes, Series 13**" means, collectively, the $400 million and $300 million aggregate principal amount of medium term notes of Pembina issued April 3, 2019 and September 12, 2019, respectively. See "*Description of the Capital Structure of Pembina - Medium Term Notes*";

"**Medium Term Notes, Series 14**" means the $600 million aggregate principal amount of medium term notes of Pembina issued September 12, 2019. See "*Description of the Capital Structure of Pembina - Medium Term Notes*";

"**Medium Term Notes, Series 15**" means the $600 million aggregate principal amount of medium term notes of Pembina issued September 12, 2019. See "*Description of the Capital Structure of Pembina - Medium Term Notes*";

"**Mitsue Pipeline**" means the pipeline system and related facilities delivering condensate from Whitecourt, Alberta to Utikuma, Alberta for use as diluent for heavy oil;

"**Musreau I**" means the Musreau A, Musreau C and Musreau D trains, shallow cut sweet gas processing facility, owned 100 percent by Pembina, and Pembina's 50 percent interest in the Musreau B train, located at 04-25-062-06 W6M;

"**Musreau II**" means Pembina's 100 MMcf/d shallow cut sweet gas processing plant and associated NGL and gas gathering pipelines near Musreau I;

"**Musreau III**" means Pembina's 100 MMcf/d shallow cut sweet gas processing facility near Musreau I and II;

"**Musreau Deep Cut**" means the 205 MMcf/d NGL extraction facility and related 10 km NGL sales pipeline connected to the Peace Pipeline and located at the Musreau I facility;

"Namao" refers to the Peace Pipeline interconnect junction located near Namao, Alberta;

"**NEBC Expansion**" means Pembina's expansion to its pipeline infrastructure in northeastern British Columbia increasing the capacity of the NEBC Pipeline system by approximately 75 mbpd;

"**NEBC Pipeline system**" means the pipeline system and related facilities, as expanded by the NEBC Expansion, delivering NGL, crude oil and condensate from northeastern British Columbia to Taylor, British Columbia;

"**NGL**" means natural gas liquids, including ethane, propane, butane and condensate;

"**Nipisi Pipeline**" means the pipeline system and related facilities delivering blended heavy oil from Utikuma, Alberta to Edmonton, Alberta;

"**North Central Liquids Hub**" has the meaning ascribed thereto under " *General Developments of Pembina – Developments in 2017*";

"**Northern Pipeline**" means the pipeline system and related facilities delivering NGL from Belloy, Alberta to Fort Saskatchewan, Alberta;

"**Northwest Pipeline**" means the pipeline system and related facilities delivering crude oil from northeastern British Columbia to Boundary Lake, Alberta;

"**NWRP**" has the meaning ascribed thereto under the heading " *Description of Pembina's Business and Operations – Overview of Pembina's Business – Facilities Division – NGL Services*";

"**NYSE**" means the New York Stock Exchange;

"**OMS**" has the meaning ascribed thereto under the heading " *Other Information Relating to Pembina's Business – Operating Management System*";

"**Option Plan**" means the stock option plan of Pembina approved by the Shareholders on May 26, 2011, as amended effective November 30, 2016;

"**Ovintiv**" means Ovintiv Inc., formerly Encana Corporation;

"**PDH/PP Facility**" has the meaning ascribed thereto under " *General Developments of Pembina – Developments in 2019*";

"**PDH EPC**" has the meaning ascribed thereto under " *General Developments of Pembina – Developments in 2019*";

"**Peace Pipeline**" means the pipeline system and related facilities delivering light crude oil, condensate, propane mix (C_{3+}) and ethane mix (C_{2+}) from northwestern Alberta to Edmonton, Alberta and to Fort Saskatchewan, Alberta;

"**PEIMP**" means the Pressure Equipment Integrity Management Program;

"**Pembina Medium Term Notes**" means, collectively, the Medium Term Notes, Series 1, the Medium Term Notes, Series 2, the Medium Term Notes, Series 3, the Medium Term Notes, Series 4, the Medium Term Notes, Series 5, the Medium Term Notes, Series 6, the Medium Term Notes, Series 7, the Medium Term Notes, Series 8, the Medium Term Notes, Series 9, the Medium Term Notes, Series 10, the Medium Term Notes, Series 11, the Medium Term Notes, Series 12, the Medium Term Notes, Series 13, the Medium Term Notes, Series 14 and the Medium Term Notes, Series 15;

"**Pembina Note Indenture**" means the indenture dated March 29, 2011 between Pembina, Pouce Coupé Pipe Line Ltd., Plateau Pipe Line Ltd., Alberta Oil Sands Pipeline Ltd., Pembina Pipeline (an Alberta partnership), Pembina North Limited Partnership, Pembina West Limited Partnership, Pembina Oil Sands Pipeline L.P., Pembina Marketing Ltd., Pembina Midstream Limited Partnership, Pembina Gas Services Ltd., Pembina Gas Services Limited Partnership and Computershare Trust Company of Canada, as supplemented by the first supplemental note indenture dated April 2, 2012 between Pembina, Pembina NGL Corporation, 1598313 Alberta Ltd., Provident Infrastructure and Logistics LP, Provident Midstream Holdings GP ULC, Provident Midstream Inc., Provident GP Inc., Provident Facilities (NGL) Ltd., Provident Facilities (NGL) L.P., 1195714 Alberta Ltd., 1444767 Alberta Ltd., Provident Energy Pipeline Inc., Empress NGL Partnership, Kinetic Resources (LPG), Pro Holding Company, Provident Midstream (USA) Inc., Pro US LLC, Pro Midstream Company, Kinetic Resources (U.S.A.), Pro GP Corp., Pro LP Corp., Terraquest, Inc. and Computershare Trust Company of Canada, as further supplemented by the second supplemental note indenture dated October

24, 2014 among Pembina, Pembina Prairie Facilities Ltd., Pembina Prairie Facilities Holdco Ltd. and Computershare Trust Company of Canada, and as further supplemented by the third supplemental indenture dated April 4, 2018 between Pembina and Computershare Trust Company of Canada providing for the issuance of the Pembina Medium Term Notes and the AEGS Notes;

"**Phase III Expansion**" means pipeline expansions, underpinned by long-term, fee-for-service agreements in Pembina's operating areas, following and expanding on certain segments of Pembina's existing Northern and Peace Pipeline systems from Taylor, British Columbia southeast to Edmonton, Alberta increasing the capacity on the system by approximately 420 mbpd;

"**Phase IV Expansion**" has the meaning ascribed thereto under " *General Developments of Pembina – Developments in 2017*";

"**Phase V Expansion**" has the meaning ascribed thereto under " *General Developments of Pembina – Developments in 2017*";

"**Phase VI Expansion**" has the meaning ascribed thereto under " *General Developments of Pembina – Developments in 2018*";

"**Phase VII Expansion**" has the meaning ascribed thereto under " *General Developments of Pembina – Developments in 2018*";

"**Phase VIII Expansion**" has the meaning ascribed thereto under " *General Developments of Pembina – Developments in 2018*";

"**Phase IX Expansion**" has the meaning ascribed thereto under " *General Developments of Pembina - Developments in 2019*";

"**PHMSA**" means the U.S. Pipeline and Hazardous Materials Safety Administration;

"**PIC**" means Petrochemical Industries Company K.S.C., a subsidiary of the Kuwait Petroleum Corporation, a company owned by the State of Kuwait;

"**Plan**" has the meaning ascribed thereto under the heading " *Description of the Capital Structure of Pembina – Common Shares* ";

"**PMM**" has the meaning ascribed thereto under the heading " *Other Information Relating to Pembina's Business – Operations and Maintenance – Operator Qualification and Preventative Maintenance System*";

"**Pouce Coupé Pipeline**" means the pipeline system and related facilities delivering sweet crude oil and HVP hydrocarbon products from Dawson Creek, British Columbia to Pouce Coupé, Alberta;

"**Prince Rupert Terminal**" has the meaning ascribed thereto under "*General Developments of Pembina – Developments in 2017*" and "*Description of Pembina's Business and Operations – Overview of Pembina's Business – Facilities Division – NGL Services* ";

"**rate base**" means the amount of investment on which a return is authorized to be earned, which typically includes net plant in service plus an allowance for working capital;

"**Redemption Amount**" has the meaning ascribed thereto under " *Description of the Capital Structure of Pembina – Class B Preferred Shares* ";

"**Resthaven Facility**" has the meaning ascribed thereto under " *Description of Pembina's Business and Operations — Overview of Pembina's Business – Facilities Division – Gas Services*";

"**RFS**" or "**Redwater**" has the meaning ascribed to it under " *Description of Pembina's Business and Operations – Facilities Division – NGL Services*".

"**RFS I**" means Pembina's 73 mbpd NGL fractionator at Redwater, Alberta;

"**RFS II**" means Pembina's second 73 mbpd NGL fractionator at Redwater, Alberta;

"**RFS III**" means Pembina's 55 mbpd propane-plus fractionator at Redwater, Alberta;

"**rich gas**" is natural gas with relatively high NGL content including ethane, propane, butane and condensate;

"**Ruby Pipeline**" means a gas transmission pipeline that runs from the Opal hub in Wyoming to the Malin hub in Oregon;

"**S&P**" means Standard & Poor's Rating Services, a division of The McGraw-Hill Companies;

"**Saturn I**" means Pembina's deep cut NGL extraction facility located in the Berland area of Alberta with 200 MMcf/d of extraction capacity;

"**Saturn II**" means Pembina's second deep cut NGL extraction facility in the Berland area, a twin of Saturn I;

"**Saturn Complex**" has the meaning ascribed thereto under "*Description of Pembina's Business and Operations – Overview of Pembina's Business – Facilities Division – Gas Services*";

"**Saturn Phase II Plant**" means Veresen Midstream's 230 MMcf/d gross gas processing facility in the Montney region;

"**SCADA**" means supervisory control and data acquisition. See "*Other Information Relating to Pembina's Business – Information and Communication Systems*";

"**SEC**" means the United States Securities and Exchange Commission;

"**SEDAR**" means the System for Electronic Document Analysis and Retrieval;

"**SEEP**" has the meaning ascribed thereto under "*Description of Pembina's Business and Operations – Overview of Pembina's Business – Facilities Division – Gas Services*";

"**Series 1 Class A Preferred Shares**" means the cumulative redeemable rate reset Class A Preferred Shares, series 1 of Pembina, issued July 26, 2013. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares*";

"**Series 2 Class A Preferred Shares**" means the cumulative redeemable floating rate Class A Preferred Shares, series 2 of Pembina, issuable on conversion of the Series 1 Class A Preferred Shares. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares*";

"**Series 3 Class A Preferred Shares**" means the cumulative redeemable rate reset Class A Preferred Shares, series 3 of Pembina, issued October 2, 2013. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares*";

"**Series 4 Class A Preferred Shares**" means the cumulative redeemable floating rate Class A Preferred Shares, series 4 of Pembina, issuable on conversion of the Series 3 Class A Preferred Shares. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares*";

"**Series 5 Class A Preferred Shares**" means the cumulative redeemable rate reset Class A Preferred Shares, series 5 of Pembina, issued January 16, 2014. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares*";

"**Series 6 Class A Preferred Shares**" means the cumulative redeemable floating rate Class A Preferred Shares, series 6 of Pembina, issuable on conversion of the Series 5 Class A Preferred Shares. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares*";

"**Series 7 Class A Preferred Shares**" means the cumulative redeemable rate reset Class A Preferred Shares, series 7 of Pembina, issued September 11, 2014. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares*";

"**Series 8 Class A Preferred Shares**" means the cumulative redeemable floating rate Class A Preferred Shares, series 8 of Pembina, issuable on conversion of the Series 7 Class A Preferred Shares. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares*";

"**Series 9 Class A Preferred Shares**" means the cumulative redeemable rate reset Class A Preferred Shares, series 9 of Pembina, issued April 10, 2015. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares*";

"**Series 10 Class A Preferred Shares**" means the cumulative redeemable floating rate Class A Preferred Shares, series 10 of Pembina, issuable on conversion of the Series 9 Class A Preferred Shares. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares*";

"**Series 11 Class A Preferred Shares**" means the cumulative redeemable minimum rate reset Class A Preferred Shares, series 11 of Pembina, issued January 15, 2016. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares* ";

"**Series 12 Class A Preferred Shares**" means the cumulative redeemable floating rate Class A Preferred Shares, series 12 of Pembina, issuable on conversion of the Series 11 Class A Preferred Shares. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares* ";

"**Series 13 Class A Preferred Shares**" means the cumulative redeemable minimum rate reset Class A Preferred Shares, series 13 of Pembina, issued April 27, 2016. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares* ";

"**Series 14 Class A Preferred Shares**" means the cumulative redeemable floating rate Class A Preferred Shares, series 14 of Pembina, issuable on conversion of the Series 13 Class A Preferred Shares. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares* ";

"**Series 15 Class A Preferred Shares**" means the cumulative redeemable rate reset Class A Preferred Shares, series 15 of Pembina, issued in exchange for the Veresen Series A Preferred Shares on October 2, 2017. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares*";

"**Series 16 Class A Preferred Shares**" means the cumulative redeemable floating rate Class A Preferred Shares, series 16 of Pembina, issuable on conversion of the Series 15 Class A Preferred Shares. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares* ";

"**Series 17 Class A Preferred Shares**" means the cumulative redeemable rate reset Class A Preferred Shares, series 17 of Pembina, issued in exchange for the Veresen Series C Preferred Shares on October 2, 2017. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares*";

"**Series 18 Class A Preferred Shares**" means the cumulative redeemable floating rate Class A Preferred Shares, series 18 of Pembina, issuable on conversion of the Series 17 Class A Preferred Shares. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares* ";

"**Series 19 Class A Preferred Shares**" means the cumulative redeemable rate reset Class A Preferred Shares, series 19 of Pembina, issued in exchange for the Veresen Series E Preferred Shares on October 2, 2017. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares*";

"**Series 20 Class A Preferred Shares**" means the cumulative redeemable floating rate Class A Preferred Shares, series 20 of Pembina, issuable on conversion of the Series 19 Class A Preferred Shares. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares* ";

"**Series 21 Class A Preferred Shares**" means the cumulative redeemable minimum rate reset Class A Preferred Shares, series 21 of Pembina, issued December 7, 2017. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares* ";

"**Series 22 Class A Preferred Shares**" means the cumulative redeemable floating rate Class A Preferred Shares, series 22 of Pembina, issuable on conversion of the Series 21 Class A Preferred Shares. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares* ";

"**Series 23 Class A Preferred Shares**" means the cumulative redeemable rate reset Class A Preferred Shares, series 23 of Pembina, issued in exchange for the KML Series 1 Preferred Shares on December 16, 2019. See "*Description of the Capital Structure of Pembina - Class A Preferred Shares*";

"**Series 24 Class A Preferred Shares**" means the cumulative redeemable floating rate Class A Preferred Shares, series 24 of Pembina, issuable on conversion of the Series 23 Class A Preferred Shares. See "*Description of the Capital Structure of Pembina - Class A Preferred Shares* ";

"**Series 25 Class A Preferred Shares**" means the cumulative redeemable rate reset Class A Preferred Shares, series 25 of Pembina, issued in exchange for the KML Series 3 Preferred Shares on December 16, 2019. See "*Description of the Capital Structure of Pembina - Class A Preferred Shares*";

"**Series 26 Class A Preferred Shares**" means the cumulative redeemable floating rate Class A Preferred Shares, series 26 of Pembina, issuable on conversion of the Series 25 Class A Preferred Shares. See "*Description of the Capital Structure of Pembina - Class A Preferred Shares*";

"**Series A Senior Notes**" has the meaning ascribed thereto under "*Description of the Capital Structure of Pembina – Other Debt*";

"**Series C Senior Notes**" has the meaning ascribed thereto under "*Description of the Capital Structure of Pembina – Other Debt*";

"**Series F Convertible Debentures**" means the 5.75 percent convertible unsecured subordinated debentures issued by Provident Energy Ltd. on April 29, 2011 and assumed by Pembina in April 2012, which matured on December 31, 2018;

"**shallow cut**" means sweet gas processing with propane and/or condensate-plus extraction capabilities;

"**Shareholders**" means the holders of Common Shares;

"**SMP**" has the meaning ascribed thereto under the heading "*Other Information Relating to Pembina's Business – Security Management Program*";

"**Sunrise Plant**" means Veresen Midstream's 400 MMcf/d gross gas plant in the Montney region;

"**Syncrude Pipeline**" means the pipeline system and related facilities delivering synthetic crude oil from the Syncrude Project into the Edmonton, Alberta area;

"**Syncrude Project**" means the joint venture that was formed for the recovery of oil sands, crude bitumen or products derived from the Athabasca oil sands, located near Fort McMurray, Alberta;

"**take-or-pay**" has the meaning ascribed thereto under "*Description of Pembina's Business and Operations – Overview of Pembina's Business – Pipelines Division – Conventional Pipelines – Firm Contracts*";

"**Taylor to Belloy Pipeline**" means the pipeline and related facilities delivering NGL from Taylor, British Columbia to Belloy, Alberta;

"**Taylor to Boundary Lake Pipeline**" means the pipeline and related facilities delivering sweet HVP hydrocarbon products from Taylor, British Columbia to Boundary Lake, Alberta;

"**Term Loan**" has the meaning ascribed thereto under "*General Developments of Pembina – Developments in 2018*";

"**throughput**" means volume of product delivered through a pipeline;

"**Tower Liquids Hub**" means Veresen Midstream's liquids handling facility located near the Sunrise, Tower and Saturn Phase II Plants;

"**Tower Plant**" means Veresen Midstream's 240 MMcf/d gross rich gas processing complex in the Montney region;

"**TSX**" means the Toronto Stock Exchange;

"Valleyview" refers to the Peace Pipeline pump station and terminal located near Valleyview, Alberta;

"**Vantage Pipeline**" means the HVP pipeline that links ethane from the North Dakota Bakken play to the petrochemical market in Alberta, originating from a large-scale gas plant in Tioga, North Dakota extending approximately northwest through Saskatchewan and terminating near Empress, Alberta, where it is connected to the AEGS;

"**Veresen**" means Veresen Inc.;

"**Veresen Acquisition**" has the meaning ascribed thereto under "*General Developments of Pembina – Developments in 2017*";

"**Veresen BAR**" means Pembina's business acquisition report dated October 26, 2017 in respect of the Veresen Acquisition;

"**Veresen Common Shares**" has the meaning ascribed thereto under "*General Developments of Pembina – Developments in 2017*";

"**Veresen Medium Term Note Indenture**" means the trust indenture dated November 22, 2011 between Veresen and Computershare Trust Company of Canada, as supplemented by the first supplemental note indenture dated March 14, 2012 between Veresen and Computershare Trust Company of Canada, as further supplemented by the second supplemental note indenture dated June 13, 2014 between Veresen and Computershare Trust Company of Canada, and as further supplemented by the third supplemental note indenture dated November 10, 2016 between Veresen and Computershare Trust Company of Canada, providing for the issuance of the Veresen Medium Term Notes;

"**Veresen Medium Term Notes, Series 1**" means the $150 million aggregate principal amount of medium term notes of Veresen issued November 22, 2011 and assumed by Pembina on October 2, 2017. See "*Description of the Capital Structure of Pembina – Medium Term Notes*";

"**Veresen Medium Term Notes, Series 3**" means the $50 million aggregate principal amount of medium term notes of Veresen issued March 14, 2012 and assumed by Pembina on October 2, 2017. See "*Description of the Capital Structure of Pembina – Medium Term Notes*";

"**Veresen Medium Term Notes, Series 4**" means the $200 million aggregate principal amount of medium term notes of Veresen issued June 13, 2014 and assumed by Pembina on October 2, 2017. See "*Description of the Capital Structure of Pembina – Medium Term Notes*";

"**Veresen Medium Term Notes, Series 5**" means the $350 million aggregate principal amount of medium term notes of Veresen issued November 7, 2016 and assumed by Pembina on October 2, 2017. See "*Description of the Capital Structure of Pembina – Medium Term Notes*";

"**Veresen Medium Term Notes**" means, collectively, the Veresen Medium Term Notes, Series 1, the Veresen Medium Term Notes, Series 3, the Veresen Medium Term Notes, Series 4 and the Veresen Medium Term Notes, Series 5;

"**Veresen Midstream**" means Veresen Midstream Limited Partnership, a limited partnership owned by a wholly-owned subsidiary of Pembina and affiliates of Kohlberg Kravis Roberts & Co. L.P.;

"**Veresen Preferred Shares**" means the Veresen Series A Preferred Shares, the Veresen Series B Preferred Shares, the Veresen Series C Preferred Shares, the Veresen Series D Preferred Shares, the Veresen Series E Preferred Shares and the Veresen Series F Preferred Shares;

"**Veresen Series A Preferred Shares**" means the cumulative redeemable preferred shares, series A of Veresen, issued February 14, 2012;

"**Veresen Series B Preferred Shares**" means the cumulative redeemable preferred shares, series B of Veresen, which were issuable on conversion of the Veresen Series A Preferred Shares;

"**Veresen Series C Preferred Shares**" means the cumulative redeemable preferred shares, series C of Veresen, issued October 21, 2013;

"**Veresen Series D Preferred Shares**" means the cumulative redeemable preferred shares, series D of Veresen, which were issuable on conversion of the Veresen Series C Preferred Shares;

"**Veresen Series E Preferred Shares**" means the cumulative redeemable preferred shares, series E of Veresen, issued April 1, 2015;

"**Veresen Series F Preferred Shares**" means the cumulative redeemable preferred shares, series F of Veresen, which were issuable on conversion of the Veresen Series E Preferred Shares;

"Wapiti" refers to the Peace Pipeline pump station and terminal located south of Wembley, Alberta;

"**WCSB**" means the Western Canadian Sedimentary Basin;

"**Western Pipeline**" means the pipeline system and related facilities delivering crude oil from Taylor, British Columbia to Prince George, British Columbia;

"**Williams Pipeline**" has the meaning ascribed thereto under " *Description of Pembina's Business and Operations – Overview of Pembina's Business –Pipelines Division – Transmission Pipelines*"; and

"**Younger**" has the meaning ascribed thereto under " *Description of Pembina's Business and Operations – Overview of Pembina's Business – Facilities Division – Gas Services*".

All dollar amounts set forth in this Annual Information Form are in Canadian dollars unless otherwise indicated. References to "$" or "C$" are to Canadian dollars and references to "US$" are to U.S. dollars. On February 26, 2020, the daily exchange rate reported by the Bank of Canada, was C$1.00 equals US$0.7515.

Except where otherwise indicated, all information in this Annual Information Form is presented as at the end of Pembina's most recently completed financial year, being December 31, 2019.

A reference made in this Annual Information Form to other documents or to information or documents available on a website does not constitute the incorporation by reference into this Annual Information Form of such other documents or such other information or documents available on such website, unless otherwise stated.

ABBREVIATIONS AND CONVERSIONS

In this Annual Information Form, the following abbreviations have the indicated meanings:

mbbls	thousands of barrels, each barrel representing 34.972 Imperial gallons or 42 U.S. gallons
mmbbls	millions of barrels
mbpd	thousands of barrels per day
mmbpd	millions of barrels per day
MMcf/d	million cubic feet per day
mboe/d	thousands of barrels of oil equivalent per day
mmboe/d	millions of barrels of oil equivalent per day
bcf/d	billion cubic feet per day
km	kilometres
CO_2e	carbon dioxide equivalent
MW	megawatt

Barrels of oil equivalent ("**boe**") may be misleading, particularly if used in isolation. A boe conversion ratio of 6 mcf of natural gas: 1 bbl of crude oil is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead.

The following table sets forth certain standard conversions between Standard Imperial Units and the International System of Units (or metric units).

To convert from	To	Multiply by
bbls	cubic metres	0.159
cubic metres	bbls	6.293
miles	kilometres	1.609
kilometres	miles	0.621

NON–GAAP MEASURES

Pembina's Financial Statements, which may be found on Pembina's profile on the SEDAR website at www.sedar.com, and in Pembina's annual report on Form 40-F filed on Pembina's profile on the EDGAR website at www.sec.gov, are presented in compliance with IFRS. Certain financial information included in such Financial Statements is contained or incorporated by reference within this Annual Information Form.

Readers should take note, however, that within this Annual Information Form, terms are used by management to evaluate the performance of Pembina and its businesses that are not defined by GAAP. 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, securities regulations require that non-GAAP measures be clearly defined, qualified and reconciled to their nearest GAAP measure. These non-GAAP measures are calculated and disclosed on a consistent basis from period to period. Specific adjusting items may only be relevant in certain periods; however, prior periods have not been restated as there is no significant impact.

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.

In particular, in this Annual Information Form, the terms "net revenue" and "adjusted EBITDA" are used to describe certain financial information of Pembina. Readers should be cautioned that net revenue and adjusted EBITDA are not defined by GAAP and are included in this Annual Information Form to describe certain financial information of Pembina and should not be construed as alternatives to revenue, earnings, gross profit, or other measures of financial results determined in accordance with GAAP as indicators of Pembina's performance.

"**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 the Marketing & New Ventures Division and the Facilities Division and to aggregate revenue generated by each of Pembina's divisions and to set comparable objectives.

Adjusted Earnings Before Interest, Taxes, Depreciation and Amortization ("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. 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.

For more information with respect to financial measures which have not been defined by GAAP, including reconciliations to the most directly comparable GAAP measure, see the "*Non–GAAP Measures*" section of the MD&A dated February 27, 2020 and posted on Pembina’s website at www.pembina.com, which sections are incorporated by reference herein.

FORWARD-LOOKING STATEMENTS AND INFORMATION

Certain statements contained in this Annual Information Form constitute "forward-looking statements" within the meaning of the *United States Private Securities Litigation Reform Act of 1995* and "forward-looking information" within the meaning of applicable Canadian securities legislation (collectively, "**forward-looking statements**"). All forward-looking statements are based on Pembina's current expectations, estimates, projections, beliefs, judgments and assumptions based on information available at the time the applicable forward-looking statement was made and in light of Pembina's experience and its perception of historical trends. 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", "propose", "goal", and similar expressions suggesting future events or future performance.

By their nature, 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 Annual Information Form should not be unduly relied upon. The forward-looking statements included herein speak only as of the date of the Annual Information Form.

In particular, this Annual Information Form contains forward-looking statements pertaining to, among other things, the following:

- the future levels and sustainability of cash dividends that Pembina intends to pay to its Shareholders, the dividend payment dates;
- planning, construction, capital expenditure estimates, schedules, regulatory and environmental applications and anticipated approvals, expected capacity, incremental volumes, in-service dates, rights, activities, benefits and operations with respect to new construction of, or expansions on existing pipelines, gas services facilities, 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 existing and proposed governmental regulatory regimes, including taxes, environmental, project assessment and greenhouse gas regulations and related abandonment and reclamation obligations, and Aboriginal, landowner and other stakeholder consultation requirements;
- Pembina's estimates of and strategy for payment of future abandonment costs and decommissioning obligations;
- Pembina's strategy and the development and expected timing of new business initiatives, 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 at 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 to fund growth plans, operating obligations and dividends and the use of proceeds from financings;
- future demand for Pembina's infrastructure and services;
- tolls and tariffs, and processing, transportation, fractionation, storage and services commitments and contracts;
- operating risks (including the amount of future liabilities related to pipeline spills and other environmental incidents) and related insurance coverage and inspection and integrity programs;
- inventory and pricing of commodities;
- the future success, growth, expansions, contributions, capacity expectations, results of operations, financial strength of certain of Pembina's Equity Accounted Investees;

- the future benefits and impacts of the Kinder Acquisition;
- compliance by the Company with integrity regulatory compliance requirements, including the effectiveness of related programs and systems;
- Pembina's commitment to, and the effectiveness and impact of its OMS and other operations and governance policies;
- the impact of the current commodity price environment on Pembina; and
- competitive conditions and Pembina's ability to position itself competitively in the industry.

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, tax rates and exchange rates and 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 participation in 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 with historical levels;
- 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 Pembina's 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 agreements will continue to perform their obligations 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 the forward-looking statements included in this Annual Information Form as a result of the material risk factors set forth below:

- the regulatory environment and decisions, and Aboriginal and landowner consultation requirements;
- the impact of competitive entities and pricing;

- the failure to realize the anticipated benefits or synergies of the Kinder Acquisition;
- reliance on third parties to successfully operate and maintain certain assets;
- labour and material shortages;
- reliance on key relationships 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 governmental or regulatory authorities, including changes in tax laws and treatment, changes in royalty rates, changes in regulatory processes or increased environmental regulation;
- fluctuations in operating results;
- adverse general economic and market conditions in Canada, North America and worldwide, including changes, or prolonged weaknesses, as applicable, in interest rates, foreign currency exchange rates, commodity prices, supply/demand trends and overall industry activity levels;
- constraints on, or the unavailability of, adequate infrastructure;
- changes in 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 including cyber-security risks;
- natural catastrophes; and
- other risk factors as set out in this Annual Information Form under " *Risk Factors*."

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.

CORPORATE STRUCTURE

Name, Address and Formation

Pembina Pipeline Corporation is a corporation amalgamated under the ABCA. It is the successor to Pembina Pipeline Income Fund (the " **Fund**") following the completion of the reorganization of the Fund from an income trust structure to a corporate structure by way of plan of arrangement involving the Fund, Pembina and the holders of the Fund's trust units, pursuant to which the trust was reorganized into Pembina on October 1, 2010. Pembina is also the successor to Veresen following the completion of the Veresen Acquisition on October 2, 2017, whereby, among other things, Pembina amalgamated with Veresen and the resulting entity continued as "Pembina Pipeline Corporation". Pembina's principal and registered office is located at Suite 4000, 585 - 8th Avenue S.W., Calgary, Alberta, T2P 1G1.

Pembina's Subsidiaries

The following chart indicates Pembina's material subsidiaries, including their jurisdictions of incorporation, formation or organization and the percentage of voting securities owned, or controlled or directed, directly or indirectly, by Pembina or its subsidiaries.

Principal Subsidiaries(1)	**Jurisdiction of Incorporation/Formation/ Organization**	**Ownership**
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%
Pembina Empress NGL Partnership	Alberta	100%
Ruby Blocker LLC	Delaware, U.S.	100%
Pembina Cochin LLC	Delaware, U.S.	100%

(1) Subsidiaries are omitted where, at Pembina's most recent financial year-end: (i) the total assets of the subsidiary do not exceed 10 percent of Pembina's consolidated assets; (ii) the revenue of the subsidiary does not exceed 10 percent of Pembina's consolidated revenue; and (iii) the conditions in (i) and (ii) would be satisfied if the omitted subsidiaries were aggregated, and the reference in (i) and (ii) changed from 10 percent to 20 percent.

Amended Articles

On May 13, 2013, Pembina filed articles of amendment under the ABCA to create a new class of shares, the Class A Preferred Shares, to change the designation and terms of the Class B Preferred Shares, and to increase the maximum number of directors of Pembina from eleven to thirteen, after receiving Shareholder approval for such amendments.

On October 2, 2017, Pembina filed articles of amendment under the ABCA to create the Series 15, Series 16, Series 17, Series 18, Series 19 and Series 20 Class A Preferred Shares.

On October 2, 2017, Pembina filed articles of amalgamation under the ABCA to effect the amalgamation of Pembina and Veresen pursuant to the Veresen Acquisition. Pursuant to the Veresen Acquisition, all of the outstanding Veresen Series A, C and E Preferred Shares were exchanged for Series 15, 17 and 19 Class A Preferred Shares, respectively. The Series 15, 17 and 19 Class A Preferred Shares have substantially the same terms and conditions as the previously outstanding Veresen Series A, C and E Preferred Shares. The Series 16, 18 and 20 Class A Preferred Shares have substantially the same terms and conditions as the Veresen Series B, D and F Preferred Shares.

On December 1, 2017, Pembina filed articles of amendment under the ABCA to create the Series 21 and Series 22 Class A Preferred Shares.

On June 25, 2019, Pembina filed articles of amendment under the ABCA to increase the limit on the number of Class A Preferred Shares Pembina is authorized to issue from 20 percent of the number of Common Shares issued and outstanding at the time of

issuance to a maximum of 254,850,850 Class A Preferred Shares, after receiving approval from the Shareholders and the holders of the Class A Preferred Shares for such amendment.

On December 16, 2019, Pembina filed articles of amendment under the ABCA to create the Series 23, Series 24, Series 25 and Series 26 Class A Preferred Shares. Pursuant to the Kinder Acquisition, all of the outstanding KML Series 1 and 3 Preferred Shares were exchanged for Series 23 and 25 Class A Preferred Shares, respectively. The Series 23 and 25 Class A Preferred Shares have substantially the same terms and conditions as the previously outstanding KML Series 1 and 3 Preferred Shares. The Series 24 and 26 Class A Preferred Shares have substantially the same terms and conditions as the KML Series 2 and 4 Preferred Shares.

GENERAL DEVELOPMENTS OF PEMBINA

During the three-year period ending on December 31, 2019 and 2020 year-to-date, Pembina continued to execute its business plan and advance its growth strategy as discussed below.

Developments in 2017

Jan 5	Pembina announced that it had received regulatory approval for and initiated construction on the NEBC Expansion.
Jan 20	Pembina issued and sold $300 million aggregate principal amount of Medium Term Notes, Series 8 and $300 million aggregate principal amount of Medium Term Notes, Series 9 pursuant to two pricing supplements dated January 17, 2017 under its 2015 Base Shelf Prospectus, as supplemented by a prospectus supplement thereto dated June 11, 2015. Pembina used the net proceeds from the sale of the Medium Term Notes, Series 8 and Series 9 to repay short-term debt, as well as to fund Pembina's capital program and other general corporate purposes. See "*Description of the Capital Structure of Pembina – Medium Term Notes*."
Feb 16	Pembina announced that it entered into a 20-year infrastructure development and service agreement (the " **KRIA Agreement**") with Chevron. The KRIA Agreement includes an area of dedication by Chevron, in the Duvernay resource play near Fox Creek. Under the KRIA Agreement, and subject to Chevron sanctioning development in the region, Chevron has the right to require Pembina to construct, own and operate gas gathering pipelines and processing facilities, liquids stabilization facilities and other supporting infrastructure for the area of dedication, together with Pembina providing long-term service for Chevron on its pipelines and fractionation facilities. In aggregate, and subject to internal Chevron and regulatory approvals, the infrastructure developed over the term of the KRIA Agreement has the potential to represent a multi-billion dollar investment by Pembina. While the KRIA Agreement and respective obligations of the parties are binding, infrastructure development remains contingent upon Chevron sanctioning development, as well as necessary environmental and regulatory approvals.
Mar 7	Pembina announced that its Board of Directors suspended its DRIP, effective April 25, 2017.
Apr 3	Pembina announced that its Board of Directors approved a 6.25 percent increase in its monthly Common Share dividend rate from $0.16 per Common Share to $0.17 per Common Share.
Apr 3	Pembina announced two new expansions to its Peace and Northern Pipeline systems for a total estimated capital cost of $325 million: (i) the Fox Creek and Namao pump stations ("**Phase IV Expansion**"), which is comprised of two pump stations on the 24 inch pipeline from Fox Creek to Namao; and (ii) the Lator to Fox Creek expansion ("**Phase V Expansion**"), an approximately 95 km, 20-inch pipeline from Lator to Fox Creek, both of which were placed into service in December 2018. The Phase IV Expansion increased pipeline capacity by an incremental 180 Mbpd and the Phase V Expansion increased pipeline capacity by an incremental 260 Mbpd.
Apr 11	Pembina announced that it signed a non-binding letter of intent with Prince Rupert Legacy Inc. (a wholly-owned subsidiary of the City of Prince Rupert) for Pembina to develop a liquefied petroleum gas terminal on Watson Island (the "**Prince Rupert Terminal**"), lands wholly owned by Prince Rupert Legacy Inc.
May 1	Pembina announced that it entered into an arrangement agreement with Veresen, whereby Pembina offered to acquire all of the issued and outstanding shares of Veresen by way of a plan of arrangement under the ABCA.
May	Pembina announced that Grant Billing did not stand for re-election and Bruce D. Rubin had been appointed to Pembina's Board of Directors.
May 15	Pembina announced that it, along with PIC, reached key milestones for the previously announced proposed integrated propylene and polypropylene production facility in Sturgeon County, Alberta, including 50/50 joint venture agreements and the formation of CKPC.
Jun 30	Pembina placed its Phase III Expansion into service.
Jun 30	Pembina announced that in conjunction with the Phase III Expansion, RFS III was also placed into service. Backstopped by long-term, take-or-pay contracts, RFS III added 55 Mbpd of additional propane-plus fractionation capacity and leveraged the designs of RFS I and RFS II. This resulted in Pembina’s Redwater complex having an aggregate fractionation capacity of approximately 210 Mbpd.

July 1	Scott Burrows was appointed as the Senior Vice President and Chief Financial Officer of Pembina, and Harry Andersen was appointed as the Senior Vice President, External Affairs & Chief Legal Officer of Pembina.
July 11	Pembina announced that the common and preferred shareholders of Veresen, at separate special meetings of shareholders, voted to approve the Veresen Acquisition.
July 12	Pembina announced that the Court of Queen's Bench of Alberta approved the Veresen Acquisition.
Aug 16	Pembina issued and sold $350 million aggregate principal amount of Medium Term Notes, Series 8 and $250 million aggregate principal amount of Medium Term Notes, Series 9, through a re-opening, pursuant to its 2017 MTN Prospectus, as supplemented by two pricing supplements thereto dated August 14, 2017. Pembina used the net proceeds from the sale of the Medium Term Notes, Series 8 and Series 9 to repay short-term indebtedness, as well as to fund Pembina's capital program and for other general corporate purposes. See "*Description of the Capital Structure of Pembina – Medium Term Notes* ."
Sept 28	Pembina announced additional project enhancements to the Phase V Expansion which would increase pipeline capacity by an incremental 45 Mbpd upstream of La Glace.
Oct 2	Pembina announced the closing of its acquisition of Veresen ("**Veresen Acquisition**") pursuant to which Pembina acquired all of the issued and outstanding common shares of Veresen ("**Veresen Common Shares**") and Veresen Preferred Shares, by way of a plan of arrangement under the ABCA, in accordance with the terms and conditions of the arrangement agreement dated May 1, 2017 between Pembina and Veresen. Pursuant to the Veresen Acquisition, Veresen subsequently amalgamated with Pembina and continued under the name "Pembina Pipeline Corporation". Additional information relating to the Veresen Acquisition is provided in the Veresen BAR, which has been filed on SEDAR.
Oct 2	Pembina announced that its Board of Directors approved a 5.88 percent increase in its monthly Common Share dividend rate from $0.17 per Common Share to $0.18 per Common Share.
Oct 2	Maureen Howe, Henry Sykes and Doug Arnell were appointed to the Board of Directors.
Nov 1	Pembina placed its NEBC Expansion and its lateral in the Altares area of British Columbia into service.
Nov 1	Pembina placed its Duvernay Complex into service, which included Duvernay I and the associated field hub.
Nov 6	Pembina announced that it executed agreements to construct and operate the first tranche of infrastructure development under the KRIA Agreement, including raw product separation and water removal, a condensate stabilization facility with approximately 30 Mbpd of raw inlet condensate handling capacity, a 100 MMcf/d gas processing facility with approximately 5 Mbpd of propane-plus liquids capacity and a 10-inch condensate pipeline lateral that will connect to the Peace Pipeline, for an expected capital cost of $290 million, with an anticipated in-service date of mid to late 2019.
Nov 29	Pembina announced its capital spending plan of approximately $1.3 billion for 2018, directed mainly at multi-year execution projects and long-term value creation.
Nov 29	Pembina announced that its Board of Directors approved the development of the Prince Rupert Terminal, with an expected capacity of approximately 25 Mbpd, and an expected in-service date in mid-2020, subject to the receipt of necessary regulatory and environmental approvals.
Nov 29	Pembina announced the sanctioning of the development of a liquids hub ("**North Central Liquids Hub**"), which supports operations for CRP within the Montney region. This project is being advanced through Veresen Midstream. The North Central Liquids Hub will provide separation and stabilization of increased condensate volumes from CRP to support the recently in-service Sunrise Plant and Saturn Phase II Plant.
Dec 7	Pembina completed a bought deal offering of 16,000,000 Series 21 Class A Preferred Shares at a price of $25.00 per Series 21 Class A Preferred Share pursuant to a prospectus supplement dated November 30, 2017 under its 2017 Base Shelf Prospectus, for aggregate gross proceeds of $400 million. Pembina used the net proceeds from the sale of the Series 21 Class A Preferred Shares for capital expenditures and to reduce its indebtedness under the Credit Facilities. See "*Description of the Capital Structure of Pembina – Class A Preferred Shares*."

Developments in 2018

Jan 2	Pembina announced the appointment of newly created positions within Pembina's executive team effective January 1, 2018, reporting to Mick Dilger, Pembina's President and Chief Executive Officer: Jason Wiun, Senior Vice President and Chief Operating Officer, Pipelines; Jaret Sprott, Senior Vice President and Chief Operating Officer, Facilities; Stu Taylor, Senior Vice President Marketing and New Ventures and Corporate Development Officer; and Paul Murphy, Senior Vice President and Corporate Services Officer.
Jan 23	Veresen Midstream placed its Saturn Phase II Plant into service.

Mar 9	Pembina extended its revolving credit facility to May 31, 2023. Concurrently, Pembina entered into a $1 billion non-revolving term loan facility (the "**Term Loan**") for an initial three-year term that is pre-payable at the Company's option. The other terms and conditions of the Term Loan, including financial covenants, are substantially similar to Pembina's Revolving Credit Facility.

Mar 26	Pembina issued and sold $400 million aggregate principal amount of Medium Term Notes, Series 10 and $300 million aggregate principal amount of Medium Term Notes, Series 11, pursuant to its 2017 MTN Prospectus, as supplemented by two pricing supplements thereto dated March 22, 2018. Pembina used the net proceeds from the sale of the Medium Term Notes, Series 10 and Series 11 to repay short-term indebtedness, as well as to fund Pembina's capital program and for other general corporate purposes. See "*Description of the Capital Structure of Pembina – Medium Term Notes* ."
Mar 28	Pembina commenced a binding open season for expansion capacity commitments on the Alliance Pipeline.
Mar 29	Ruby Pipeline, L.L.C., in which Pembina owns a 50 percent preferred interest, amended the maturity date of its US$203 million 364-day term loan, originally maturing March 30, 2018 to March 28, 2019. The term loan will continue to amortize at US$15.6 million per quarter (US$7.8 million net), beginning March 30, 2018, until a final bullet payment of US$141 million (US$71 million net) is payable on the amended maturity date.
Apr 4	Pembina entered into a note exchange agreement with holders of senior notes previously issued by AEGS (" **AEGS Notes**") to exchange the AEGS Notes for Series A Senior Notes of Pembina under Pembina's Note Indenture. The coupon for the Series A Senior Notes remained the same at 5.565 percent per annum and they are non-amortizing with a bullet payment of $73 million at maturity on May 4, 2020.
Apr 9	Pembina changed its operations management structure to be organized by three divisions: Pipelines, Facilities and Marketing & New Ventures and was effective January 1, 2018.
Apr 20	Veresen Midstream amended its senior secured credit facilities that were originally scheduled to mature on March 31, 2020. Under the term of the amendment and extension reached with a syndicate of lenders, Veresen Midstream increased its borrowing capacity to $200 million under the revolving credit facility and to $2.550 billion of availability under the term loan A and used the proceeds to repay an existing US$705 million term loan B on April 30, 2018. Other terms and conditions in the facilities were modified to reflect the operating nature of the business, including modifying the covenant package and increasing the permitted distributions out of Veresen Midstream. The maturity date of the two debt facilities was extended to April 20, 2022.
May 3	Pembina announced a further expansion of its Peace Pipeline system for a total estimated capital cost of $280 million (" **Phase VI Expansion**"), which is comprised of upgrades at Gordondale, a 16-inch pipeline from La Glace to Wapiti, Alberta and associated pump station upgrades, and a 20-inch pipeline from Kakwa to Lator, with an expected in-service date in the second half of 2019, subject to environmental and regulatory approvals.
Sept 24	Pembina announced that it will be developing additional pipeline and terminalling infrastructure in the Wapiti region near Grande Prairie, Alberta and in northeastern British Columbia for the capital cost of $120 million.
Nov 1	Pembina announced a further expansion of the Peace Pipeline system (" **Phase VII Expansion**"), which is comprised of a new 20-inch, approximately 220 km pipeline in the La Glace-Valleyview-Fox Creek corridor, as well as six new pump stations, between La Glace and Edmonton, Alberta. The Phase VII Expansion will add approximately 240,000 bpd of incremental capacity upstream of Fox Creek accessing capacity available on the mainlines downstream of Fox Creek, with an expected in-service date in the first half of 2021.
Nov 1	Pembina announced that it and Veresen Midstream had executed binding agreements whereby Veresen Midstream will construct natural gas gathering and processing infrastructure in the Pipestone Montney region with Pembina also constructing various laterals connecting to the company's Peace Pipeline system. The infrastructure consists of several separate projects: (i) an expansion of up to 125 MMcf/d (57 MMcf/d net to Pembina), of sour gas processing at Veresen Midstream's existing Hythe facility (the "**Hythe Gas Plant**"); (ii) the construction, by Veresen Midstream, of a new, approximately 60 km, 12-inch sour gas pipeline to transport natural gas to the Hythe Gas Plant; and (iii) the construction, by Pembina, of various laterals to connect to Pembina's Peace Pipeline system. The Hythe developments have an expected in-service date in late 2020, subject to regulatory and environmental approvals.
Nov 1	Pembina announced that it executed further agreements to construct and operate the second tranche of infrastructure development under the KRIA Agreement, including (i) a 100 MMcf/d sweet gas, shallow cut processing facility with approximately 5 Mbpd of propane-plus liquids capacity (the "**Duvernay III**"); (ii) a condensate stabilization facility with approximately 20,000 bpd of raw inlet condensate handling capacity; and (iii) water handling infrastructure, for an expected capital cost of $165 million with an anticipated in-service date of mid-to-late 2020, subject to regulatory and environmental approvals.
Dec 10	Pembina announced its capital spending plan of approximately $1.6 billion for 2019, directed mainly at multi-year execution projects and long-term value creation.
Dec 17	Pembina announced the release of its inaugural sustainability report highlighting its environmental, social and governance performance.
Dec 31	Pembina's Series F Convertible Debentures matured on December 31, 2018.
Dec	Phase IV and Phase V were placed into service.

Developments in 2019

Jan 14	Pembina placed its ethane storage facility, with capacity of 1 mmbbls, near Burstall, Saskatchewan into service.
Jan 31	Pembina announced a further expansion of the Peace Pipeline system (" **Phase VIII Expansion**"), which is comprised of a new 10-inch and 16-inch pipeline in the Gordondale to La Glace corridor as well as a series of pump stations located between Gordondale and Fox Creek. Complete sanctioning of the Phase VIII Expansion remains subject to securing sufficient long-term, take-or-pay commitments, with an expected in-service date in the first half of 2022. The Phase VIII Expansion has an estimated capital cost of approximately $500 million and is supported by 10-year contracts with take-or-pay provisions. Phase VIII is anticipated to be placed into service in stages starting in 2020 through the first half of 2022, subject to regulatory and environmental approvals.
Feb 4	Pembina and PIC announced the positive final investment decision on the previously announced $4.5 billion, 550,000 tonne per annum integrated propane dehydrogenation plant and polypropylene upgrading facility in Sturgeon County, Alberta (the "**PDH/PP Facility**"), through their equally-owned joint venture entity, CKPC. The PDH/PP Facility will be located adjacent to RFS and will convert approximately 23 Mbpd of locally supplied propane into polypropylene, a high value polymer used in a wide range of finished products, including automobiles, medical devices, food packaging and home electronic appliances, among others. Pembina's net investment is expected to be $2.5 billion. This project is expected to be in-service mid-2023, subject to environmental and regulatory approvals.
Feb 6	Pembina announced Mr. Doug Arnell's resignation from the Board.
Mar 28	Ruby Pipeline, L.L.C. amended the maturity date of its 364-day term loan, originally maturing March 28, 2019 to March 26, 2020. The term loan will continue to amortize at US$16 million per quarter (US$8 million net), beginning March 30, 2019, until a final bullet payment of US$78 million (US$39 million net to Pembina) is payable on the amended maturity date.
Mar 29	Pembina placed its 45 MW co-generation facility at Redwater into service.
Apr 3	Pembina issued and sold $400 million aggregate principal amount of Medium Term Notes, Series 12 and $400 million aggregate principal amount of Medium Term Notes, Series 13, pursuant to its 2017 MTN Prospectus, as supplemented by two pricing supplements thereto dated April 1, 2019. Pembina used the net proceeds from the sale of the Medium Term Notes, Series 12 and Series 13 to repay short-term indebtedness under the Credit Facilities, as well as to fund Pembina's capital program and for general corporate purposes. See "*Description of the Capital Structure of Pembina - Medium Term Notes* ."
May 2	Pembina announced that its Board of Directors approved a 5.3 percent increase in its monthly Common Share dividend rate from $0.19 per Common Share to $0.20 per Common Share.
May 2	Pembina announced that it had executed further agreements with Chevron to construct sour gas treating facilities at the Duvernay Complex ("**Duvernay Sour Treatment Facilities** "). The Duvernay Sour Treatment Facilities will include a 150 MMcf/d sour gas sweetening system with 300 MMcf/d of amine regeneration capability and up to one tonne of sulphur per day of acid gas incineration. The Duvernay Sour Treating Facilities will have a 20-year contractual life and will be back-stopped by fixed-return arrangements. The Duvernay Sour Treatment Facilities have an expected capital cost of $65 million and an anticipated in-service date in the first quarter of 2020, subject to environmental and regulatory approvals.
Aug 21	Pembina announced that it had entered into agreements to acquire KML (the " **Kinder Morgan Canada Acquisition**") and the U.S. portion of the Cochin pipeline system from Kinder Morgan, Inc. (the "**Cochin U.S. Acquisition**" and, together with the Kinder Morgan Canada Acquisition, the "**Kinder Acquisition**") for a total purchase price of approximately $4.35 billion (adjusted post-closing to $4.255 billion).
Aug 30	Pembina filed its 2019 Base Shelf Prospectus and 2019 MTN Prospectus.
Sept 10	Pembina announced that it had agreed with KML to amend and restate the arrangement agreement in respect of the Kinder Morgan Canada Acquisition to include the acquisition of the outstanding KML Preferred Shares in exchange for Class A Preferred Shares of Pembina, subject to the approval of the holders of the KML Preferred Shares.
Sept 12	Pembina issued and sold $600 million aggregate principal amount of Medium Term Notes, Series 14, $600 million aggregate principal amount of Medium Term Notes, Series 15 and $300 million aggregate principal amount of Medium Term Notes, Series 13, through a re-opening, pursuant to its 2019 MTN Prospectus, as supplemented by three pricing supplements thereto dated September 9, 2019. Pembina used the net proceeds from the sale of the Medium Term Notes, Series 14, Series 15 and Series 13 to repay short-term indebtedness under the Term Loan, as well as to fund Pembina's capital program and for general corporate purposes. See "*Description of the Capital Structure of Pembina - Medium Term Notes* ."
Sept 26	Veresen Midstream amended its senior secured credit facilities that were originally scheduled to mature on April 20, 2022. Under the term of the amendment and extension reached with a syndicate of lenders, Veresen Midstream increased its borrowing capacity to $225 million under the revolving credit facility and to $2.60 billion of availability under the term facility. Amortization payments under the term facility were deferred for 24 months, recommencing on September 30, 2021. The maturity date of the two debt facilities was extended to April 20, 2024.

Nov 1 Pembina announced the first stage of a further expansion of its Peace Pipeline system (" **Phase IX Expansion**"), which is comprised of new 6-inch and 16-inch pipelines debottlenecking the corridor north of Gordondale, upgrades at one pump station and the conversion of existing pipelines, which are currently batching, into single product lines. The Phase IX Expansion has an estimated cost of $100 million and is supported by 10-year contracts with predominantly investment grade counterparties under significant take-or-pay obligations. Phase IX is anticipated to be placed into service in the fourth quarter of 2021, subject to regulatory and environmental approvals.

Pembina also announced that its Board of Directors approved the development of a $120 million co-generation facility at Empress, with an expected in-service date in mid-2022, subject to regulatory and environmental approval.

Dec 10 Pembina announced that the holders of the KML Voting Shares and the KML Preferred Shares, at separate special meetings of shareholders, voted to approve the Kinder Morgan Canada Acquisition. Pembina also announced that the Court of Queen's Bench of Alberta approved the Kinder Morgan Canada Acquisition.

Dec 16 Pembina announced the closing of the Kinder Acquisition. Pembina also announced that its Board of Directors approved a 5 percent increase in its monthly Common Share dividend rate from $0.20 per Common Share to $0.21 per Common Share.

Developments to date in 2020

Jan 7 Pembina announced the execution of a lump sump engineering, procurement and construction contract related to the construction of the CKPC PDH facility within its integrated PDH and PP upgrading facility (the "**PDH EPC**"). in connection with the execution of the PDH EPC, CKPC fixed approximately 60% of the cost of the PDH/PP facility and Pembina revised its proportionate share of the capital cost of the PDH/PP Facility, including the 100 percent directly-owned supporting facilities, from $2.5 billion to $2.7 billion.

Jan 10 Pembina issued and sold $250 million aggregate principal amount of Medium Term Notes, Series 10, $500 million aggregate principal amount of Medium Term Notes, Series 11 and $250 million aggregate principal amount of Medium Term Notes, Series 12, through a re-opening, pursuant to its 2019 MTN Prospectus dated August 30, 2019, as supplemented by related pricing supplements dated January 8, 2020. Pembina used the net proceeds from the sale of the Medium Term Notes, Series 10, Series 11 and Series 12 to repay short-term indebtedness, as well as to fund Pembina's capital program and other general corporate purposes. See "*Description of the Capital Structure of Pembina - Medium Term Notes.* "

Feb 3 CKPC entered into a reimbursable engineering and procurement services contract with TR Canada E&C Inc. (" **TR**") for the PP plant.

Feb 27 CKPC closed a syndicated senior secured credit agreement consisting of a US$1.7 billion amortizing term facility, and a US$150 million revolving facility, which has been guaranteed equally by the owners through the completion of construction on a several basis. The final maturity date of the term facility and revolving facility is February 27, 2027.

DESCRIPTION OF PEMBINA'S BUSINESS AND OPERATIONS

Pembina Business Objective:

Pembina strives to be the leader in delivering integrated infrastructure solutions connecting global markets. The Company expects that it will successfully achieve this vision if:

- customers choose us first for reliable and value-added services;
- investors receive sustainable industry-leading 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.

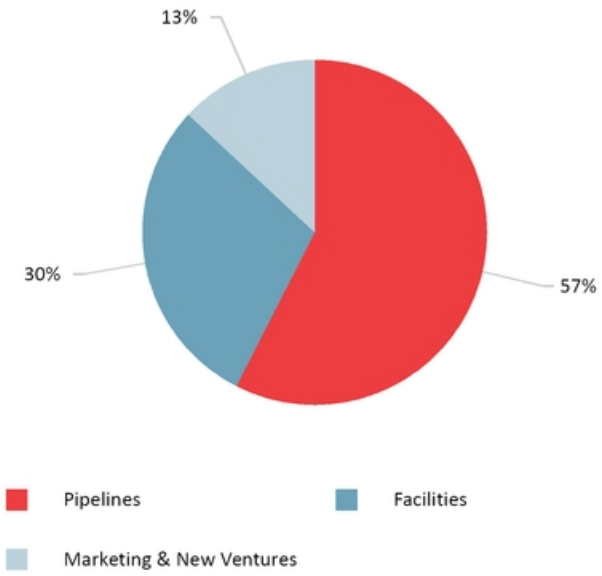
Overview of Pembina's Business

There are three general sectors in the oil and gas industry: upstream, midstream and downstream. The upstream sector encompasses exploration for, and production of, hydrocarbon liquids in their raw forms. In the midstream sector, hydrocarbon products are gathered, processed, transported and marketed to the downstream sector. The downstream sector consists of refineries, petrochemical facilities, end-use customers, local distributors and wholesalers.

Pembina is a leading transportation and midstream service provider that has been serving North America's energy industry for 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; is growing an export terminals business; and is currently constructing a petrochemical facility to convert propane into polypropylene. 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 WCSB and the other basins where Pembina operates can reach the highest value markets throughout the world.

Pembina is structured into three divisions: Pipelines Division, Facilities Division and Marketing & New Ventures Division; which are described in their respective sections of this Annual Information Form.

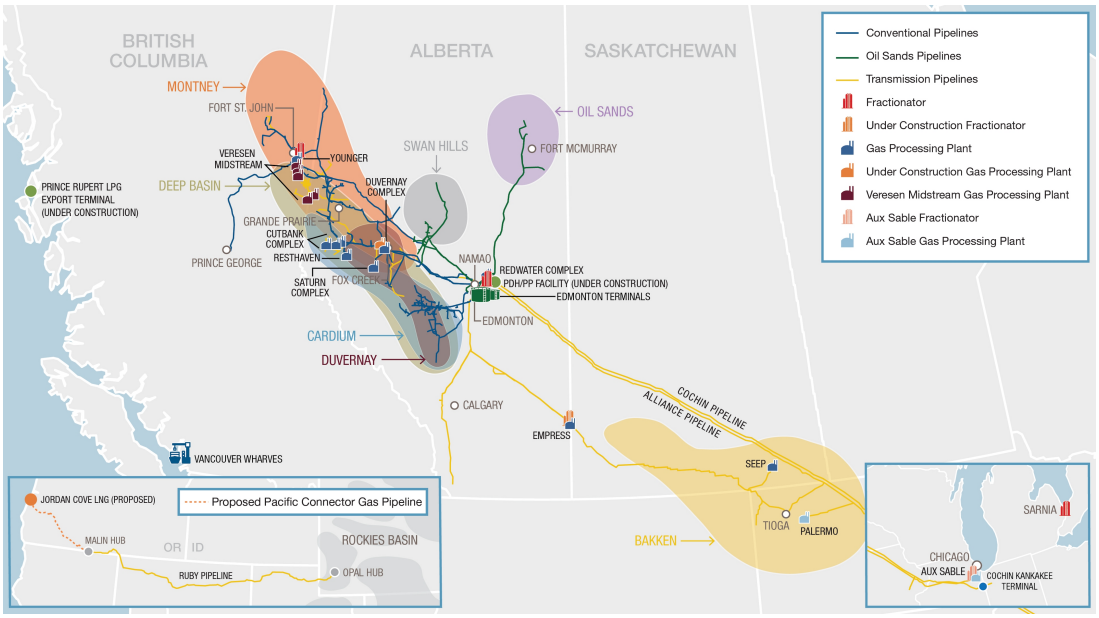
The adjusted EBITDA(2) in 2019 from each of Pembina's three divisions (1) was as follows:



(1) Excluding corporate segment and inter-division eliminations.

(2) See "Non-GAAP Measures".

The following map illustrates Pembina's primary assets:



The following table sets forth certain financial highlights for 2019 and 2018.

Financial Highlights
(in $ millions unless otherwise noted)

	Pipelines		Facilities		Marketing & New Ventures		Corporate & Inter-division Eliminations		Total	
($ millions)	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018
Revenue	**1,787**	1,588	**1,121**	1,014	**4,804**	5,175	**(482)**	(426)	**7,230**	7,351
Cost of goods sold, including product purchases	**—**	—	**4**	8	**4,417**	4,789	**(311)**	(282)	**4,110**	4,515
Net revenue(1)	**1,787**	1,588	**1,117**	1,006	**387**	386	**(171)**	(144)	**3,120**	2,836
Adjusted EBITDA(1)	**1,854**	1,703	**955**	880	**423**	409	**(171)**	(157)	**3,061**	2,835

(1) See the "*Non–GAAP Measures*" section.

Further discussion of financial and operational results and new developments for Pembina's business segments for the years ended December 31, 2019 and 2018 is contained in the section "Segment Results" in the MD&A, which section is incorporated by reference herein.

Pipelines Division

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 manages pipeline transportation capacity of 3.1 mmboe/d(1), above ground storage of 11 mmbls(1) and rail terminalling capacity of approximately 145 mboe/d (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 crudes, 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 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 products 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.

(1) Net capacity; excludes projects under development.

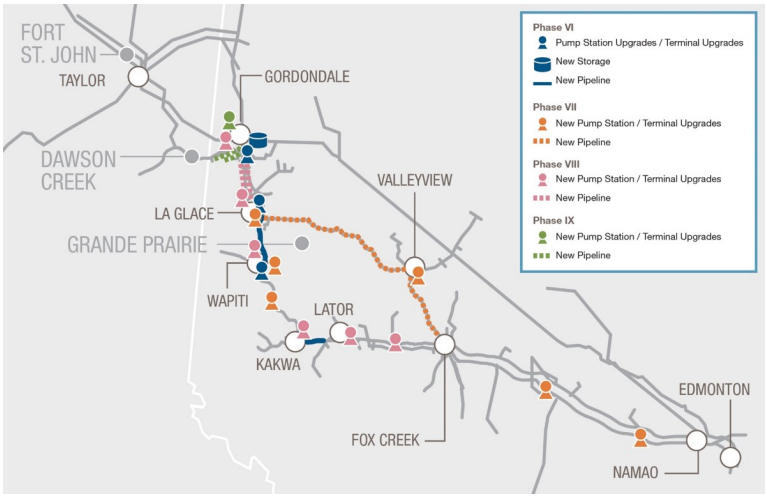
Conventional Assets

Pembina's primary conventional assets include the following:

- The Peace Pipeline system, which includes approximately 3,500 km of pipelines, including gathering laterals, that transport NGL, crude oil and condensate from northwestern Alberta to Edmonton, Alberta and to Fort Saskatchewan, Alberta.

- The Northern Pipeline system, which includes approximately 700 km of pipelines, including gathering laterals, that transport NGL from Belloy, Alberta to Fort Saskatchewan, Alberta;

- Pembina continues to experience growing customer demand for transportation services to support development of the Montney, Duvernay and other resource plays and is currently undertaking additional intra-Alberta expansions of the Peace and Northern Pipeline systems as follows:



  - The Phase VI Expansion ("**Phase VI**"), which includes upgrades at Gordondale; a 16-inch pipeline in the La Glace to Wapiti corridor and associated pump station and terminal upgrades; and a 20-inch pipeline in the Kakwa to Lator corridor. The expansion is anticipated to be placed into service in stages, starting in the first quarter of 2020 through mid-2020;

  - The Phase VII Expansion ("**Phase VII**"), which includes a 20-inch, approximately 220 km pipeline in the La Glace-Valleyview-Fox Creek corridor, and six new pump stations or terminal upgrades, between La Glace and Edmonton, Alberta. Phase VII will add approximately 240 mbpd of incremental capacity upstream of Fox Creek, accessing capacity available on the mainlines downstream of Fox Creek. Phase VII is anticipated to be in service in the first half of 2021, subject to environmental and regulatory approvals. Upon completion of Phase VII, Pembina will have 1.1 mmbpd of Edmonton, Alberta area market delivery capacity across the Peace Pipeline and Northern Pipeline systems;

- The Phase VIII Expansion ("**Phase VIII**"), which includes 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. Phase VIII will enable segregated pipeline service for ethane-plus and propane-plus NGL mix from the central Montney area near Gordondale into the Edmonton, Alberta area for market delivery. Phase VIII is anticipated to be in service in stages starting in 2020 through the first half of 2022, subject to regulatory and environmental approvals; and

- The first stage of the Phase IX Expansion (" **Phase IX**"), which will include 6-inch and 16-inch pipelines, as well as upgrades at one pump station, that will debottleneck the corridor north of Gordondale and convert currently batched pipelines into single product lines. Phase IX is anticipated to be placed into service in the fourth quarter of 2021, subject to regulatory and environmental approvals;

  Once Phase IX is complete, Pembina will have completed its objective of achieving segregated liquids transportation service for ethane-plus, propane-plus, crude and condensate between Gordondale and the Edmonton, Alberta area. Pembina continues to have the ability to add approximately 200 mbpd of capacity to its pipelines in the Fox Creek to Namao corridor through a second stage of the Phase IX expansion. This would include the addition of pump stations on these mainlines;

- The Drayton Valley Pipeline system, which includes approximately 1,100 km of pipelines, including gathering laterals, that transport crude oil and condensate from the area southwest of Edmonton, Alberta to Edmonton;

- The NEBC Pipeline system, which includes approximately 350 km of pipelines, including gathering laterals, that transport NGL, crude oil and condensate from northeastern British Columbia to Taylor, British Columbia;

- The Western Pipeline system, which includes approximately 400 km of pipelines, including gathering laterals, that transport crude oil from Taylor, British Columbia to Prince George, British Columbia;

- The LGS, which includes approximately 400 km of pipelines, including gathering laterals, that transport NGL from northeastern British Columbia to Gordondale;

- The Brazeau NGL Pipeline system, which includes approximately 500 km of pipelines, including gathering laterals, that transport NGL from natural gas processing plants southwest of Edmonton, Alberta to Fort Saskatchewan, Alberta;

- The Canadian Diluent Hub ("**CDH**"), which includes approximately 500 mbbls of above ground storage, provides direct connectivity for domestic and U.S. condensate volumes to the oil sands via downstream third-party pipelines;

- The Edmonton North Terminal (" **ENT**"), which includes approximately 900 mbbls of above ground storage having access to crude oil, synthetic crude oil and condensate supply transported on Pembina's operated pipelines and products from various third-party operated pipelines; and

- 14 truck terminals, which provide pipeline and market access for crude oil and condensate production that is not pipeline connected.

There are approximately 65 shippers on the conventional pipeline systems owned and operated by Pembina. The primary delivery points for hydrocarbon products from Pembina include: the Enbridge pipeline systems for multiple products; the Pembina North 40 terminal and the Trans Mountain pipeline system at Edmonton, Alberta; the Strathcona refinery in the Edmonton area; Pembina's CDH near Fort Saskatchewan, Alberta; a refinery located in Prince George, British Columbia; AEGS and all major NGL fractionators near Fort Saskatchewan, Alberta.

Pembina's conventional terminals are configured to access and provide services for the common grades of Canadian crude oil, as well as access domestic and imported condensate streams. The terminals provide essential services for Pembina's customers with outbound delivery flexibility and above ground storage.

At Pembina's truck terminals, the Company's customer base generally comprises the same producers who seek to transport various products, including condensate, on Pembina's conventional and oil sands and heavy oil systems. Truck terminals are particularly attractive to those producers who are unable to justify pipeline/oil battery connections due to relatively low daily production or are producing in advance of being pipeline connected.

The contracts related to conventional assets are fee-for-service in nature, but vary in their structure as follows:

Firm Contracts: Pembina focuses on securing base volumes on its Peace Pipeline and Northern Pipeline systems under a firm contract structure, where a fee-for-service toll, which includes flow-through operating costs for power and extraordinary events, is set under the contract and customers receive a firm amount of pipeline capacity for the transportation of their product. Under firm contracts, customers also agree to a minimum revenue or volume commitment ("**take-or-pay**").

Cost-of-Service Contracts: Pembina's conventional pipelines in British Columbia are operated under a cost-of-service methodology whereby Pembina flows through the actual operating costs of the systems to shippers while recovering a negotiated return on invested capital. Although there are no volume commitments from the shippers, there is an obligation for Pembina to hold fixed capacity for the shippers and the shippers have an obligation to pay their share of the rate base and operating costs whether they use all of the fixed capacity or not.

Non-Firm or Interruptible Contracts: Capacity on conventional assets that has not been secured under the "Firm Contracts " or "Cost-of-Service" structures described above is contracted under fee-for-service, month-to-month contracts on an interruptible basis that allow Pembina to adjust tolls for actual volumes, operating expenses and capital expenditures on a periodic basis. These contracts do not require Pembina to guarantee a specified amount of dedicated capacity for a customer. Rather, customers nominate volumes on a monthly basis and tariffs are set periodically by receipt point.

The majority of crude oil, condensate and NGL product transported on the Peace Pipeline and Northern Pipeline systems are contracted under long-term, Firm Contracts.

Services provided on other assets and systems such as the Drayton Valley Pipeline, LGS, Brazeau Pipeline, CDH, and ENT are generally under Interruptible Contracts.

Competition among existing crude oil, condensate and NGL pipelines is based primarily on the cost of transportation, access to supply, the quality and reliability of service, contract carrier alternatives, proximity and access to markets and additional service offerings.

Pembina's conventional pipelines are feeder pipelines that move products in the field from batteries, processing facilities and storage tanks to facilities, markets and export pipelines primarily in the Edmonton, Alberta and Fort Saskatchewan, Alberta area as outlined above. The majority of Pembina's conventional pipelines are connected to existing oil batteries and other facilities. Existing volumes generally remain connected to the applicable pipeline system until it is uneconomic to continue providing pipeline transportation services. This can occur for numerous reasons, including low volumes or increased integrity maintenance costs, in which case the connection may be discontinued and the producer may truck volumes to an alternate delivery point. With Pembina's track record of safe, reliable and cost-effective operations, service tenure, the complex and integrated nature of its systems and high levels of customer service, it is difficult for a competitor to replicate Pembina's service offering.

Unlike connected facilities, unconnected volumes of product are typically trucked to the most cost-effective truck unloading facility and there is direct competition from numerous service providers serving the same area. Typically, a producer's selection of a truck terminal is only partially based on tolls. It may also be based on whether the volumes need some form of treatment to meet pipeline specifications, or arbitrage opportunities associated with the product. Pembina owns truck terminals to assist in aggregating unconnected volumes onto its systems. There are several other pipelines and terminal operators which compete for trucked volumes in Pembina's operating areas. Competition for these volumes include local market fractionators for NGL, as well as rail and numerous pipelines connected to terminal operations for crude oil and condensate.

Producer activity focused on NGL development continues in the Deep Basin Cretaceous, Montney and Duvernay resource areas served by Pembina's Peace Pipeline and Northern Pipeline systems. Pembina has successfully been able to leverage its existing assets to provide incremental capacity in these areas, as evidenced by Pembina's numerous pipeline expansion projects.

Oil Sands and Heavy Oil Assets

Pembina's primary oil sands and heavy oil assets include the following:

- The Syncrude Pipeline, an approximately 450 km pipeline, which has a capacity of 389 mbpd. Pembina is the sole transporter of synthetic crude oil for the Syncrude Project to delivery points near Edmonton, Alberta;

- The Horizon Pipeline, an approximately 500 km pipeline, which has a capacity of 335 mbpd. Pembina is the sole transporter of synthetic crude oil for the Horizon Project to delivery points near Edmonton, Alberta;

- The Cheecham Lateral, an approximately 50 km pipeline, which has a capacity of 230 mbpd and transports synthetic crude oil from a common pump station on the Syncrude Pipeline and Horizon Pipeline to a terminalling facility located near Cheecham, Alberta, where it is then used as diluent for oil sands producers operating southeast of Fort McMurray, Alberta;

- The Nipisi and Mitsue Pipelines, including approximately 700 km of pipelines, which have a total net capacity of 133 mbpd and provide transportation for heavy oil producers operating in the Pelican Lake and Peace River regions of Alberta;

- The Swan Hills Pipeline, an approximately 450 km pipeline, which has a net capacity of 48 mbpd and provides transportation of light sweet crude oil from the Swan Hills region of Alberta to delivery points near Edmonton, Alberta; and

- The terminals at Edmonton, Alberta (the "**Edmonton Terminals**"), which consist of 36 merchant tanks with a capacity of approximately 12.1 mmbbls (9.6 mmbbls net) of storage and a crude-by-rail capacity of 290 mbpd (145 mbpd net). The terminals are connected to a highly diverse suite of inbound pipelines and outbound connections including both pipeline and rail, resulting in the most robust connectivity in the Edmonton, Alberta area. The Edmonton Terminals include various joint venture assets with two different counterparties:

    - The Edmonton South Terminal is a merchant tank terminal located in Sherwood Park, Alberta. The assets in this facility consist of 15 tanks with a total storage capacity of approximately 5.1 mmbbls. The 15 tanks are currently leased from Trans Mountain Corporation and are subleased to third parties;

    - The North 40 Terminal is a merchant tank terminal located in Sherwood Park, Alberta, immediately adjacent to the Edmonton South Terminal. The assets in this facility consist of nine tanks with a total storage capacity of approximately 2.15 mmbbls;

    - The Base Line Terminal is a joint venture asset owned by Pembina (50 percent) and Keyera Corporation ("**Keyera**")(50 percent). It is a merchant crude storage terminal located on leased land at the Keyera Alberta EnviroFuels facility in Sherwood Park, Alberta. The assets in this facility consist of 12 storage tanks with a total capacity of 4.8 mmbbls (2.4 mmbbl net);

    - The Edmonton South Rail Terminal is a joint venture asset owned by Pembina (50 percent) and Imperial (50 percent). The terminal is located on land leased from Imperial with a total throughput capacity of approximately 250 mbpd (125 mbpd net). The facility is served by both the Canadian National Railway ("**CN**") and Canadian Pacific Railway ("**CP**") networks; and

    - The Alberta Crude Terminal is a joint venture asset owned by Pembina (50 percent) and Keyera (50 percent). It is a crude oil rail loading facility located on land leased from Keyera in Edmonton, Alberta. The terminal is served by the CN and CP railway networks and is connected via pipeline to the North 40 Terminal and the Base Line Terminal. The terminal has approximately 40 mbpd (20 mbpd net) of manifest crude oil rail loading capacity.

The Edmonton Terminals assets provide excellent inbound and outbound connectivity, both in terms of the facilities to which these terminals are connected and the diversity of products that may be stored and transported by them. In addition to the considerable market access offered to customers via pipeline, through its Alberta Crude Terminal and Edmonton Rail Terminal origination crude-by-rail loading facilities, the Edmonton Terminals are able to offer customers the flexibility to move crude oil to markets without pipeline access, supplement deliveries to markets with constrained pipeline capacity and supply different or unique crude types to refineries looking to maintain set crude specifications.

The major shippers on Pembina's oil sands and heavy oil pipelines are primarily large upstream exploration and production companies.

Pembina's oil sands and heavy oil assets provide services predominantly under long-term, extendible contracts, which allow for the flow-through of eligible operating expenses to customers. As a result, adjusted EBITDA from these assets is primarily driven by the amount of capital invested and is predominantly not sensitive to fluctuations in certain operating expenses, physical throughput or commodity prices.

Pembina's Syncrude Pipeline is fully contracted under a cost-of-service, extendible, long-term agreement that expires no earlier than the end of 2035.

The Horizon Pipeline is fully contracted to a single customer and is operated under the terms of a 25-year fixed return, extendible contract, which expires in 2034.

Pembina's Cheecham Lateral is fully contracted to shippers under the terms of 25-year fixed-return extendible agreements that expire in 2032.

The Nipisi and Mitsue Pipelines are contracted under 10-year fee-for-service agreements, with substantial take-or-pay components. These contracts expire in 2021 and also have extension and expansion rights.

The Swan Hills Pipeline is utilized by various shippers who transport mainly on an interruptible basis.

The Edmonton Terminals service customers consisting of a diverse mix of production, refining, marketing and integrated companies. Edmonton Terminals are contracted under long-term, take-or-pay agreements. A significant majority of total revenue is take-or-pay in nature, while the remaining revenue is derived from variable fees for incremental services provided.

While regional infrastructure capacity for delivery to the Edmonton area is sufficient for current production levels, the primary focus of infrastructure development is expected to be on accessing markets outside of Alberta for the majority of bitumen and heavy oil produced in Alberta. In the long term, expansions of existing condensate and synthetic crude diluent supply infrastructure, as well as blended bitumen and heavy oil pipeline delivery systems, may be required depending on the rate at which oil sands and heavy oil may be produced in the future. See *"Risk Factors - Risks Inherent in Pembina's Business - Reserve Replacement, Throughput and Product Demand."*

Given the long-term nature of oil sands and heavy oil investments, most pipelines serving existing production are underpinned by long-term transportation agreements. Competition primarily arises with respect to incremental supply that requires additional pipeline capacity. In some cases, existing pipeline companies have under-utilized assets which can be re-purposed to suit a customer's needs, giving them a competitive advantage when competing for new projects. In other cases, where construction of significant new infrastructure is required, pipeline companies compete for these opportunities based primarily on their operating expertise, cost of capital and commercial flexibility.

While limited land availability and the significant capital investment required to enter the terminalling business are significant barriers to entry, the Edmonton Terminals are subject to competition from other rail terminals and storage facilities which are either in the general vicinity of the facilities or have gathering systems that are, or could potentially extend into, areas served by the Edmonton Terminals.

Transmission Assets

Pembina's primary transmission assets include the following:

Vantage Pipeline

The Vantage Pipeline includes an 786 km, 69 mbpd pipeline and gathering laterals that link a growing supply of ethane from the Bakken play in North Dakota to the petrochemical market in Alberta. Volumes originate from a large-scale gas plant in Tioga, North Dakota extending northwest through Saskatchewan and terminating near Empress, Alberta, where it is connected to the AEGS.

Transportation service on the Vantage Pipeline is underpinned by long-term, fee-for-service contracts with take-or-pay provisions. Currently, the Vantage Pipeline contracts are with one customer with petrochemical infrastructure in Alberta, with multiple receipt points on the Vantage Pipeline. Approximately 50 percent of the Vantage Pipeline's capacity is contracted on a take-or-pay basis with additional volumes flowing on a fee-for-service basis. Contract terms range from 10 to 20 years with current contracts expiring in the 2024-2034 timeframe.

Alberta Ethane Gathering System (AEGS)

AEGS transports ethane within Alberta from various ethane extraction plants to major petrochemical complexes located near Joffre, Alberta and Fort Saskatchewan, Alberta. At 1,336 km in total length, and an aggregate design capacity of approximately 330 mbpd, AEGS is comprised of an east leg, west leg and a bi-directional north leg, which together form an integrated system, that includes interconnections with underground storage sites in Fort Saskatchewan, Alberta and Burstall, Saskatchewan.

The AEGS shipper community is currently comprised of either major ethane producers or consumers that have significant energy infrastructure and/or petrochemical investments in Alberta. AEGS is fully contracted with nearly 100 percent of this capacity under new 20-year take-or-pay agreements as of January 1, 2019.

Alliance Pipeline

The Alliance Pipeline system is held through Alliance Canada and Alliance U.S., both of which are owned by Pembina (50 percent) and Enbridge Inc. (50 percent).

The Alliance Pipeline system consists of a 3,849 km integrated Canadian and U.S. natural gas transmission pipeline, delivering rich gas from the WCSB and the Williston Basin in North Dakota to natural gas markets in the Chicago, Illinois area. The Alliance Pipeline system has been in commercial service since December 2000 and currently delivers an average of 1.6 bcf/d of rich gas. The Alliance Pipeline system connects to the Aux Sable NGL extraction facility in Channahon, Illinois, which extracts NGL from the natural gas transported before delivery to downstream pipelines. The Alliance Pipeline connects in the Chicago area, through its downstream header, with five interstate natural gas pipelines and two local natural gas distribution systems, which provide shippers with access to natural gas markets in the midwest, the northeast, and the Gulf Coast of the U.S., and eastern Canada. All shippers have signed extraction agreements that give Aux Sable the right to extract the NGL from the rich gas transported.

The Canadian portion of the Alliance Pipeline system consists of an 1,561 km natural gas mainline pipeline and 732 km of related lateral pipelines connected to natural gas receipt locations, primarily at gas processing facilities in northwestern Alberta and northeastern British Columbia, and related infrastructure. Alliance Canada owns the Canadian portion of the Alliance Pipeline system.

The U.S. portion of the Alliance Pipeline system consists of 1,556 kms of infrastructure including the 129 km Tioga Lateral in North Dakota. Alliance U.S., an affiliate of Alliance Canada, owns the U.S. portion of the Alliance Pipeline system.

Alliance Canada's natural gas transmission services, coupled with rich gas delivery capabilities, are designed to enable producers to maximize the value of their product. This provides significant competitive advantages which can include:

- saving producers processing and infrastructure costs, and providing an opportunity to reduce the time to market for their rich gas production;
- providing access to the Aux Sable NGL extraction facility allowing for considerable economies of scale; and
- delivering value-added products to alternative NGL markets while only paying a transportation charge based on natural gas volume. These services can potentially provide shippers with a higher netback for rich gas.

Alliance Canada has fully contracted its firm receipt service through 2020. Alliance Canada has 30 long-term firm shippers and Alliance U.S. has 23 long-term firm shippers. The average firm contract capacity, including seasonal firm service (which can have contract terms of one day through eleven months), through the year contracted to the Canadian border is approximately 1.5 bcf/d and approximately 1.7 bcf/d from the U.S. border. In addition, Alliance Pipeline sells interruptible transportation service on a price-biddable basis pursuant to applicable FERC rules.

The Alliance Pipeline faces competition for pipeline transportation to its Chicago, Illinois area delivery points and interconnected pipeline delivery points downstream of its Chicago terminus from both existing pipelines and proposed projects. The Alliance Pipeline system is also exposed to competition from new sources of natural gas, such as the Appalachian Basin which runs from upstate New York to Virginia. The continued development of the Appalachian Basin may provide an alternative source of gas to this location and decrease natural gas imports from Canada into the region.

Cochin Pipeline

The Cochin Pipeline ("**Cochin**") consists of a 12-inch diameter pipeline totaling 2,452 km, which spans from Kankakee County, Illinois to Fort Saskatchewan, Alberta. Cochin, transports light condensate primarily to be used as diluent to facilitate bitumen transportation. Cochin traverses two provinces in Canada and four states in the U.S. and is currently capable of transporting approximately 95 mbpd of light condensate. If additional receipt points in Canada are established, and future demand supports it, throughput on the Canadian portion of Cochin has the potential to reach approximately 110 mbpd.

Cochin has three primary customers who, among them, have total contractual take-or-pay commitments of 85 mbpd. These customers have investment grade credit ratings and financial capacity that supports their long-term contractual commitments, which expire in 2024.

Diluent used in Canada is primarily supplied by local production in Canada (both conventional and unconventional condensates, as well as refinery light naphtha) and imports from the U.S. While Cochin is exposed to competition from other pipeline systems that are capable of transporting significant volumes of diluent, Cochin's delivery point in Fort Saskatchewan has a low gravity diluent pool and a high level of connectivity, thereby making Cochin an attractive mode of shipping diluent.

Ruby Pipeline

The Ruby Pipeline is a natural gas transmission system delivering natural gas production from the Rockies Basin. The Ruby Pipeline is 1,094 km in length with a 42-inch diameter and has a current capacity of 1.5 bcf/d.

Ruby Pipeline is owned equally by each of Pembina and Kinder Morgan Inc., who operates the pipeline. Pembina has a 50 percent convertible, cumulative preferred interest in the Ruby Pipeline which provides for distributions of US$91 million annually in priority to distributions on common equity. Pembina's preferred interest may convert to a common equity interest either at Pembina's option or automatically upon the contracting of an additional 250 MMcf/d of long-term firm capacity above the currently contracted capacity, at rates consistent with current contracts on the Ruby Pipeline.

Approximately 67 percent of the capacity of the Ruby Pipeline (approximately 1,043 MMcf/d, gross) is contracted under long-term, firm contracts that expire in 2021 and 2026.

The Ruby Pipeline competes to deliver gas into the western U.S. primarily with western Canadian gas delivered through TC PipeLines, LP's Gas Transmission Northwest pipeline system and, to a lesser extent, with U.S. Rockies gas delivered through Williams Northwest Pipeline LLC's northwest pipeline ("**Williams Pipeline**"). The Ruby Pipeline provides a source of supply diversification for customers in the Pacific Northwest U.S. and northern California who would otherwise be largely reliant on Canadian supply.

The Ruby Pipeline competes to export gas from the U.S. Rockies with several pipelines, including the Williams Pipeline into the Pacific Northwest, Kern River Gas Transmission Company's Kern River pipeline into California, and numerous pipeline systems that can transport gas into the eastern and mid-western U.S. Growing gas production from prolific shale basins in the northeastern U.S. has negatively affected eastern exports of U.S. Rockies gas in recent years relative to western exports on pipelines, including the Ruby Pipeline.

Jet Fuel Pipeline

The Jet Fuel Pipeline is an approximately 40 km pipeline that transports jet fuel from a Burnaby, British Columbia refinery and the Westridge Marine Terminal to the Vancouver International Airport. It includes operational storage tanks at the Vancouver International Airport with capacity of approximately 40 mbbls.

Grand Valley

Pembina's transmission pipelines business also includes a 75 percent jointly controlled interest in Grand Valley 1 Limited Partnership wind farm.

Facilities Division

Overview

The Facilities Division includes infrastructure that provides Pembina's customers with natural gas, condensate and NGL services. Pembina's operated 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 six(1) bcf/d for its customers. Virtually all of the condensate and NGL extracted through Canadian-based facilities are transported by Pembina's Pipelines Division. 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 326 mbpd(1) of NGL fractionation, 21 mmbbls(2) 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.

(1) 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.

(2) Net capacity.

Gas Services

Pembina's primary gas services assets include the following:

- Pembina's Cutbank complex (the "**Cutbank Complex**") located near Grande Prairie, Alberta includes six shallow cut sweet gas processing plants (the Cutbank Gas Plant, Musreau I, Musreau II, Musreau III, the Kakwa Gas Plant and the Kakwa River Shallow Cut Plant), one deep cut sweet gas processing plant (the Musreau Deep Cut) and a raw-to-deep cut sour gas processing facility (the Kakwa River Deep Cut). In total, the Cutbank Complex has 675 MMcf/d gross (618 MMcf/d net) of shallow cut sweet gas processing capacity, 205 MMcf/d of sweet deep cut extraction capacity and 200 MMcf/d of raw-to-deep cut sour gas processing capacity. The Cutbank Complex also includes approximately 450 km of gathering pipelines, nine field compression stations and centralized condensate stabilization;

- Pembina's Saturn complex (the "**Saturn Complex**") located near Hinton, Alberta, includes the Saturn I and Saturn II facilities for a total of 400 MMcf/d of deep cut gas processing capacity, as well as approximately 25 km of gathering pipelines;

- Pembina's Resthaven facility (the "**Resthaven Facility**") located near Grande Cache, Alberta, includes 300 MMcf/d gross (214 MMcf/d net) of raw-to-deep cut sweet gas processing capacity, as well as approximately 30 km of gathering pipelines;

- Pembina's Saskatchewan Ethane Extraction plant ("**SEEP**") located to service the Bakken in southeast Saskatchewan, has deep cut sweet gas processing capacity of 60 MMcf/d, ethane, propane and butane fractionation capabilities of up to 4.5 mbpd and a 104 km ethane delivery pipeline;

- Pembina's Duvernay complex (the "**Duvernay Complex**") located near Fox Creek, currently includes the Duvernay I and Duvernay II facilities for a total of 200 MMcf/d gross (175 MMcf/d net) shallow cut sweet gas processing plant and 12 km of sales gas pipelines, and supporting infrastructure, which includes 35 km of gas gathering pipelines and fuel gas pipelines, respectively, 205 MMcf/d gas compression, 42 mbpd raw inlet condensate stabilization and 15 mbpd of water handling.

  Under an agreement with Chevron and KUFPEC, as described further below, Pembina is currently undertaking two development projects at the Duvernay Complex:

  - Duvernay III, which includes a 100 MMcf/d sweet gas, shallow cut processing facility with approximately 5,000 bpd of propane-plus liquids capacity, 20 mbpd of condensate stabilization and water handling infrastructure. Pembina anticipates an in-service date between mid to late 2020; and

  - Duvernay Sour Treatment Facilities, which include 150 MMcf/d of sour gas sweetening system with 300 MMcf/d of amine regeneration capability and up to one tonne of sulphur per day of acid incineration. Pembina anticipates an in-service date in the first quarter of 2020;

- The Younger NGL Extraction Facility ("**Younger**") is an approximately 640 MMcf/d (460 MMcf/d net) extraction and approximately 10 mbpd (net) fractionation facility in British Columbia that supplies specification NGL products to local markets, as well as NGL mix supply transported on the Company's pipeline systems to the Fort Saskatchewan, Alberta area for fractionation and sale, and condensate to Pembina's CDH;

- The Empress NGL Extraction Facility ("**Empress**"), which is comprised of 2 bcf/d, net to Pembina, of extraction capacity across various joint-venture assets located at Empress, Alberta. At Empress, NGL mix is extracted from natural gas at straddle plants and ethane and condensate are fractionated out of the NGL mix and sold into western Canadian markets. The Company owns 39 mbpd (net) of ethane fractionation capacity at Empress. Pembina currently transports the remaining propane-plus NGL mix to Sarnia, Ontario for further fractionation, distribution and sale into markets in eastern Canada and the eastern U.S., or trucks the propane-plus NGL mix to Pembina's Redwater Complex for further fractionation, distribution and sale into western Canadian markets.

Pembina is currently undertaking construction of two development projects at Empress:

  - Empress Infrastructure Project, which includes additional fractionation and terminalling facilities at Empress. The expansion is expected to add approximately 30 mbpd of propane-plus fractionation capacity to Empress and is anticipated to be placed into service in the fourth quarter of 2020; and

  - Empress Co-generation Facility, which will reduce overall operating costs by providing power and heat to the extraction and fractionation facilities. The project is expected to be placed into service in mid-2022, subject to regulatory and environmental approvals; and

- Pembina owns a 45 percent interest in Veresen Midstream, which owns assets in western Canada serving the Montney geological play in northwestern Alberta and northeastern British Columbia. Veresen Midstream owns natural gas processing plants, with combined gross processing capacity of 1.6 bcf/d (727 MMcf/d net), including the Saturn, Sunrise and Tower Plants (collectively, the "**Dawson Assets**") and the Hythe and Steeprock plants. Veresen Midstream's assets also include over 1,100 km of gas gathering lines and the South Central, North Central and Tower Liquids Hubs. Veresen Midstream is currently constructing additional natural gas gathering and processing infrastructure in the Pipestone Montney region. The expansion of Veresen Midstream's existing Hythe facility will add up to 125 MMcf/d (56 MMcf/d net to Pembina) of sour gas processing and approximately 60 km of 12-inch sour gas pipeline. The project is expected to be placed into service in late 2020.

Pembina's gas services business has approximately 50 customers, including independent producers as well as multinational oil and gas companies. Pembina processes customers' natural gas at Pembina's Cutbank Complex, Saturn Complex, Resthaven Facility, Duvernay Complex and Veresen Midstream facilities. The processed natural gas is delivered to the Enbridge Inc. T-North system in British Columbia, TC Energy's NOVA Gas Transmission Ltd. pipeline system and the Alliance Pipeline system. The NGL are delivered to Pembina's Peace and Northern Pipeline systems. Customers' natural gas processed at SEEP is delivered to the TransGas System in Saskatchewan and the ethane is delivered to Pembina's Vantage Pipeline system.

Under the contractual arrangements with producers associated with the Cutbank Complex, Saturn Complex, Resthaven Facility, SEEP, Duvernay Complex, and Veresen Midstream assets, Pembina is largely protected from the impact of market fluctuations in the price of natural gas and NGL. The liquids handling, gathering and processing business is based on charging fees to customers on the volume of raw or processed gas that is gathered and/or processed through its facilities and the fees are largely based on a fixed-fee-for-service methodology and, in some instances, based on fixed return on invested capital. The fee-for-service contracts associated with the gas services business comprise a mixture of firm and interruptible service contracts of varying durations. The contractual fee structure incorporates a capital fee based on functional unit usage, as well as provisions for the recovery of operating and overhead costs.

Pembina's net share of capacity at Younger and Empress are not under any third-party contracts and are used exclusively by Pembina's marketing business for proprietary volumes.

Duvernay II, Duvernay III and Duvernay Sour Treatment Facilities are under a 20-year infrastructure development and service agreement with Chevron and KUFPEC, which includes an area of dedication in the rich gas Kaybob region of the Duvernay resource play near Fox Creek, Alberta. Under this agreement, and subject to Chevron and KUFPEC sanctioning development in the region, Chevron and KUFPEC have the right to require Pembina to construct, own and operate gas gathering pipelines and processing facilities, liquids stabilization facilities and other supporting infrastructure for the area of dedication, together with Pembina providing long-term service for Chevron and KUFPEC on its pipelines and fractionation facilities. Subject to Chevron, KUFPEC and regulatory approvals, the infrastructure developed over the term of this agreement has the potential to represent a multi-billion-dollar investment by Pembina. The Duvernay II, Duvernay III and Duvernay Sour Treatment Facilities are supported by 20-year contracts with a combination of fee-for-service and fixed-return arrangements.

In the region of the Dawson Assets, Veresen Midstream has entered into fee-for-service agreements with the CRP and Ovintiv, whereby the CRP has committed to use Veresen Midstream's Dawson Assets on an exclusive basis for a 30-year term within an area of mutual interest. The contract expires in 2045.

In the Hythe/Steeprock area, Veresen Midstream has entered into a cost of service-agreement, including take-or-pay commitments, with Ovintiv for the majority of the current available capacity of these facilities over the duration of the services agreement. The contract expires in 2031. As part of the expansion of the Hythe facility, currently under construction, Veresen Midstream has entered into a 15-year, predominately take-or-pay agreement with NuVista Energy Limited for up to 100 mmcf/d of natural gas gathering and processing.

Gas producers continued to focus their exploration and development on rich gas areas during 2019. Pembina's gas services expansions and new development plans continue to be focused in condensate and rich gas geographical areas, including the regional Montney and Duvernay areas.

Gas processing infrastructure requirements are largely driven by area profitability, which is impacted by commodity prices, and the gas producer's ability to access capital. In times where gas prices are relatively low and NGL prices are relatively high, producers are incentivized to extract as much NGL out of the raw gas stream as possible. During times when NGL prices are lower, producers may opt to leave more liquids entrenched within their raw gas. Pembina has the flexibility to offer facilities with varying degrees of liquids extraction capability to support customers in a variety of market conditions.

With its existing assets, Pembina is able to separate crude and condensate, process sweet and sour gas, extract NGL from the gas, transport the gas to Chicago and transport the liquids through its conventional pipelines to its CDH, ENT, Edmonton Terminals and fractionation complexes, where Pembina is able to market the products to end users. With its extensive operating experience and an integrated service offering along the crude, condensate, NGL and natural gas value chain, Pembina believes it is strongly positioned compared to other service providers to capture new business.

NGL Services

Pembina's primary NGL services assets include the following:

- The Redwater Fractionation and Storage Facility ("**RFS**" or "**Redwater**" or "**Redwater Complex**"), which includes two 73 mbpd ethane-plus fractionators (RFS I and RFS II); a 55 mbpd propane-plus fractionator (RFS III); and 12.1 mmbbls of cavern storage in Redwater, Alberta. Redwater purchases NGL mix from various natural gas and NGL producers and fractionates it into finished products for further distribution and sale. Redwater also processes NGL supply volumes from Pembina's Younger NGL extraction plant. Also located at RFS are Pembina's truck and rail terminals, which service Pembina's proprietary and customer needs for importing and exporting NGL products;

- The East NGL System, which includes:

    - 20 mbpd of fractionation capacity and 1.2 mmbbls of cavern storage in Sarnia, Ontario as well as storage and terminalling assets/capacity at Kerrobert, Saskatchewan; Cromer, Manitoba; Superior, Wisconsin; and Lynchburg, Virginia;

    - 6 mmbbls of hydrocarbon storage, truck and rail loading facilities at Corunna; and

    - An ethane storage facility, with capacity of 1.1 mmbbls, near Burstall, Saskatchewan;

- The Prince Rupert Terminal, an propane export terminal to be located on Watson Island, British Columbia on lands leased from a wholly-owned subsidiary of the City of Prince Rupert. The Prince Rupert Terminal is a small-scale rail terminal, moving propane from rail cars to 'handysize' ships destined for international markets. Currently under construction, the Prince Rupert Terminal is expected to have a capacity of approximately 25 mbpd and is expected to be in service in mid-2020, subject to regulatory and environmental approvals.

  The Prince Rupert Terminal Expansion will increase the propane export capacity of the terminal to approximately 40 mbpd with an anticipated in-service date in the first half of 2023, subject to regulatory and environmental approvals;

- The Vancouver Wharves, located in North Vancouver, B.C, is a 125-acre bulk marine terminal facility that in 2019 transfered over 4 million tons of bulk cargo and 3.5 mmbbl of liquids predominantly to offshore export markets. The Vancouver Wharves holds an operating lease and asset ownership agreement with the B.C. Railway Company and a corresponding water lot lease with Port Metro Vancouver. The terminal includes one million tons of bulk storage capacity, 250,000 barrels of distillate storage capacity, four berths, facilities that can house up to 325 rail cars and connectivity to three Class 1 rail companies.

  The Vancouver Wharves Expansion will add 200,000 barrels of additional distillate storage and enhancements to the railcar unloading capabilities. The expansion is supported by a 20-year, take-or-pay contract and is expected to be placed into service in the first quarter of 2021; and

- A 50 percent interest in Fort Corp., which has 27,500 metric tonnes of ethylene storage near Fort Saskatchewan, Alberta.

Pembina's NGL service business provides a multitude of services for its customers. It is common practice for customers to sign up for more than one service with Pembina, including fractionation, storage, loading and off-loading.

At Redwater, Pembina provides NGL fractionation, storage and terminalling (loading and off-loading) services. NGL fractionation services at Redwater are provided under single or multi-year, predominately take-or-pay contracts.

Through its East NGL System, Pembina provides NGL fractionation, storage and terminalling (loading and off-loading) services on an interruptible, fee-for-service basis, primarily to Pembina's Marketing & New Ventures Division.

Storage services are typically provided to various customers under either a fee-for-service or fixed-return agreement with contract lengths ranging between one to 25 years. Loading and off-loading services are provided on a fee-for-service basis under contracts that range from one year to multi-year terms.

Pembina provides terminalling services for the North West Redwater Partnership (" **NWRP**") with respect to NWRP's Sturgeon Refinery. The terminalling services are provided under a 30-year fixed-return agreement.

The Vancouver Wharves capacity is contracted under long-term, take-or-pay terminal service agreements. Some of our major long-term contracts at the Vancouver Wharves are extendible.

Pembina's NGL services business is subject to competition from other fractionators, truck terminals, and storage facilities which are either in the general vicinity of the facilities or have gathering systems that extend, or could potentially extend, into areas served by the facilities. Going forward, the demand for additional infrastructure will be determined primarily by the rate at which the WCSB hydrocarbon production grows. The Vancouver Wharves is subject to competition from significantly smaller distillates facilities in the area. There are various competitive grain terminal projects contemplated or underway that could increase competitive pressures on the Vancouver Wharves grain business. For mineral concentrates, the Vancouver Wharves enjoys a distinct advantage as it is one of only three facilities on the west coast of North America that is currently permitted to handle these commodities.

Marketing & New Ventures Division

Overview

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.

Marketing Activities

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.

Through this infrastructure capacity, as well as utilizing the Company's expansive rail fleet and logistics capabilities, Pembina's marketing business adds incremental value to the commodities by accessing high value markets across North America and globally. Financial and operational results in the marketing business are subject to commodity price fluctuations, product price differentials, location basis differentials, foreign exchange rates and volumes.

The value potential associated with Pembina's marketing business is dependent upon the ability of Pembina to: access connections to both downstream pipelines and end-use markets; understand the value of the commodities transported, stored and terminalled; provide flexibility and a variety of storage options; and adjust to a liquid, responsive, forward commodity market. Pembina actively monitors market conditions and commodity stream values and qualities to target revenue opportunities and service offerings. Pembina is also proactively working with upstream and downstream customers to develop value-added terminalling solutions and increase available optionality. The prices of products that are marketed by Pembina are subject to volatility as a result of the factors stated above and other factors such as seasonal demand changes, weather conditions, general

economic conditions, changes in crude oil, NGL and natural gas markets and other factors. See " *Risk Factors - Risks Inherent in Pembina's Business - Commodity Price Risk*".

Customers within Pembina's marketing business are generally those who produce, consume and/or market crude oil, NGL and natural gas, are downstream markets for those products, or are interested in ancillary services related to those products. Pembina's marketing business leverages the value chain, focusing on activities that complement the existing network of facilities and energy infrastructure across Pembina's asset base.

The contractual arrangements associated with Pembina's marketing business vary by service offering.

Aux Sable

The Marketing & New Ventures Division includes Pembina's ownership interest in Aux Sable, since the majority of cash flow from this asset is derived from commodity sales.

Aux Sable U.S. is owned by Pembina (42.7 percent), Enbridge Inc. (42.7 percent) and Williams Partners (14.6 percent). Aux Sable Canada is owned by Pembina (50 percent) and Enbridge Inc. (50 percent).

Aux Sable U.S. includes the Channahon Facility, located in Channahon, Illinois, about 80 km southwest of Chicago near the eastern terminus of the Alliance Pipeline. The Channahon Facility is capable of processing 2,100 MMcf/d of natural gas and can produce approximately 131 mbpd of specification NGL products. All of the natural gas delivered via the Alliance Pipeline is processed at the Channahon Facility.

Under transportation agreements with natural gas shippers on the Alliance Pipeline, Aux Sable Liquid Products LP has the right to extract NGL from all of the natural gas transported for the period of the agreements. Aux Sable has signed NGL value-sharing agreements with gas producers in Alberta, British Columbia and North Dakota. Approximately 60 percent of the gas contracted by Aux Sable is under these NGL value-sharing agreements.

Aux Sable Liquid Products LP entered into an exclusive NGL sale agreement with an NGL marketer on December 31, 2005, pursuant to which Aux Sable Liquid Products LP sells a portion of its NGL production from the Channahon Facility to such counterparty. In return, Aux Sable Liquid Products LP receives a fixed annual fee and percentage share of any net margin generated from the business in excess of specified thresholds. The NGL sales agreement has an initial term expiring March 31, 2026 and may be extended by mutual agreement for 10-year terms on a continuous basis.

The Channahon Facility includes storage and rail facilities as well as NGL pipelines that connect the facility to various third-party terminals, refineries and petrochemical plants. The scale and geographic location of the Channahon Facility provides western Canadian and Bakken producers with economic options for liquids rich gas takeaway and access to U.S. NGL markets, avoiding costly investments in field processing and transportation infrastructure.

The other primary assets of Aux Sable U.S. include:

- The Palermo Conditioning Plant, located near Palermo, North Dakota, a 80 MMcf/d plant, which receives gas from gathering systems servicing nearby Bakken shale oil and gas production areas and removes the heavier hydrocarbon compounds while leaving the majority of the natural gas liquids in the rich gas prior to shipping on the Alliance Pipeline via delivery on the Prairie Rose Pipeline; and

- The Prairie Rose Pipeline, a 120 MMcf/d pipeline connecting the Palermo Conditioning Plant to the Alliance Pipeline.

The primary assets of Aux Sable Canada include:

- The Heartland Offgas Plant ("**HOP**"), a 20 MMcf/d extraction plant located in Fort Saskatchewan, Alberta. HOP produces valuable products including hydrogen, ethane, and other natural gas liquids from a refinery offgas stream supplied from Shell's Scotford Complex. The products are returned to Shell via pipeline;

- The Wilder Gas Plant, a 60 MMcf/d sweet gas processing plant, located in northeastern British Columbia. The facility is owned approximately 15.5 percent by Aux Sable Canada and is operated by a third-party. On January 17, 2020 Crew Energy Inc. exercised its option to acquire Aux Sable Canada's net interest in the Wilder Gas Plant, which is expected to close in the fourth quarter of 2020;

- The Septimus Gas Plant, a 75 MMcf/d sweet gas processing plant, located in northeastern British Columbia. The facility is owned approximately 15.5 percent by Aux Sable Canada and is operated by a third-party**.** On January 17, 2020 Crew Energy Inc. exercised its option to acquire Aux Sable Canada's net interest in the Septimus Gas Plant, which is expected to close in the fourth quarter of 2020; and

- The Septimus Pipeline, which is located in northeastern British Columbia and transports sweet, liquids rich gas from the Septimus and Wilder Gas Plants to the Alliance Pipeline, for downstream processing at Aux Sable U.S.' Channahon Facility. The pipeline is 100 percent owned by Aux Sable Canada and operated by a third-party. The pipeline has a capacity of approximately 350 MMcf/d.

Alliance Canada Marketing

Alliance Canada Marketing is owned by Pembina (42.7 percent), Enbridge (42.7 percent) and Williams Partners (14.6 percent) and holds total firm transportation capacity of 76.2 MMcf/d on the Alliance Pipeline. This capacity was not contracted at the time Alliance Pipeline was approved and Alliance Canada Marketing was formed solely to manage this capacity. Alliance Canada Marketing's mandate is to generate earnings from the capacity, for the benefit of its owners, through the purchase, transportation and sale of natural gas and from the optimization of those activities. As a shipper on the Alliance Pipeline, Alliance Canada Marketing is entitled to the relevant capacity and is obligated to pay the associated demand charges.

Alliance Canada Marketing has assigned the capacity it holds on the Alliance Pipeline to a third party. In both Canada and the U.S., the third party has agreed to pay negotiated market-based rates to use its respective capacity.

New Ventures

Pembina's Marketing & New Ventures Division includes development of new large-scale, or value chain extending projects, currently including:

PDH/PP Facility

Pembina and PIC have approved the development of a 550,000 tonne per annum integrated PDH/PP Facility through their equally-owned joint venture, CKPC. The PDH/PP Facility will be located adjacent to RFS and will convert approximately 23 mbpd of locally supplied propane into polypropylene, a high value polymer used in a wide range of finished products. This project is expected to be in-service in the second half of 2023.

Jordan Cove LNG Project

The proposed Jordan Cove LNG Project is a world-scale LNG export facility which would transport North American natural gas to world markets. The project is made up of two parts: the LNG terminal, with a planned design capacity of 7.8 million tonnes per annum and the Pacific Connector Gas Pipeline an approximately 400 km pipeline, which would transport natural gas from Malin, Oregon to an LNG terminal in Coos County, Oregon.

Regulatory processes for the proposed Jordan Cove LNG Project are ongoing. Pembina is focused on getting all the remaining permits required to proceed with this project. These permits are a critical component of the regulatory process and are necessary to enable the commercial viability of the project and allow this investment to move forward. The timing and ultimate approval of this project is uncertain and dependent upon receipt of these remaining approvals.

In conjunction with a final investment decision, the Company intends to seek partners for both the Pacific Connector Gas Pipeline and LNG Terminal thereby reducing its 100 percent ownership interest to a net ownership interest of between 40 and 60 percent with the intention to reduce the capital, operating, and other project risks.

Seasonality

Pembina's businesses are affected by seasonality as follows:

- Construction and operational maintenance activities may vary seasonally. Site access and ground conditions can be impacted by spring melting and, as a result, Pembina typically experiences higher pipeline maintenance and integrity spending in the first and fourth quarters of the year. Labour productivity may be negatively impacted by seasonal weather conditions including extreme temperatures in the winter;

- Conventional feeder pipelines and gathering systems generally experience lower volumes during the spring months as a result of reduced drilling primarily due to weight restrictions on roads, producers conducting maintenance on their batteries and gas plant turnarounds. The magnitude and duration of road weight restrictions are dependent upon spring weather conditions. Many battery operators also perform maintenance work on production facilities during the spring months. Road restrictions and battery maintenance can also impact gathering pipeline receipts during the fall months, although the impact on throughput is generally less pronounced than during the spring months. Similar seasonality impacts are experienced upstream of the pipelines at Pembina's gas processing facilities;

- Volumes transported on the Alliance Pipeline or volumes processed at gas processing facilities are generally higher during winter months as gas compression is more efficient in cold weather and there is, therefore, increased availability to flow interruptible volumes in the winter months, subject to customer demand for the service; and

- The financial performance of Pembina's marketing business can be affected by seasonal demands for products and other market factors. Propane inventory generally builds over the second and third quarters of the year and is sold in the fourth quarter and the first quarter of the following year during the winter heating season. Condensate, butane and ethane are generally sold rateably throughout the year. See "*Risk Factors – Risks Inherent in Pembina's Business – Commodity Price Risk*".

OTHER INFORMATION RELATING TO PEMBINA'S BUSINESS

Operations Management and Corporate Governance

Operating Management System

Pembina is committed to operational excellence and one of the ways in which we deliver this is through our Operating Management System ("**OMS**"). Pembina's OMS provides a consistent framework for the design, development, and implementation of a comprehensive suite of policies, programs, procedures, standards and tools that guide, govern and drive operating activities. The Pembina OMS also supports cyclical planning, implementation, review, and adjustment of operational activities. Pembina's OMS anticipates, prevents, manages and mitigates conditions that may adversely affect the safety and security of Pembina's employees, the public, the environment, and our infrastructure assets while complying with government regulations. Our OMS aligns Pembina with industry best practices and standards.

Pembina's OMS is comprised of a number of individual programs intended to drive safety, reliability, efficiency, cost-effectiveness and the continuous improvement of our operational performance. The programs are outlined below:



Operational improvements, findings and industry changes are assessed, risked and prioritized, with corrective and preventative actions identified and implemented. These actions are underpinned by goals and objectives with delivery monitored against targets through assurance and management reviews. OMS is maturing over time through regularly scheduled OMS working group activities and oversight by the OMS Steering Committee. Any necessary modifications to the OMS are implemented through Pembina's management of change framework. By implementing OMS in support of a strong safety culture, Pembina's projects are designed, constructed, operated and decommissioned or abandoned in a manner that considers the safety and security of the public, Pembina personnel and physical assets, and the protection of property and the environment.

Corporate Governance

In 2018, Pembina updated its governance framework and completed a company-wide update of its corporate policies to standardize and align with the changing business of the Company and Pembina's new strategy and purpose (see "*Description of Pembina's Business and Operations – Pembina's Business Objective and Strategy*"), to comply with new and existing laws and regulations and to adhere to best practices in the industry. In addition, Pembina developed a new set of policies for the growing number of employees in the United States. With these changes, the Pembina OMS was also updated to reflect the updated corporate policies. Pembina's corporate policies reflect Pembina's core values and beliefs, which in turn influence the OMS and associated programs.

Further information about Pembina's corporate governance will be included in Pembina's management information circular for its 2020 meeting of Shareholders, and copies of Pembina's Code of Ethics, Whistleblower Policy and other corporate governance policies can be found on Pembina's website at www.pembina.com.

Certain of Pembina's policies are aimed at preserving a positive relationship with the physical and social environment in which Pembina operates. These policies are outlined below:

Health, Safety and Environment ("HSE") Policy (Canada and United States)

Health, safety and the environment are top priorities in all of Pembina's operations and business activities. Pembina is committed to being an industry leader that meets or exceeds all applicable laws and regulations designed to protect the health and safety of workers and the public, and safeguard the environment affected by its activities. Pembina is also committed to improving its HSE performance. These areas are of paramount importance to management, employees and contractors at the Company. Pembina believes that excellence in HSE practices is essential to the well-being of the Company.

The Safety and Environment Committee of the Board of Directors monitors compliance with the HSE Policy through regular reporting.

Enterprise Risk Management Policy

This policy sets out the Company's enterprise risk management principles and specifies expectations associated with Pembina's risk management activities and governance. Enterprise risk management consists of practices and procedures applied across the Company to identify, measure, assess, respond to, monitor and report on principal risks that may affect the achievement of business objectives.

Code of Ethics Policy (Canada and United States)

Pembina's reputation is one of its most important assets. The purpose of the Code of Ethics Policy is to establish a high standard of integrity and ethical behaviour to support Pembina's reputation and our relationships with our internal and external stakeholders. All personnel are expected to comply with the Code of Ethics Policy at all times**.** The Code of Ethics Policy sets out principles for ethical conduct in the following areas: conflicts of interest; business relationships and fair dealing; compliance with the law; government relations; health, safety and environmental matters; integrity of financial information; disclosure and insider trading; stakeholder and public relations; privacy and confidentiality; protecting our assets and records; entertainment, gifts and other payments; workplace environment and relationships; and reporting responsibilities and procedures.

Alcohol and Drug Policies (Canada and United States)

As part of Pembina's commitment to its employees, contractors and the public, Pembina has comprehensive alcohol and drug policies in place which require that all personnel remain fit for work while on duty or on call. These policies form a part of

Pembina's approach to risk mitigation and safety and supports the HSE Policy. Pembina has also implemented an alcohol and drug policy for Department of Transportation workers as required under applicable United States laws.

Aboriginal and Tribal Relations Policy (Canada and United States)

As part of Pembina's approach to Aboriginal and Tribal relations, Pembina seeks to enter into lasting and mutually-beneficial relationships with all Aboriginal and Tribal peoples affected by its operations. By striving for positive and mutually-beneficial relationships with Aboriginal and Tribal leadership and communities, Pembina employees, consultants and contractors will help build continued success for Pembina's existing and expanding systems and other businesses.

Whistleblower Policy (Canada and United States)

Pembina is committed to high standards of professional and ethical conduct in all activities. Pembina's reputation for honesty and integrity among its stakeholders is key to the success of its business. The transparency, honesty, integrity and accountability of Pembina's financial, administrative and management practices are vital. These high standards guide the decisions of the Board of Directors and are relied upon by Pembina's stakeholders and the financial markets.

For these reasons, it is critical to maintain a workplace where concerns regarding questionable business practices can be raised without fear of discrimination, retaliation or harassment. Pembina also believes that encouraging a culture of openness and ethical leadership from management supports this process. As such, Pembina's Whistleblower Policy encourages directors, officers, employees, consultants, contractors, agents and external stakeholders to act responsibly, raise concerns and report any potential instances of unethical practices within Pembina, rather than overlooking a problem or seeking a resolution of the problem outside Pembina. In addition to raising concerns directly with Pembina management, individuals may report concerns anonymously and on a confidential basis to the chair of the Audit Committee of the Board of Directors or through Pembina's whistleblower line, which is available 24 hours a day, seven days a week both online and through a toll-free number. Complaints received by Pembina under its Whistleblower Policy are thoroughly investigated.

Corporate Security Policy

Pembina is committed to protecting the safety of its workers, the public, and to safeguarding Pembina's facilities, physical infrastructure, and physical property. These areas are of paramount importance to management, employees and contractors at the Company. Pembina believes that excellence in security management is essential to the well-being of the Company. As such, Pembina is committed to identifying security risks and establishing appropriate programs and procedures to reduce these risks to an acceptable level, and to testing these programs and procedures to assess their effectiveness on a regular basis.

Cyber Security Policy

Pembina is committed to protecting the confidentiality, integrity and availability of its information assets. These areas are of paramount importance to management, employees and contractors at the Company. Pembina believes that excellence in security management of its information assets is essential to the well-being of the Company. As such, Pembina is committed to identifying security risks and establishing appropriate programs and procedures, including the Enterprise Cyber Security Plan, to reduce these risks to an acceptable level, and to testing these programs and procedures to assess their effectiveness on a regular basis.

Privacy Policy

Pembina is committed to maintaining the accuracy, confidentiality and security of personal information in accordance with applicable privacy laws. Protection of personal information is of paramount importance to management, employees and contractors at the Company. As such, Pembina is committed to setting out the manner in which Pembina collects, uses, discloses, protects and otherwise manages personal information.

Respectful Workplace Policy (Canada)/Policy Prohibiting Harassment and Discrimination (United States)

Pembina is committed to providing a respectful workplace in which all people are treated with respect and dignity. The safety and well-being of everyone working for or in connection with Pembina is a priority. Harassment, discrimination and violence in the workplace will not be tolerated in any form. These policies establish clear standards and expectations for all staff to prevent and protect individuals from workplace harassment, discrimination and violence.

Security Management Policy

Pembina is committed to protecting the safety of its workers, the public, and to safeguarding Pembina's facilities and information. These areas are of paramount importance to management, employees and contractors. Pembina believes that excellence in security management is essential to the well-being of the Company.

Information and Communication Systems

Pembina has a Pipeline Control Management Program in place to ensure that our pipeline systems are operated safely and reliably. As part of the Pipeline Control Management Program, Pembina employs modern SCADA technology on the majority of its pipeline systems. The SCADA systems allow for continuous electronic monitoring and control of the pipeline systems from dedicated computer consoles located in Pembina's control centre in Sherwood Park, Alberta. Operators monitor the computer consoles 24 hours per day, 365 days per year. The SCADA systems and associated leak detection software continually monitor pipeline flow and operating conditions. Line balance calculations are performed automatically by the system and alarms are triggered when imbalances are detected. When imbalance alarms are triggered, trained control centre operators investigate the alarm or shut down the pipeline in accordance with Pembina's Segment Imbalance Response Protocol.

Integrity Management

Pembina employs comprehensive asset integrity management programs and dedicates a significant portion of its annual operating budget directly to integrity management activities. Pembina's integrity management programs include the systems, processes, analysis and documentation designed to ensure proactive and transparent management of its pipeline systems and facilities, in compliance with applicable standards and regulations.

Pembina's asset integrity management programs are designed to achieve enhanced safety, reliability and longevity through the entire asset lifecycle. They incorporate industry best practices and are designed to meet or exceed regulatory requirements with the goal of achieving enhanced safety, reliability and longevity of our assets.

Integrity management begins at the engineering and design phase. Pembina has a robust set of engineering and design specifications to ensure learnings and best practices are captured and consistently applied to future projects. At the early stages of building a new pipeline, we ensure that pipeline routes are chosen to avoid geologically unstable or high consequence areas and to minimize environmental impact. To further mitigate the risk and impact of an incident, we design our pipelines so they can be safely shut down and segments can be isolated by installing block valves at strategic intervals along the system. Where appropriate, we take extra safety precautions, such as increasing pipe wall thickness or depth-of-cover, to help mitigate risks. In addition, when it comes to choosing materials for new construction, Pembina only uses steel pipe and other products that have been manufactured to meet the highest quality standards and specifications. As part of the design of facilities, impacts to existing infrastructure are identified and mitigation measures established as part of the Process Hazard Assessment process. The outcome is that lifecycle costs are minimized, while assuring safe, reliable and compliant operation.

Proactive pipeline integrity management activities extend into operations through programs, including right-of-way patrols and public awareness to reduce the likelihood of third-party damage, system-specific hazard evaluations and risk assessments, geotechnical programs to manage slope instability and river crossings, the use of specific chemicals to reduce the likelihood of internal corrosion from impurities and bacteria in the oil, cathodic protection to mitigate the possible growth of external corrosion, training and competency management programs for staff and contractors, and enhanced emergency response procedures and training exercises.

We plan and execute scheduled turnarounds and outages at our gas processing, fractionation and pipeline facilities to complete required maintenance and inspection of pressure equipment, tanks, piping and pressure relieving devices. By using data collected through our facility integrity program, we can provide cost-effective, safe and reliable operation of our facilities – to the benefit of our customers and shareholders.

Environmental Matters

Pembina's assets are subject to environmental regulation and relevant approvals, and must comply with applicable federal, provincial, state and local laws and regulations in Canada and the U.S. Such laws and regulations govern, among other things, construction, operating and maintenance standards, management and control of emissions and waste discharge and protection of aquatic and terrestrial wildlife and habitat. Management expects that Pembina's facilities and operations meet or exceed those requirements. Pembina participates in the following applicable regulated emission reporting programs: Canadian Greenhouse

Gas Emissions Reporting Program, Canadian National Pollutant Release Inventory Reporting, Alberta Specified Gas Reporting Program, British Columbia Greenhouse Gas Emission Reporting Regulation, Alberta Technology, Innovation and Emission Reduction Regulation, as well as other provincial air quality reporting requirements under asset specific conditions of approval.

To confirm regulatory compliance and conformance with Pembina's internal environmental standards, Pembina has in place an Environmental Management Program, which includes a planned environmental audit program. As part of this program, regularly scheduled third-party environmental compliance audits are conducted at various facilities within a selected business unit each year. The Environmental Management Program is designed so that assets within each business unit are audited at least once every five years.

Pembina's focus on integrity management and safe operations continues to result in low incident frequency and minimal environmental impact. Each year, to manage environmental liability, Pembina invests in the remediation and reclamation of pre-existing spill sites, thereby reducing Pembina's environmental liabilities. In addition to the environmental expenses associated with its operations, Pembina also invests in environmental assessment, planning, permitting and post-construction monitoring associated with the Company's capital projects.

Safety Program

Pembina has a Safety Program in place which is aligned with the HSE Policy and other programs that form Pembina's OMS. It employs a systematic approach comprised of principles, standards, procedures, guidelines, and other supporting documents.

To enhance improvement company-wide, Pembina has established a corporate incident review panel (" **IRP**") and an Executive Safety Committee. The IRP meets six times a year and consists of operations, engineering and safety leaders as well as business and service unit Vice Presidents, Senior Vice Presidents and the President and Chief Executive Officer. The IRP is focused on analyzing and understanding the causes of incidents and determining and completing resulting action plans to eliminate re-occurrence and ensuring that learnings are fully communicated and implemented on a corporate-wide basis.

Pembina holds a Certification of Recognition designation which is awarded annually by the Alberta government to employers who have health and safety programs that meet established government standards.

Pembina uses ISNetworld, a program that aggregates and discloses the safety track record of service providers, to manage contractor pre-qualifications, orientations and compliance. The Construction Supervisor Onboarding Program and Contract Safety Representative Onboarding Process were created to ensure contractors in these roles are provided with a consistent and standardized approach to Pembina's policies and safety culture, and gain a clear understanding of their specific role.

Emergency Management Program

Pembina is committed to being ready to safely and effectively respond to emergency situations related to or impacting our operations. As part of Pembina's emergency preparedness, we conduct regular staff emergency awareness sessions and ensure local emergency responders (police, fire/EMS, disaster services, and others) are provided with key information to facilitate their response to potential emergency situations.

Pembina maintains inventories of specially-designed emergency response equipment for deployment, strategically located near Pembina's operations. Additionally, as a member of the Western Canadian Spill Services Co-op, the Canadian Energy Pipeline Association Mutual Aid Plan and Emergency Response Assistance Canada, Pembina has access to emergency response equipment and participates in emergency response exercises with other industry members.

Security Management Program

Pembina's Security Management Program (" **SMP**") is the foundation for corporate security and cyber security management. This enables Pembina to conduct its activities and operations in a manner consistent with Pembina's commitment to protecting people, the environment and property. The SMP establishes requirements for development, implementation, maintenance, and evaluation process of security management activities. The SMP is based on established management system models with the objective of utilizing a structured system that enables ongoing review and continual improvement of security management performance and related processes. Continual improvement is part of Pembina's SMP with goals, objectives and targets established on an annual basis. The SMP includes documentation that describes Pembina's processes to:

- Identify relevant security management, legal and regulatory requirements, as well as manage and communicate changes in these requirements;

- Identify and assess security vulnerabilities, threats, hazards and risks associated with Pembina's activities for the purpose of establishing appropriate security mitigation measures, preparedness and response; and

- Establish and track progress on achieving security management goals, objectives and targets.

Damage Prevention and Public Awareness Programs

Working safely around pipelines and preventing damage to Pembina owned and operated pipelines, facilities and associated infrastructure is in the best interest of all of Pembina's stakeholders. Pipeline infrastructure is often buried underground and, as a result, preventing pipeline damage depends on operators, the public and stakeholders working together to be aware of the dangers and taking appropriate actions to prevent the risk of damage. Pembina's Damage Prevention and Public Awareness Programs are dedicated to worker safety, public safety, protection of the environment and the preservation of the integrity of our infrastructure.

Pembina is committed to establishing meaningful and open communications with those who live and work around our underground infrastructure so they are informed and aware of our underground infrastructure and operational activities. This commitment includes maintaining positive relationships with the residents, landowners, communities and the public, as well as Aboriginal communities near our operations.

Pipeline Rights-of-Way and Land Tenure

Pembina's real property interests fall into two basic categories of ownership: (i) a number of locations, including many pumping stations and terminal and storage facilities, which are owned in fee simple; and (ii) the majority of locations which are covered by leases, easements, rights-of-way, permits or licences from landowners or governmental authorities permitting the use of such land for the construction and operation of a pipeline.

Operations and Maintenance – Operator Qualification and Preventative Maintenance Management Programs

Pembina's SAP-based preventative maintenance management tool ("**PMM**") was completed in 2018. The objective of PMM is to ensure safe, consistent and efficient asset management. PMM is a key component of our OMS and a driver of safe and efficient asset management and operation.

Pembina's Operator Qualification Program for the United States operations of the Vantage Pipeline and West Spur Lateral is in place to ensure that our Operators and Technicians are trained and qualified to perform their duties safely.

Industry Regulation

Pembina's pipelines are regulated by various regulatory bodies, including, but not limited to, the AER, AUC, BCUC, BCOGC, CER, PHMSA and FERC.

The Regulatory Financial Program ("**RF Program**") and its supporting processes, procedures and practices are used to provide strategic direction, leadership and oversight of financial operational regulatory compliance at Pembina. The purpose of the RF Program is to develop, implement and maintain financial operational regulatory processes, procedures and practices in accordance with regulatory requirements. Currently, the RF Program only covers CER and FERC regulated pipelines that Pembina wholly owns and operates.

AER and AUC

With respect to rate-regulation in Alberta, once a permit to construct a pipeline is issued by the AER, subject to regulatory intervention, the pipeline is free to establish tolls in a competitive market environment. Tolls are established under contracts of varying terms and conditions and are also posted by location for non-firm (interruptible) service. Posted tolls which are applied to non-firm volumes can generally be adjusted to respond to changing volumes, costs and market circumstances. Contracted tolls on firm contracts can also be adjusted, where permitted by the terms of the contract, for such things as changes in the consumer price index, changes in power costs, extraordinary natural events that impact pipeline integrity and changes to

regulations associated with pipelines. For common carriers, pipeline customers have recourse to the AER, with respect to pipeline access and discrimination among customers, and to the AUC with respect to tariff matters, on a complaint basis.

Pembina is subject to regulation by the AER under the Licensee Liability Rating Program and the Large Facility Liability Management Program. The programs require that Pembina submit site specific liability assessments (decommissioning and reclamation estimates) for select facilities to the AER and provide a measure to ensure that Pembina has the financial ability to complete required asset retirement activities.

BCUC

The tolls on certain B.C. pipelines are rate-regulated by the BCUC. The BCUC approves tolls that may be charged by common carriers and regulates other tolls on a complaint basis.

CER

On August 28, 2019, the *Canada Energy Regulator Act* (the "**CER Act**") came into force, repealing the *National Energy Board Act* ("**NEB Act**") and creating the Canadian Energy Regulator. Overall, the CER Act parallels the current regulatory regime under the NEB Act in several areas, including: pipeline traffic, tolls and tariffs; authorizations for the export of oil and gas; liabilities for unintended or uncontrolled releases; and the pipeline company's financial requirements. Significant changes to the regulator regime include establishing a new entity (the "**Canada Energy Regulator**") to replace the NEB, broader "public interest" considerations prior to making a recommendation to the Minister on an application for a pipeline certificate and increased indigenous participation.

Interprovincial or international pipelines fall under the CER's jurisdiction. Under the CER Act and regulations, companies who own and/or operate CER-regulated pipelines are divided into two groups. Group 1 consists of the major pipeline companies which are subject to enhanced regulatory oversight by the CER. The other pipeline companies under the jurisdiction of the CER, not included in Group 1, have been classified as Group 2. The Canadian segments of the Alliance Pipeline and the Cochlin Pipeline are classified as Group 1. Pembina's other CER regulated pipelines are regulated as Group 2 by the CER. For these Group 2 pipeline systems, if no complaint is filed, the CER may presume that the filed tariffs are just and reasonable. The Northwest Pipeline, the Taylor to Belloy Pipeline, the Pouce Coupé Pipeline and the Pouce Coupé Lateral, all licensed by Pembina's wholly-owned subsidiary Pouce Coupé Pipe Line Ltd., are regulated by the CER. Pembina's Taylor to Boundary Lake Pipeline owned by Pembina Energy Services Inc. and Pembina's Vantage Pipeline, which is owned by Pembina Prairie Facilities Ltd., both wholly-owned subsidiaries of Pembina, are regulated by the CER. The four lines collectively referred to as the Tupper Pipelines, licensed by Veresen Energy Pipeline Inc., and 42 percent owned by Pembina, are also regulated by the CER. The Kerrobert pipeline is regulated by the CER but is not operated by Pembina.

Pembina is required to maintain a minimum of $941 million in financial resources to meet the absolute liability limit requirements in the *Pipeline Safety Act*. The CER requires the Company to maintain these financial resources and readily accessible funds in specific types of financial instruments.

FERC

The FERC is an independent U.S. agency that regulates the interstate transmission of natural gas, and oil. The Ruby Pipeline, and the U.S. segments of the Vantage Pipeline, Cochin Pipeline and Alliance Pipeline are subject to FERC jurisdiction. Further, Alliance U.S. is subject to regulation by the FERC as a "natural gas company" under the U.S. *Natural Gas Act of 1938*. Under such legislation, the FERC has jurisdiction over Alliance U.S. with respect to virtually all commercial aspects of its business, including transportation of natural gas, rates and charges, construction of new facilities, extension or abandonment of service and facilities, accounts and records, depreciation and amortization policies, the acquisition and disposition of facilities, the initiation and discontinuation of services, affiliate relationships and certain other matters.

In general, rates charged by interstate natural gas pipeline companies may not exceed the statutory "just and reasonable" or "recourse" rates approved by the FERC and natural gas pipeline companies are prohibited from granting any undue preference to any person or maintaining any unreasonable difference in their rates or terms and conditions of service. However, under the FERC's current policies, a pipeline may obtain approval to charge negotiated rates which differ from (and may exceed) the "just and reasonable" or the FERC regulated "recourse" rate. The FERC approved Alliance U.S.'s proposal to offer shippers both negotiated and "recourse" rate options. Accordingly, Alliance U.S.'s existing tariff contains both negotiated and "recourse" rates.

The U.S. segments of the Vantage Pipeline and Cochin Pipeline are subject to FERC jurisdiction, however not as interstate natural gas pipelines, but rather as liquids pipelines under the *Interstate Commerce Act*. See "*Risk Factors – Risks Inherent in Pembina's Business – Abandonment Costs*", "*Risk Factors – Risks Inherent to Pembina's Business – Environmental Costs and Liabilities* " and "*Risk Factors – Risks Inherent to Pembina's Business – Regulation and Legislation*."

Indemnification and Insurance

Pembina maintains insurance to provide coverage in relation to the ownership of its assets and also maintains standard director and officer insurance consistent with industry practice.

Pembina believes that it has procured such insurance coverage as would be maintained by a prudent owner and operator of the type of assets owned and operated by Pembina. This insurance coverage is subject to limits and exclusions or limitations on coverage that Pembina considers reasonable given the cost of procuring such insurance and current operating conditions. However, there can be no assurance that insurance coverage will be adequate in any particular situation or that insurers will be able to fulfill their obligations should a claim be made. Further, there can be no assurance that such insurance coverage will be available in the future on commercially reasonable terms or at commercially reasonable rates.

Employees

As at December 31, 2019, Pembina employed 2,791 personnel, of which 1,631 were engaged in the performance of field operations and superintendence activities, and 1,160 were engaged in the performance of facilities engineering, systems, management, finance, accounting, administration, human resources, information services, drafting, business development, safety and environmental service and other activities. Of the above field operations employees, 40 are unionized. Pembina's workforce is relatively stable with limited turnover and employees are financially encouraged to remain in Pembina's employment through options to purchase Common Shares, long-term incentive programs and pension plans, all of which vest over time.

Corporate Governance and Corporate Social Responsibility

Pembina is committed to maintaining a high standard of corporate governance and ethical practices, both within the corporate boardroom and throughout its operations. Pembina's corporate governance practices aim to:

- Enhance and preserve value;
- Protect dividends;
- Ensure Pembina meets its obligations to all regulatory bodies, business partners, customers, stakeholders, employees and Shareholders; and
- Operate in a safe, reliable and environmentally responsible way.

Pembina published its first sustainability report in December 2018 and updated the data reported in 2019 with the next full report to be published in 2020.

Pembina is a public company listed on the TSX and the NYSE, and it recognizes and respects rules and regulations applicable to listed issuers in both Canada and the U.S. Pembina's corporate governance practices comply with the Canadian governance guidelines, which include the governance rules of the TSX and the Canadian Securities Administrators, including:

- National Instrument 52-110 - *Audit Committees*;
- National Policy 58-201 - *Corporate Governance Guidelines*; and
- National Instrument 58-101 - *Disclosure of Corporate Governance Practices*.

Pembina also complies with the governance listing standards of the NYSE and the governance rules of the SEC that apply to foreign private issuers.

Pembina's governance practices comply with the NYSE standards for U.S. companies in all significant respects, except as summarized on Pembina's website at www.pembina.com. As a non-U.S. company, Pembina is not required to comply with most

of the governance listing standards of the NYSE. As a foreign private issuer, however, Pembina must disclose how its governance practices differ from those followed by U.S. companies that are subject to the NYSE standards.

Some of Pembina's best practices are derived from the NYSE rules and comply with applicable rules adopted by the SEC to meet the requirements of the *Sarbanes-Oxley Act of 2002* and the *Dodd-Frank Wall Street Reform and Consumer Protection Act* .

CANADIAN OIL AND GAS INDUSTRY

General

The discussion below provides a high-level overview of the crude oil industry, the NGL and natural gas industry and the midstream infrastructure industry within those commodities, with a focus on western Canada, given that a significant portion of Pembina's operations are situated in Alberta. Pembina also has operations in eastern Canada and the U.S. Volumes which feed into those assets predominantly originate in western Canada before being transported to eastern markets via Pembina and third-party pipelines.

Western Canada is the major source of conventional crude oil, synthetic crude oil, natural gas, bitumen and related products, including NGL and condensate, in Canada. Production comes primarily from Alberta with lesser amounts from British Columbia, Saskatchewan, Manitoba and the Northwest Territories. Synthetic crude oil and bitumen come from the oil sands developments near Fort McMurray, Alberta.

Efficient, low cost, and safe transportation by pipeline, rail and truck from producing fields and facilities to refineries, processing plants and domestic and export markets is essential to the Canadian oil and gas industry.

Canadian Crude and Heavy Oil

Western Canada has one of the world's largest crude oil reserves, and over the past decade, the crude oil industry in western Canada has implemented improved drilling technologies, which have enabled increased recoveries and have enhanced economics. Technologies such as multi-stage hydraulic fracturing have allowed producers to access tighter areas of conventional reserves as well as shales and siltstones, which were previously considered to be uneconomical. Through this development, crude oil produced from the WCSB has significantly increased.

Alberta is also abundant in oil sands - a natural mixture of sand, water, clay and a type of natural heavy oil called bitumen. Once the bitumen is recovered and processed to separate it from the sand and water, it is then upgraded to produce synthetic crude oil. Oil sands may be extracted by surface mining where it is moved by trucks to a processing facility or by in situ processes which use steam, solvents and/or thermal energy to allow the bitumen to be pumped to the surface. Because bitumen is so viscous, it often requires dilution with lighter hydrocarbons, such as condensate, to make it transportable by pipeline.

Crude oil production is generally consumed in refineries. Refineries are widely distributed geographically and can be located anywhere along the transportation chain, from the production basin hub locations to mid-point junctions on transmission networks to tidewater where foreign production is able to access North American markets via marine transport.

Pipelines continue to be the safest, most economical and predominant mode of transporting large amounts of crude oil, however, given the extensive rail infrastructure network across North America and the lack of sufficient export pipeline capacity, transporting hydrocarbon products by rail has gained momentum.

Product Transportation:

Feeder pipeline systems gather petroleum products from producing fields and facilities for transport to regional centres for storage, refining and connection to larger pipelines. From these centres, petroleum products are further transported by export pipeline or rail systems either to domestic markets in western or eastern Canada or to markets in the northern U.S. and U.S. gulf coast for end-use or used as feedstock in refineries or the petrochemical industry. The major operational centre for the Canadian oil and natural gas industry is the Edmonton/Fort Saskatchewan area of Alberta, which is the largest crude oil refining centre in western Canada and a major fractionation and market hub for NGL and related products. In addition, the Edmonton/Fort Saskatchewan area is the hub of the Alberta feeder pipeline network and the starting point of many large Canadian export pipelines.

Truck terminals are a means for oil, condensate and NGL production, which is not pipeline connected, to secure transportation access to market.

The export liquids pipelines originating in the Edmonton area are the Trans Mountain Pipeline and the Enbridge Pipeline. Crude oil and refined products delivered to domestic and export markets on the west coast are transported through the Trans Mountain Pipeline. Crude oil and refined products delivered to eastern Canada, the northern U.S. and U.S. gulf coast are transported through the Enbridge Pipeline. NGL delivered to eastern Canadian and export markets are transported through the Enbridge Pipeline. The existing Keystone Pipeline and Express Pipeline also export crude oil from Hardisty, Alberta to the U.S.

Natural Gas Liquids

The NGL industry involves the production, storage, fractionation and transportation of products that are extracted from natural gas prior to its sale to end-use customers. Natural gas is a mixture of various hydrocarbon components, the most abundant of which is methane. The higher value hydrocarbons, which include ethane (C2), propane (C3), butane (C4) and condensate (C5+), are generally in gaseous form at the pressures and temperatures under which natural gas is gathered and transported. NGL extraction facilities recover NGL mix from natural gas in a liquid form. The majority of NGL supply in western Canada is derived from natural gas processing, with the remainder derived from the refining of crude oil. The profitability of the industry is based on the products extracted being of greater economic value as separate commodities (net of the costs of extraction and transportation) than as components of natural gas.

The NGL value chain begins with the gathering of gas produced from the wellhead and moving it to a gas plant. The gas is then processed through field processing plants and mainline extraction facilities, as well as treated for removal of water, sulphur and other impurities. The value chain culminates with the transportation of NGL mix from the gas plant via pipeline to fractionation facilities where the NGL mix will be separated into saleable products and marketed to the final NGL customers.

Condensate is produced naturally at the wellhead when natural gas is brought to the surface at a gas well. It is then either trucked to a connection point on a pipeline or the natural gas plant may be connected directly into a gathering pipeline system for onward delivery to market. Condensate is used primarily as a diluent to blend with heavy crude oil and bitumen to decrease viscosity and density, allowing transport in pipelines. In addition, condensate is used as a refinery feedstock in the production of gasoline, kerosene and jet fuel. With the growth in demand for diluents for heavy oil transportation, there is a requirement to manage diluents prior to injection into the various diluent delivery pipelines. This demand includes accessing the greatest variety of diluents, meeting diluent quality specifications and storage.

The North American markets for NGL are largely continental in nature, though exports have been increasing, with end uses varying substantially by product, from heating and transportation fuels to petrochemical and crude oil refining feed stocks. Ethane is used as feedstock for the petrochemical industry. Propane is the most versatile of the NGL products with uses such as home and commercial heating, crop drying, cooking, motor fuel and petrochemical feedstock. Butane is used primarily in gasoline blending, either directly or in the production of iso-octane and as a diluent for heavy oil.

NGL Extraction

NGL is recovered at three distinct types of facilities: natural gas field plants, natural gas mainline straddle plants and oil refineries. Field plants process raw natural gas, which is produced from wells in the immediate vicinity, to remove impurities such as water, sulphur and carbon dioxide prior to the delivery of natural gas to the major natural gas pipeline systems. Field plants also remove almost all condensate and as much as 65 percent of propane and 80 percent of butane to meet pipeline specifications, leaving ethane and unrecovered NGL in the natural gas. Most western Canadian field plants do not extract ethane but leave it in the natural gas. Once processed, the natural gas is then compressed and delivered to one of the major gas transmission systems in the region. In Alberta, any residual NGL and ethane in the natural gas is extracted at mainline straddle plants prior to export.

NGL extraction produces a mixed hydrocarbon product (either ethane-plus (C2+) or propane-plus (C3+)), which must be further processed in subsequent steps to separate out the individual products. At most field facilities, only sufficient NGL to make the natural gas marketable is extracted; however, with the addition of deep cut processing facilities and mainline straddle plants, further NGL extraction is possible to ensure the maximum amount of NGL is recovered. NGL products have historically been priced relative to oil, so this additional level of recovery is dependent on the relative value between oil and natural gas. As the relative price of oil versus natural gas increases, the economic impetus for this activity is also increased.

NGL Fractionation

NGL mix extracted at field plants and straddle plants is transported via pipelines, truck or rail to fractionation facilities, which separate the mix into its components: ethane, propane, butane and condensate. Due to size, storage and transportation limitations, fractionation generally does not occur at field plants, but rather at larger, well-connected, centralized locations. Once fractionated, the products are stored and transported to end markets by pipeline, truck or rail.

NGL Transportation

The efficient movement of NGL products requires significant infrastructure, including transportation assets (pipelines, trucks and rail cars), storage facilities, and terminals (rail and truck). The safest, most efficient and lowest-cost means for moving NGL products to markets is by pipeline. The Canadian energy sector has an extensive pipeline network for the transportation of NGL to fractionation facilities, petrochemical complexes, underground storage facilities and the end-user. Pipelines serve as the main mode of NGL transportation (pre- and post-fractionation). Additionally, NGL are transported by truck and rail.

NGL Storage

Storage assets offer a number of key strategic advantages, which include: (i) providing the necessary operational buffer between production of NGL (which varies daily depending on gas flows and composition) and their consumption (which can vary from day-to-day and season-to-season depending on market needs); (ii) allowing for storage of NGL products for future utilization; and (iii) exploiting seasonal price differentials that may develop over the course of a year (particularly for propane and butane).

Natural Gas Transportation

The natural gas transportation industry from western Canada to eastern markets has historically been controlled by companies affiliated with TransCanada PipeLines Limited. Natural gas supply and pipeline infrastructure has grown over the past several years creating increased competition throughout North America.

The efficient movement of natural gas requires significant infrastructure, including pipelines and storage facilities. The safest, most efficient and the lowest-cost means for moving natural gas to markets is by pipeline. The Canadian energy sector has an extensive pipeline network for the transportation of natural gas to field plants and extraction facilities. Pipelines serve as the main mode of natural gas transportation.

DESCRIPTION OF THE CAPITAL STRUCTURE OF PEMBINA

The authorized capital of Pembina consists of an unlimited number of Common Shares, a number of Class A Preferred Shares, issuable in series, not to exceed 254,850,850 Class A Preferred Shares, and an unlimited number of Class B Preferred Shares. As of December 31, 2019, there were approximately 548 million Common Shares outstanding, and approximately 19 million Common Shares issuable pursuant to outstanding options under the Option Plan. In addition, 10 million Series 1 Class A Preferred Shares, 6 million Series 3 Class A Preferred Shares, 10 million Series 5 Class A Preferred Shares, 10 million Series 7 Class A Preferred Shares, 9 million Series 9 Class A Preferred Shares, 6.8 million Series 11 Class A Preferred Shares, 10 million Series 13 Class A Preferred Shares, 8 million Series 15 Class A Preferred Shares, 6 million Series 17 Class A Preferred Shares, 8 million Series 19 Class A Preferred Shares, 16 million Series 21 Class A Preferred Shares, 12 million Series 23 Class A Preferred Shares and 10 million Series 25 Class A Preferred Shares were outstanding as of December 31, 2019.

The following is a summary of the rights, privileges, restrictions and conditions attaching to the Common Shares, the Class A Preferred Shares and the Class B Preferred Shares.

Common Shares

Holders of Common Shares are entitled to receive notice of and to attend all meetings of Shareholders and to one vote at such meetings for each Common Share held. The holders of the Common Shares are, at the discretion of the Board of Directors and subject to applicable legal restrictions, entitled to receive any dividends declared by the Board of Directors on the Common Shares, and are entitled to share in the remaining property of Pembina upon liquidation, dissolution or winding-up, subject to the rights of the holders of the Class A Preferred Shares and Class B Preferred Shares.

Pembina has a shareholder rights plan (the " **Plan**") that was adopted to ensure, to the extent possible, that all Shareholders are treated fairly in connection with any take-over bid for Pembina and to ensure that the Board is provided with sufficient time to

evaluate unsolicited take-over bids and to explore and develop alternatives to maximize Shareholder value. The Plan creates a right that attaches to each present and subsequently issued Common Share. Until the Separation Time (as defined in the Plan), which typically occurs at the time of an unsolicited take-over bid, whereby a person acquires or attempts to acquire 20 percent or more of the Common Shares, the rights are not separable from the Common Shares, are not exercisable and no separate rights certificates are issued. Each right entitles the holder, other than the 20 percent acquirer, from and after the Separation Time (as defined in the Plan) and before certain expiration times, to acquire one Common Share at a substantial discount to the market price at the time of exercise. The Board of Directors may waive the application of the Plan in certain circumstances. The Plan was reconfirmed by Shareholders at Pembina's 2019 annual meeting and must be reconfirmed at every third annual meeting thereafter. Accordingly, the Plan, with such amendments as the Board of Directors determines to be necessary or advisable, and as may otherwise be required by law, is expected to be placed before Shareholders for approval at Pembina's 2022 meeting of Shareholders. A copy of the agreement relating to the current Plan has been filed on Pembina's SEDAR and EDGAR profiles on May 13, 2016 and May 31, 2016, respectively.

Class A Preferred Shares

The Class A Preferred Shares were not intended to and will not be used by the Company for anti-takeover purposes without Shareholder approval. Subject to certain limitations, the Board may, from time to time, issue Class A Preferred Shares in one or more series and determine for any such series, its designation, number of shares and respective rights, privileges, restrictions and conditions. The Class A Preferred Shares as a class have, among others, the provisions described below.

Each series of Class A Preferred Shares shall rank on parity with every other series of Class A Preferred Shares, and shall have priority over the Common Shares, the Class B Preferred Shares and any other class of shares ranking junior to the Class A Preferred Shares with respect to redemption, the payment of dividends, the return of capital and the distribution of assets in the event of the liquidation, dissolution or winding-up of Pembina. The Class A Preferred Shares of any series may also be given such preferences, not inconsistent with the provisions thereof, over the Common Shares, the Class B Preferred Shares and over any other class of shares ranking junior to the Class A Preferred Shares, as may be determined by the Board.

In the event of the liquidation, dissolution or winding-up of Pembina, if any cumulative dividends or amounts payable on a return of capital in respect of a series of Class A Preferred Shares are not paid in full, the Class A Preferred Shares of all series shall participate rateably in: (a) the amounts that would be payable on such shares if all such dividends were declared at or prior to such time and paid in full; and (b) the amounts that would be payable in respect of the return of capital as if all such amounts were paid in full; provided that if there are insufficient assets to satisfy all such claims, the claims of the holders of the Class A Preferred Shares with respect to repayment of capital shall first be paid and satisfied and any assets remaining shall be applied towards the payment and satisfaction of claims in respect of dividends. After payment to the holders of any series of Class A Preferred Shares of the amount so payable, the holders of such series of Class A Preferred Shares shall not be entitled to share in any further distribution of the property or assets of Pembina in the event of the liquidation, dissolution or winding-up of Pembina.

Holders of any series of Class A Preferred Shares will not be entitled (except as otherwise provided by law and except for meetings of the holders of Class A Preferred Shares or a series thereof) to receive notice of, attend at, or vote at any meeting of shareholders of Pembina, unless the Board shall determine otherwise in the terms of a particular series of Class A Preferred Shares, in which case voting rights shall only be provided in circumstances where Pembina shall have failed to pay a certain number of dividends on such series of Class A Preferred Shares, which determination and number of dividends and any other terms in respect of such voting rights, shall be determined by the Board and set out in the designations, rights, privileges, restrictions and conditions of such series of Class A Preferred Shares. Other than as set out below, the material characteristics of each series of Class A Preferred Shares are substantially the same.

The table below outlines the number of outstanding, and the material provisions of, each of the issued series of Class A Preferred Shares.

Series	Issue Date	Issued and Outstanding	Amount (C$)	Annual Dividend Rate	Redemption and Conversion Option Date[2][3]	Reset Spread	Per Share Base Redemption/ Liquidation Value	Right to Convert on a one for one basis[4]
1	July 26, 2013	10,000,000	$250,000,000	$1.22650[1]	December 1, 2023	2.47%[3]	$25.00	Series 2
3	October 2, 2013	6,000,000	$150,000,000	$1.11950[1]	March 1, 2024	2.60%[3]	$25.00	Series 4
5	January 16, 2014	10,000,000	$250,000,000	$1.14325[1]	June 1, 2024	3.00%[3]	$25.00	Series 6
7	September 11, 2014	10,000,000	$250,000,000	$1.09500[1]	December 1, 2024	2.94%[3]	$25.00	Series 8
9	April 10, 2015	9,000,000	$225,000,000	$1.18750[1]	December 1, 2020	3.91%[3]	$25.00	Series 10
11	January 15, 2016	6,800,000	$170,000,000	$1.43750[1]	March 1, 2021	5.00%[5]	$25.00	Series 12
13	April 27, 2016	10,000,000	$250,000,000	$1.43750[1]	June 1, 2021	4.96% [5]	$25.00	Series 14
15	October 2, 2017[6]	8,000,000	$200,000,000	$1.11600[7]	September 30, 2022	2.92%[3]	$25.00	Series 16
17	October 2, 2017[6]	6,000,000	$150,000,000	$1.20525[7]	March 31, 2024	3.01%[3]	$25.00	Series 18
19	October 2, 2017[6]	8,000,000	$200,000,000	$1.25000[7]	June 30, 2020	4.27%[3]	$25.00	Series 20
21	December 7, 2017	16,000,000	$400,000,000	$1.22500[1]	March 1, 2023	3.26%[8]	$25.00	Series 22
23	December 16, 2019[9]	12,000,000	$300,000,000	$1.31250[10]	November 15, 2022	3.65%[11]	$25.00	Series 24
25	December 16, 2019[9]	10,000,000	$250,000,000	$1.30000[10]	February 15, 2023	3.51%[12]	$25.00	Series 26

Notes:

(1) The holder is entitled to receive a fixed, cumulative preferential dividend per year payable quarterly on the 1st day of March, June, September and December, as declared by the Board of Directors.

(2) The Company may, at its option, redeem all or a portion of an outstanding series of Class A Preferred Shares on the Redemption Option Date and every fifth year thereafter for the Base Redemption Value per share plus all accrued and unpaid dividends.

(3) The dividend rate will reset on the Redemption and Conversion Option Date and every five years thereafter at a rate equal to the sum of the then five-year Government of Canada bond yield plus the applicable Reset Spread noted above.

(4) A holder has the right, subject to certain conditions, to convert their Class A Preferred Shares into cumulative redeemable Class A Preferred Shares of a specified series on the Conversion Option Date and every fifth anniversary thereafter. The even numbered series of Class A Preferred Shares carry the right to receive floating, cumulative preferential dividends at a rate, reset quarterly, equal to the sum of the then 90 day Government of Canada treasury bill rate plus the applicable reset spread.

(5) The dividend rate will reset on the Redemption and Conversion Option Date and every five years thereafter at a rate equal to the sum of the then five-year Government of Canada bond yield plus the applicable Reset Spread noted above, provided that in any event, the rate for the Series 11 and Series 13 Class A Preferred Shares shall not be less than 5.75 percent.

(6) Effective October 2, 2017 and pursuant to the Veresen Acquisition, all of the outstanding Veresen Series A, C and E Preferred Shares were exchanged for Series 15, 17 and 19 Class A Preferred Shares, respectively.

(7) The holder is entitled to receive a fixed, cumulative preferential dividend per year payable quarterly on the last day of March, June, September and December, as declared by the Board of Directors.

(8) The dividend rate will reset on the Redemption and Conversion Option Date and every five years thereafter at a rate equal to the sum of the then five-year Government of Canada bond yield plus the applicable Reset Spread noted above, provided that in any event, the rate for the Series 21 Class A Preferred Shares shall not be less than 4.90 percent.

(9) Effective December 16, 2019 and pursuant to the Kinder Acquisition, all of the outstanding KML Series 1 and 3 Preferred Shares were exchanged for Series 23 and 25 Class A Preferred Shares, respectively.

(10) The holder is entitled to receive a fixed, cumulative preferential dividend per year payable quarterly on the 15th day of February, May, August and November, as declared by the Board of Directors.

(11) The dividend rate will reset on the Redemption and Conversion Option Date and every five years thereafter at a rate equal to the sum of the then five-year Government of Canada bond yield plus the applicable Reset Spread noted above, provided that in any event, the rate for the Series 23 Class A Preferred Shares shall not be less than 5.25 percent.

(12) The dividend rate will reset on the Redemption and Conversion Option Date and every five years thereafter at a rate equal to the sum of the then five-year Government of Canada bond yield plus the applicable Reset Spread noted above, provided that in any event, the rate for the Series 21 Class A Preferred Shares shall not be less than 5.20 percent.

Class B Preferred Shares

The Class B Preferred Shares were not intended to and will not be used by the Company for anti-takeover purposes without Shareholder approval. If at any time a holder of Class B Preferred Shares ceases to be, or is not, a direct or indirect wholly-owned subsidiary of Pembina, Pembina, with or without knowledge of such event, shall be deemed, without further action or notice, to have automatically redeemed all of the Class B Preferred Shares held by such holder in exchange for the redemption amount as set out in Pembina's articles per share together with all declared but unpaid dividends thereon (the "**Redemption Amount**").

Holders of Class B Preferred Shares are not entitled to receive notice of, to attend or to vote at any meeting of the Shareholders, except as required by law. The Class B Preferred Shares are retractable and redeemable at the option of the holder thereof and Pembina, respectively.

The holders of Class B Preferred Shares shall be entitled to receive, if and when declared by the Board of Directors, preferential non-cumulative dividends and upon the liquidation, dissolution or winding-up of Pembina, the holders of Class B Preferred Shares shall be entitled to receive for each such share, in priority to the holders of Common Shares, the Redemption Amount.

All of the issued Class B Preferred Shares of Pembina were cancelled pursuant to the amalgamation between Pembina and its wholly-owned subsidiary, Alberta Oil Sands Pipeline Ltd., on October 1, 2015. There are currently no Class B Preferred Shares outstanding.

Credit Facilities

Pembina's credit facilities as at December 31, 2019 consisted of an unsecured $2.5 billion revolving credit facility due May 31, 2024, which includes a $750 million accordion feature (the "**Revolving Credit Facility**") and an unsecured operating facility of $20 million due May 31, 2020 (the "**Operating Credit Facility**", and together with the Revolving Credit Facility, the " **Credit Facilities**"). Borrowings on the Credit Facilities bear interest at prime lending rates plus nil to 1.25 percent or Bankers' Acceptances and LIBOR rates plus 1.00 percent to 2.25 percent. Margins on the Credit Facilities are based on the credit rating of Pembina's senior unsecured debt. There are no repayments due over the term of the Credit Facilities. Pembina also has a $500 million Term Loan for an initial three-year term that is pre-payable at the company’s option. The other terms and conditions of the Term Loan, including financial covenants, are substantially similar to the Revolving Credit Facility. As at December 31, 2019, Pembina had $2.1 billion drawn on bank debt and $129 million in cash, leaving $1.0 billion of cash and unutilized debt facilities. Pembina also had an additional $103 million in letters of credit issued on separate demand letter credit facilities.

Medium Term Notes

Subject to certain conditions, as noted below, Pembina may redeem each series of Pembina Medium Term Notes, either in whole, or in part, upon not less than 30 and not more than 60 days prior notice, at a price equal to the greater of (i) par and (ii) the Canada Yield Price (as defined below), plus, in either case, accrued but unpaid interest, if any, to but excluding the date of redemption. In respect of the Pembina Medium Term Notes, "**Canada Yield Price**" means, in effect, a price equal to the price of a specific series of Pembina Medium Term Notes, as applicable, calculated in accordance with generally accepted financial practice in Canada to provide a yield to maturity equal to the Government of Canada Yield (as defined below) plus the Redemption Premium set forth in the table below. In respect of the Pembina Medium Term Notes, "**Government of Canada Yield**" means, on any date, in effect, the yield to maturity on such date compounded semi-annually which a non-callable Government of Canada bond would carry if issued, in Canadian dollars in Canada, at 100 percent of its principal amount on such date with a term to maturity equal to the remaining term to maturity of the specified series of Pembina Medium Term Notes, as applicable. The Government of Canada Yield will be the average of the yields determined by two major Canadian investment dealers selected by Pembina. In certain circumstances following a Change of Control (as such term is defined in the Pembina Note Indenture) and a resulting downgrade in the ratings of the Pembina Medium Term Notes to below an investment grade, Pembina will be required to make an offer to repurchase all or, at the option of any holder of Pembina Medium Term Notes, any part, at a purchase price payable in cash equal to 101 percent of the aggregate outstanding principal amount thereof plus accrued and unpaid interest, if any, to the date of purchase. After certain dates (as set forth below), the Medium Term Notes, Series 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 and 15 may be redeemed at a price equal to par, plus accrued but unpaid interest, if any, to but excluding the date of redemption.

Subject to certain conditions, as noted below, Pembina may redeem each series of Veresen Medium Term Notes, either in whole, or in part, upon not less than 30 and not more than 60 days prior notice, at a price equal to the greater of (i) par and (ii) the Canada Yield Price (as defined below), plus, in either case, accrued but unpaid interest, if any, to but excluding the date of redemption. In respect of the Veresen Medium Term Notes, "**Canada Yield Price**" means, in effect, a price equal to the price of a specific series of Veresen Medium Term Notes, as applicable, calculated in accordance with generally accepted financial practice

in Canada to provide a yield to maturity equal to the Government of Canada Yield (as defined below) plus the Redemption Premium set forth in the table below. In respect of the Veresen Medium Term Notes, "**Government of Canada Yield**" means, on any date, in effect, the yield to maturity on such date compounded semi-annually which a non-callable Government of Canada bond would carry if issued, in Canadian dollars in Canada, at 100 percent of its principal amount on such date with a term to maturity equal to the remaining term to maturity of the specified series of Veresen Medium Term Notes, as applicable. The Government of Canada Yield will be the average of the yields determined by two major Canadian investment dealers selected by Pembina. In certain circumstances following a Change of Control (as defined in the Veresen Medium Term Note Indenture) and a resulting downgrade in the ratings of the Veresen Medium Term Notes to below an investment grade, Pembina will be required to make an offer to repurchase all or, at the option of any holder of Veresen Medium Term Notes, any part, at a purchase price payable in cash equal to 101 percent of the aggregate outstanding principal amount thereof plus accrued and unpaid interest, if any, to the date of purchase. After certain dates (as set forth below), the Veresen Medium Term Notes, Series 5 may be redeemed at a price equal to par, plus accrued but unpaid interest, if any, to but excluding the date of redemption.

The table below outlines the aggregate principal amount outstanding, and the material provisions of, each of our issued series of Medium Term Notes as at December 31, 2019.

Series	Issue Date	Maturity Date	Principal and Outstanding Amount (C$)	Annual Coupon Rate	Redemption Premium (per annum)
1[1]	March 29, 2011	March 29, 2021	$250,000,000	4.89%	0.395%
2[1]	October 22, 2012	October 24, 2022	$450,000,000	3.77%	0.460%
3[2]	April 30, 2013	April 30, 2043	$200,000,000	4.75%	0.585%
	February 2, 2015[3]		$150,000,000		
	June 16, 2015[3]		$100,000,000		
4[4]	April 4, 2014	March 25, 2044	$600,000,000	4.81%	0.450%
5[5]	February 2, 2015	February 3, 2025	$450,000,000	3.54%	0.540%
6[6]	June 16, 2015	June 15, 2027	$500,000,000	4.24%	0.560%
7[7]	August 11, 2016	August 11, 2026	$500,000,000	3.71%	0.655%
8[8]	January 20, 2017	January 22, 2024	$300,000,000	2.99%	0.385%
	August 16, 2017[9]		$350,000,000		
9[10]	January 20, 2017	January 21, 2047	$300,000,000	4.74%	0.610%
	August 16, 2017[11]		$250,000,000		
10[12]	March 26, 2018	March 27, 2028	$400,000,000	4.02%	0.450%
11[13]	March 26, 2018	March 26, 2048	$300,000,000	4.75%	0.605%
12[14]	April 3, 2019	April 3, 2029	$400,000,000	3.62%	0.475%
13[15]	April 3, 2019	April 3, 2049	$400,000,000	4.54%	0.640%
	September 12, 2019[16]		$300,000,000		
14[17]	September 12, 2019	June 1, 2023	$600,000,000	2.56%	0.280%
15[18]	September 12, 2019	February 1, 2030	$600,000,000	3.31%	0.485%
Veresen 3[19]	March 14, 2012	March 14, 2022	$50,000,000	5.05%	0.750%
Veresen 5[20]	November 10, 2016	November 10, 2021	$350,000,000	3.43%	0.675%

Notes:

(1) Pembina may redeem the Medium Term Notes, Series 1 and Medium Term Notes, Series 2 at a price equal to the greater of (i) par and (ii) the Canada Yield Price, plus, in either case, accrued but unpaid interest, if any, to but excluding the date of redemption.

(2) Pembina may redeem the Medium Term Notes, Series 3, (a) at any time prior to October 30, 2042 at a price equal to the greater of (i) par and (ii) the Canada Yield Price, and (b) at any time on or after October 30, 2042 at a price equal to par, plus, in either case, accrued but unpaid interest, if any, to but excluding the date of redemption.

(3) On February 2, 2015 and June 16, 2015, Pembina re-opened its Medium Term Notes, Series 3 for $150 million and $100 million aggregate principal amounts, respectively.

(4) Pembina may redeem the Medium Term Notes, Series 4, (a) at any time prior to September 25, 2043 at a price equal to the greater of (i) par and (ii) the Canada Yield Price, and (b) at any time on or after September 25, 2043 at a price equal to par, plus, in either case, accrued but unpaid interest, if any, to but excluding the date of redemption.

(5) Pembina may redeem the Medium Term Notes, Series 5, (a) at any time prior to November 3, 2024 at a price equal to the greater of (i) par and (ii) the Canada Yield Price, and (b) at any time on or after November 3, 2024 at a price equal to par, plus, in either case, accrued but unpaid interest, if any, to but excluding the date of redemption.

(6) Pembina may redeem the Medium Term Notes, Series 6, (a) at any time prior to March 15, 2027 at a price equal to the greater of (i) par and (ii) the Canada Yield Price and (b) at any time on or after March 15, 2027 at a price equal to par, plus, in either case, accrued but unpaid interest, if any, to but excluding the date of redemption.

(7) Pembina may redeem the Medium Term Notes, Series 7, (a) at any time prior to May 11, 2026 at a price equal to the greater of (i) par and (ii) the Canada Yield Price and (b) at any time on or after May 11, 2026 at a price equal to par, plus, in either case, accrued but unpaid interest, if any, to but excluding the date of redemption.

(8) Pembina may redeem the Medium Term Notes, Series 8, (a) at any time prior to November 22, 2023 at a price equal to the greater of (i) par and (ii) the Canada Yield Price and (b) at any time on or after November 22, 2023 at a price equal to par, plus, in either case, accrued but unpaid interest, if any, to but excluding the date of redemption.

(9) On August 16, 2017, Pembina re-opened its Medium Term Notes, Series 8 for $350 million aggregate principal.

(10) Pembina may redeem the Medium Term Notes, Series 9, (a) at any time prior to July 21, 2046 at a price equal to the greater of (i) par and (ii) the Canada Yield Price and (b) at any time on or after July 21, 2046 at a price equal to par, plus, in either case, accrued but unpaid interest, if any, to but excluding the date of redemption.

(11) On August 16, 2017, Pembina re-opened its Medium Term Notes, Series 9 for $250 million aggregate principal.

(12) Pembina may redeem the Medium Term Notes, Series 10, (a) at any time prior to December 27, 2027 at a price equal to the greater of (i) par and (ii) the Canada Yield Price and (b) at any time on or after December 27, 2027 at a price equal to par, plus, in either case, accrued but unpaid interest, if any, to but excluding the date of redemption.

(13) Pembina may redeem the Medium Term Notes, Series 11, (a) at any time prior to September 26, 2047 at a price equal to the greater of (i) par and (ii) the Canada Yield Price and (b) at any time on or after September 26, 2047 at a price equal to par, plus, in either case, accrued but unpaid interest, if any, to but excluding the date of redemption.

(14) Pembina may redeem the Medium Term Notes, Series 12, (a) at any time prior to January 3, 2029 at a price equal to the greater of (i) par and (ii) the Canada Yield Price and (b) at any time on or after January 3, 2029 at a price equal to par, plus, in either case, accrued but unpaid interest, if any, to but excluding the date of redemption.

(15) Pembina may redeem the Medium Term Notes, Series 13, (a) at any time prior to October 3, 2048 at a price equal to the greater of (i) par and (ii) the Canada Yield Price and (b) at any time on or after October 3, 2048 at a price equal to par, plus, in either case, accrued but unpaid interest, if any, to but excluding the date of redemption.

(16) On September 12, 2019, Pembina re-opened its Medium Term Notes, Series 13 for $300 million aggregate principal.

(17) Pembina may redeem the Medium Term Notes, Series 14, (a) at any time prior to June 1, 2023 at a price equal to the greater of (i) par and (ii) the Canada Yield Price and (b) at any time on or after June 1, 2023 at a price equal to par, plus, in either case, accrued but unpaid interest, if any, to but excluding the date of redemption.

(18) Pembina may redeem the Medium Term Notes, Series 15, (a) at any time prior to November 1, 2029 at a price equal to the greater of (i) par and (ii) the Canada Yield Price and (b) at any time on or after November 1, 2029 at a price equal to par, plus, in either case, accrued but unpaid interest, if any, to but excluding the date of redemption.

(19) Pembina may redeem the Veresen Medium Term Notes, Series 3, at any time prior to the maturity date at a price equal to the greater of (i) par and (ii) the Canada Yield Price, together with accrued and unpaid interest to, but excluding, the date of redemption.

(20) Pembina may redeem the Veresen Medium Term Notes, Series 5, (a) at any time prior to October 10, 2021 at a price equal to the greater of (i) par and (ii) the Canada Yield Price, and (b) at any time on or after October 10, 2021 at a price equal to par plus, in either case, accrued but unpaid interest, if any, to but excluding, the date of redemption.

Other Debt

Other debt at December 31, 2019 included $200 million aggregate principal amount of senior unsecured notes of Pembina issued September 30, 2006 and due September 30, 2021 and which bear interest at a fixed rate of 5.58 percent per annum (the "**Series C Senior Notes**") and $73 million aggregate principal amount of senior unsecured notes of Pembina issued April 4, 2018 and due May 4, 2020 and which bear interest at a fixed rate of 5.565 percent per annum (the "**Series A Senior Notes**"). The Series A and C Senior Notes are subject to the maintenance of certain financial ratios.

Credit Ratings

The following information with respect to Pembina's credit ratings is provided as it relates to Pembina's financing costs and liquidity. Specifically, credit ratings affect Pembina's ability to obtain short-term and long-term financing and impact 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 may affect Pembina's ability to enter into, and the associated costs of entering 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 debt securities. The credit ratings assigned by the rating agencies are not recommendations to purchase, hold or sell the securities nor do the ratings comment on market price or suitability for a particular investor. Any 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 judgement circumstances so warrant.

Pembina has paid each of S&P and DBRS their customary fees in connection with the provision of the below ratings. Pembina has not made any payments to S&P or DBRS over the past two years for services unrelated to the provision of such ratings.

DBRS Limited

DBRS has assigned a debt rating of 'BBB' to each issued senior unsecured note.

The BBB rating is the fourth highest of DBRS's ten rating categories for long-term debt, which range from AAA to D. DBRS uses "high" and "low" designations on ratings from AA to C to indicate the relative standing of securities being rated within a particular rating category. The absence of a "high" or "low" designation indicates that a rating is in the middle of the category. The BBB

rating indicates that, in DBRS's view, the rated securities are of adequate credit quality. The capacity for the payment of financial obligations is considered acceptable; however, the issuer may be vulnerable to future events.

Each issued series of Class A Preferred Shares has been rated 'Pfd-3' by DBRS. The Pfd-3 rating is the third highest of six rating categories for preferred shares, which range from a high of Pfd-1 to a low of D. "High" or "low" grades are used to indicate the relative standing within a rating category. The absence of either a "high" or "low" designation indicates the rating is in the middle of the category. According to the DBRS rating system, preferred shares rated Pfd-3 are of adequate credit quality. While protection of dividends and principal is still considered acceptable, the issuing entity is more susceptible to adverse changes in financial and economic conditions, and there may be other adverse conditions present which detract from debt protection.

When a significant event occurs that directly impacts the credit quality of a particular entity or group of entities, DBRS will attempt to provide an immediate rating opinion. However, if there is uncertainty regarding the outcome of the event, and DBRS is unable to provide an objective, forward-looking opinion in a timely fashion, then the ratings of the issuer will be placed "Under Review."

S&P

S&P has a long-term corporate credit rating on Pembina of 'BBB'. S&P also has assigned a rating of 'BBB' to each issued senior unsecured note.

The BBB rating is the fourth highest rating, of S&P's ten rating categories for long-term debt which range from 'AAA' to 'D'. The ratings from 'AA' to 'CCC' may be modified by the addition of a plus (+) or minus (–) sign to show relative standing within the major rating categories. Issues of debt securities rated BBB are judged by S&P to exhibit adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation.

Each issued series of Class A Preferred Shares has been rated 'P-3 (High)' by S&P. S&P's ratings for preferred shares range from a high of 'P-1' to a low of 'P-5'. "High" or "low" grades are used to indicate the relative standing within a rating category. According to the S&P rating system, securities rated P-3 are regarded as having significant speculative characteristics. While such securities will likely have some quality and protective characteristics, these may be outweighed by large uncertainties or major exposures to adverse conditions. An obligation rated P-3 (High) is less vulnerable to non-payment than other speculative issues. However, it faces major ongoing uncertainties or exposure to adverse business, financial or economic conditions which could lead to the obligor's inadequate capacity to meet its financial commitment on the obligation.

These securities ratings are not recommendations to purchase, hold or sell the securities in as much as such ratings do not comment as to market price or suitability for a particular investor. There is no assurance that any rating will remain in effect for any given period of time or that any rating will not be revised or withdrawn entirely by a rating agency in the future if, in its judgment, circumstances so warrant.

See "*Risk Factors – General Risk Factors – Credit Ratings*."

DIVIDENDS AND DISTRIBUTIONS

Cash Dividends

The declaration and payment of any dividend by Pembina is at the discretion of the Board of Directors and will depend on numerous factors, including compliance with applicable laws and the financial performance, debt obligations, working capital requirements and future capital requirements of Pembina and its subsidiaries. See "*Risk Factors*." The agreements governing Pembina's Credit Facilities provide that if an event of default has occurred under the Credit Facilities, the indebtedness may be accelerated by the lenders, and the ability to pay dividends thereupon ceases. Pembina is restricted from making distributions (including the declaration of dividends) if it is in default under its Credit Facilities (or a default would be expected to occur as a result of such distribution) or if its borrowings exceed its borrowing base threshold.

Common Shares

Pembina pays cash dividends on its Common Shares on a monthly basis to Shareholders of record on the 25th calendar day of each month (except for the December record date, which is December 31st), if, as and when determined by the Board of Directors. Should the record date fall on a weekend or a statutory holiday, the effective record date will be the previous business day. The dividend payment date is the 15th of the month following the record date. Should the payment date fall on a weekend or on a

holiday, the business day prior to the weekend or holiday becomes the payment date. The following table sets forth the amount of monthly cash dividends paid by Pembina on its Common Shares in 2017, 2018, 2019 and to date in 2020.

Cash Dividends Per Common Share

Month of Payment Date	2017	2018	2019	2020
January	$0.16	$0.18	$0.19	$0.20
February	$0.16	$0.18	$0.19	$0.21(5)(6)
March	$0.16	$0.18	$0.19	
April	$0.16(1)	$0.18	$0.19	
May	$0.17	$0.18(3)	$0.19(4)	
June	$0.17	$0.19	$0.20	
July	$0.17	$0.19	$0.20	
August	$0.17	$0.19	$0.20	
September	$0.17	$0.19	$0.20	
October	$0.17(2)	$0.19	$0.20	
November	$0.18	$0.19	$0.20	
December	$0.18	$0.19	$0.20	
Total	$2.03	$2.23	$2.35	$0.41

Notes:

(1) On April 3, 2017, Pembina announced an increase to its monthly dividend from $0.16 to $0.17.

(2) On October 2, 2017, Pembina announced an increase to its monthly dividend from $0.17 to $0.18.

(3) On May 3, 2018, Pembina announced an increase to its monthly dividend from $0.18 to $0.19.

(4) On May 2, 2019, Pembina announced an increase to its monthly dividend from $0.19 to $0.20.

(5) On December 16, 2019, Pembina announced an increase to its monthly dividend from $0.20 to $0.21.

(**6**) On February 5, 2020, Pembina announced that the Board of Directors had declared a dividend of $0.21 per Common Share to be paid, subject to applicable law, on March 13, 2020 to holders of Common Shares of record on February 25, 2020.

Class A Preferred Shares

Dividends on each issued series of Class A Preferred Shares (excluding the Series 15, 17, 19 **,** 23 and 25 Class A Preferred Shares) are payable on the first day of March, June, September and December of each year, if, as and when declared by the Board. Dividends on the Series 15, 17 and 19 Class A Preferred Shares are payable on the last day of March, June, September and December of each year, if, as and when declared by the Board. Dividends on the Series 23 and 25 Class A Preferred Shares are payable on the 15th day of February, May, August and November of each year, if, as and when declared by the Board**.** Additional information regarding dividends payable on the Class A Preferred Shares can be found under the heading "*Description of the Capital Structure of Pembina – Class A Preferred Shares* " herein.

The following table sets forth the amount of monthly cash dividends paid by Pembina on its Class A Preferred Shares in 2017, 2018, 2019 and to date in 2020.

Cash Dividends Per Class A Preferred Share

Quarterly Payment Date[1]	Series 1	Series 3	Series 5	Series 7	Series 9	Series 11	Series 13	Series 15[2]	Series 17[3]	Series 19[4]	Series 21[5]	Total
2017												
Mar	$0.265625	$0.293750	$0.312500	$0.281250	$0.296875	$0.359375	$0.359375	N/A	N/A	N/A	N/A	$2.168750
June	$0.265625	$0.293750	$0.312500	$0.281250	$0.296875	$0.359375	$0.359375	N/A	N/A	N/A	N/A	$2.168750
Sept	$0.265625	$0.293750	$0.312500	$0.281250	$0.296875	$0.359375	$0.359375	N/A	N/A	N/A	N/A	$2.168750
Dec	$0.265625	$0.293750	$0.312500	$0.281250	$0.296875	$0.359375	$0.359375	$0.279000	$0.312500	$0.312500	N/A	$3.072750
2018												
Mar	$0.265625	$0.293750	$0.312500	$0.281250	$0.296875	$0.359375	$0.359375	$0.279000	$0.312500	$0.312500	$0.281900	$3.354650
June	$0.265625	$0.293750	$0.312500	$0.281250	$0.296875	$0.359375	$0.359375	$0.279000	$0.312500	$0.312500	$0.306250	$3.379000
Sept	$0.265625	$0.293750	$0.312500	$0.281250	$0.296875	$0.359375	$0.359375	$0.279000	$0.312500	$0.312500	$0.306250	$3.379000
Dec	$0.265625	$0.293750	$0.312500	$0.281250	$0.296875	$0.359375	$0.359375	$0.279000	$0.312500	$0.312500	$0.306250	$3.379000
2019												
Mar[8]	$0.306625	$0.293750	$0.312500	$0.281250	$0.296875	$0.359375	$0.359375	$0.279000	$0.312500	$0.312500	$0.306250	$3.379000
June	$0.306625	$0.279875	$0.312500	$0.281250	$0.296875	$0.359375	$0.359375	$0.279000	$0.301313	$0.312500	$0.306250	$3.394938
Sept	$0.306625	$0.279875	$0.285813	$0.281250	$0.296875	$0.359375	$0.359375	$0.279000	$0.301313	$0.312500	$0.306250	$3.368251
Dec	$0.306625	$0.279875	$0.285813	$0.281250	$0.296875	$0.359375	$0.359375	$0.279000	$0.301313	$0.312500	$0.306250	$3.368251
2020												
Mar[6]	$0.306625	$0.279875	$0.285813	$0.273750	$0.296875	$0.359375	$0.359375	$0.279000	$0.301313	$0.312500	$0.306250	$3.360751

Quarterly Payment Date[1]	Series 23[7]	Series 25[8]	Total
2020			
Feb[9]	$0.328125	$0.325000	$0.653125
May[9]	$0.328125	$0.325000	$0.653125

Notes:

(1) A holder of Series 1, 3, 5, 7, 9, 11, 13 and 21 Class A Preferred Shares is entitled to receive a fixed, cumulative preferential dividend payable quarterly on the first day of March, June, September and December, as declared by the Board of Directors. A holder of Series 15, 17 and 19 Class A Preferred Shares is entitled to receive a fixed, cumulative preferential dividend payable quarterly on the last day of March, June, September and December, as declared by the Board of Directors. A holder of Series 23 and 25 Class A Preferred Shares is entitled to receive a fixed, cumulative preferential dividend payable quarterly on the 15th day of February, May, August and November, as declared by the Board of Directors.

(2) The initial dividend on the Series 15 Class A Preferred Shares was paid on December 31, 2017 for the period commencing on the date of issuance (October 2, 2017) up to but excluding December 31, 2017. Prior to the completion of the Veresen Acquisition, the holders of Veresen Series A Preferred Shares were paid a quarterly dividend of $0.275000 by Veresen for each Veresen Series A Preferred Share held.

(3) The initial dividend on the Series 17 Class A Preferred Shares was paid on December 31, 2017 for the period commencing on the date of issuance (October 2, 2017) up to but excluding December 31, 2017. Prior to the completion of the Veresen Acquisition, the holders of Veresen Series C Preferred Shares were paid a quarterly dividend of $0.312500 by Veresen for each Veresen Series C Preferred Share held.

(4) The initial dividend on the Series 19 Class A Preferred Shares was paid on December 31, 2017, 2017 for the period commencing on the date of issuance (October 2, 2017) up to but excluding December 31, 2017. Prior to the completion of the Veresen Acquisition, the holders of Veresen Series E Preferred Shares were paid a quarterly dividend of $0.312500 by Veresen for each Veresen Series E Preferred Share held.

(5) The initial dividend on the Series 21 Class A Preferred Shares was paid on March 1, 2018 for the period commencing on the date of issuance (December 7, 2017) up to but excluding March 1, 2018.

(6) On January 9, 2020, Pembina announced that the Board of Directors had declared a quarterly dividend of $0.306625 per Series 1 Class A Preferred Share, $0.279875 per Series 3 Class A Preferred Share, $0.285813 per Series 5 Class A Preferred Share, $0.273750 per Series 7 Class A Preferred Share, $0.296875 per Series 9 Class A Preferred Share, $0.359375 per Series 11 Class A Preferred Share, $0.359375 per Series 13 Class A Preferred Share and $0.306250 per Series 21 Class A Preferred Share to be paid, subject to applicable law, on March 2, 2020 to holders of record on February 3, 2020. On January 9, 2020, Pembina announced that the Board of Directors had declared a quarterly dividend of $0.279000 per Series 15 Class A Preferred Share, $0.312500 per Series 17 Class A Preferred Share and $0.312500 per Series 19 Class A Preferred Share to be paid, subject to applicable law, on March 31, 2020 to holders of record on March 16, 2020.

(7) The initial dividend on the Series 23 Class A Preferred Shares of $0.328125 for each share held was paid on February 18, 2020 for a full quarterly period up to but excluding February 15, 2020. Prior to the completion of the Kinder Acquisition, the holders of KML Series 1 Preferred Shares were paid a quarterly dividend of $0.328125 by KML for each KML Series 1 Preferred Share held, with the final dividend being paid on November 15, 2019.

(8) The initial dividend on the Series 25 Class A Preferred Shares of $0.325000 for each share held was paid on February 18, 2020 for a full quarterly period up to but excluding February 15, 2020. Prior to the completion of the Kinder Acquisition, the holders of KML Series 3 Preferred Shares were paid a quarterly dividend of $0.325000 by KML for each KML Series 3 Preferred Share held., with the final dividend being paid on November 15, 2019.

(9) On January 9, 2020, Pembina announced that the Board of Directors had declared a quarterly dividend of $0.328125 per Series 23 Class A Preferred Share and $0.325000 per Series 25 Class A Preferred to be paid, subject to applicable law, on February 18, 2020 to holders of record on January 31, 2020.

MARKET FOR SECURITIES

Trading Price and Volume

The Common Shares are listed and traded on the TSX under the symbol "PPL." The Common Shares are also listed on the NYSE under the trading symbol "PBA." The following table sets forth the price ranges for and trading volumes of the Common Shares on the TSX for 2019, as reported by the TSX, and on the NYSE for 2019, as reported by NYSE.

	TSX (PPL)				NYSE (PBA)			
Month	**High ($)**	**Low ($)**	**Close ($)**	**Volume**	**High (US$)**	**Low (US$)**	**Close (US$)**	**Volume**
January	47.10	39.74	46.82	31,262,874	35.84	29.13	35.62	13,244,682
February	49.05	46.39	48.16	23,824,298	37.06	35.19	36.64	14,247,025
March	50.45	48.36	49.09	34,249,355	37.93	36.29	36.76	10,758,804
April	50.65	47.89	47.90	23,485,781	37.83	35.75	35.76	9,191,182
May	49.54	46.79	48.22	33,835,415	36.86	34.73	35.67	12,371,386
June	49.82	47.48	48.75	22,292,500	37.80	35.52	37.21	12,634,219
July	50.40	47.23	47.89	19,873,774	38.56	35.83	36.29	9,437,972
August	49.93	46.52	48.74	29,310,806	37.49	35.03	36.67	14,949,888
September	49.99	48.33	49.11	28,281,964	37.71	36.17	37.07	17,726,733
October	49.42	45.89	46.37	27,335,432	37.21	34.92	35.16	16,209,506
November	48.33	46.06	46.38	20,381,998	36.54	34.79	35.00	15,499,666
December	49.23	45.44	48.13	37,559,476	37.41	34.23	37.06	20,851,652

The Series 1 Class A Preferred Shares, Series 3 Class A Preferred Shares, Series 5 Class A Preferred Shares, Series 7 Class A Preferred Shares, Series 9 Class A Preferred Shares, Series 11 Class A Preferred Shares, Series 13 Class A Preferred Shares, Series 15 Class A Preferred Shares, Series 17 Class A Preferred Shares, Series 19 Class A Preferred Shares, Series 21 Class A Preferred Shares, Series 23 Class A Preferred Shares and Series 25 Class A Preferred Shares are listed and traded on the TSX under the symbols "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", respectively. The following tables set forth the price range for and trading volume of the Series 1, Series 3, Series 5, Series 7, Series 9, Series 11, Series 13, Series 15, Series 17, Series 19, Series 21, Series 23 and Series 25 Class A Preferred Shares on the TSX for 2019, all as reported by the TSX.

	Series 1 (PPL.PR.A)				Series 3 (PPL.PR.C)				Series 5 (PPL.PR.E)			
Month	**High ($)**	**Low ($)**	**Close ($)**	**Volume**	**High ($)**	**Low ($)**	**Close ($)**	**Volume**	**High ($)**	**Low ($)**	**Close ($)**	**Volume**
January	19.38	17.54	17.87	115,439	19.38	17.22	17.50	210,269	21.95	19.75	19.75	149,172
February	18.40	17.76	18.10	281,777	18.17	16.86	18.00	162,354	20.71	19.06	19.82	118,916
March	18.32	17.49	17.75	167,098	18.13	17.36	17.67	169,103	20.23	18.24	18.67	112,919
April	18.18	17.58	17.84	114,446	17.86	17.05	17.45	79,932	19.28	18.56	18.56	102,507
May	17.86	16.51	16.61	132,005	17.61	16.24	16.24	67,228	18.82	17.20	17.43	210,370
June	16.90	15.80	16.60	219,483	16.63	15.71	16.42	66,632	18.00	16.82	17.98	153,516
July	17.85	16.65	16.99	128,005	17.29	16.40	16.48	41,600	18.80	17.95	18.20	108,120
August	17.10	14.63	15.74	169,146	16.40	14.55	15.11	175,177	18.26	15.23	16.70	156,302
September	16.82	15.32	16.25	164,692	16.25	15.25	15.92	143,124	17.93	16.69	17.50	294,254
October	16.71	15.96	16.18	162,868	16.65	15.83	16.10	204,096	17.73	17.04	17.06	232,726
November	16.69	15.99	16.47	423,813	16.69	16.03	16.15	228,476	17.51	16.75	17.20	287,311

	Series 1 (PPL.PR.A)				Series 3 (PPL.PR.C)				Series 5 (PPL.PR.E)			
December	17.46	16.26	17.35	283,995	17.36	15.57	17.06	103,067	18.47	17.07	18.47	376,733

	Series 7 (PPL.PR.G)				Series 9 (PPL.PR.I)				Series 11 (PPL.PR.K)			
Month	**High ($)**	**Low ($)**	**Close ($)**	**Volume**	**High ($)**	**Low ($)**	**Close ($)**	**Volume**	**High ($)**	**Low ($)**	**Close ($)**	**Volume**
January	20.70	18.43	19.05	173,884	23.04	21.27	21.73	88,787	25.88	25.11	25.39	94,110
February	19.59	17.91	18.68	41,728	22.23	20.96	22.23	35,941	25.91	25.29	25.90	144,398
March	19.77	17.42	18.16	138,031	22.07	21.35	21.50	132,565	26.06	25.75	26.00	80,296
April	18.41	17.71	17.72	67,399	21.76	21.19	21.45	120,104	26.25	25.92	25.96	335,273
Month	**High ($)**	**Low ($)**	**Close ($)**	**Volume**	**High ($)**	**Low ($)**	**Close ($)**	**Volume**	**High ($)**	**Low ($)**	**Close ($)**	**Volume**
May	17.83	17.00	17.07	195,266	21.45	20.64	20.73	79,201	26.10	25.19	25.40	54,946
June	17.05	15.85	16.73	151,350	20.96	19.46	20.41	75,647	25.83	25.17	25.65	80,832
July	18.02	16.42	17.41	212,164	21.44	20.37	21.00	107,592	25.99	25.42	25.61	54,100
August	17.53	14.10	15.00	91,017	20.95	17.33	18.38	107,514	25.75	25.20	25.61	50,634
September	16.61	15.06	16.20	184,027	19.85	18.24	19.75	120,532	25.92	25.50	25.80	57,219
October	17.20	15.77	16.09	123,491	20.38	19.35	19.70	87,681	26.15	25.49	25.65	64,235
November	17.51	16.00	17.18	411,671	20.75	19.60	20.65	125,312	25.84	25.46	25.57	76,298
December	18.49	16.93	18.32	186,572	21.17	20.01	20.75	202,873	26.01	25.50	26.00	81,149

	Series 13 (PPL.PR.M)				Series 15 (PPL.PR.O)				Series 17 (PPL.PR.Q)			
Month	**High ($)**	**Low ($)**	**Close ($)**	**Volume**	**High ($)**	**Low ($)**	**Close ($)**	**Volume**	**High ($)**	**Low ($)**	**Close ($)**	**Volume**
January	25.80	25.00	25.40	131,539	20.15	18.11	18.31	83,349	21.80	19.54	19.55	40,947
February	25.74	25.17	25.65	61,561	18.65	17.40	18.63	169,319	20.17	18.72	19.75	88,886
March	26.05	25.65	25.94	116,937	18.95	17.40	17.95	32,276	20.00	18.80	19.14	129,887
April	26.15	25.89	25.92	123,299	18.33	17.65	17.91	96,524	19.38	18.88	19.18	98,499
May	26.00	25.15	25.30	157,739	17.92	17.35	17.35	264,392	19.38	18.50	18.50	96,822
June	25.73	25.20	25.72	202,606	17.45	16.00	16.80	46,490	18.65	17.46	18.42	49,313
July	26.09	25.40	25.75	158,709	18.00	16.78	17.73	69,155	19.05	18.02	18.64	38,286
August	25.77	25.20	25.56	125,225	17.72	14.48	15.31	151,768	18.60	15.56	16.55	117,017
September	25.99	25.46	25.69	119,203	16.37	15.31	15.99	79,180	17.85	16.50	17.10	116,607
October	26.00	25.59	25.75	192,934	16.95	15.70	16.20	135,905	17.90	16.87	17.15	89,049
November	25.80	25.53	25.60	125,456	17.22	16.25	16.55	195,950	17.95	17.00	17.52	148,410
December	26.30	25.52	26.30	59,697	17.54	16.37	17.41	166,522	18.36	17.20	18.25	161,352

	Series 19 (PPL.PR.S)				Series 21 (PPL.PF.A)				Series 23 (PPL.PF.C)[1]			
Month	**High ($)**	**Low ($)**	**Close ($)**	**Volume**	**High ($)**	**Low ($)**	**Close ($)**	**Volume**	**High ($)**	**Low ($)**	**Close ($)**	**Volume**
January	24.89	23.02	23.63	106,645	23.51	21.35	21.65	192,924	N/A	N/A	N/A	N/A
February	24.10	23.04	24.09	129,186	22.49	21.28	22.49	278,026	N/A	N/A	N/A	N/A
March	24.42	23.06	23.88	48,929	22.42	21.32	21.99	507,704	N/A	N/A	N/A	N/A
April	24.24	23.24	23.69	73,819	22.78	21.70	22.43	345,132	N/A	N/A	N/A	N/A
May	24.46	22.35	22.54	104,161	23.01	21.65	21.65	286,818	N/A	N/A	N/A	N/A
June	22.47	21.20	22.20	78,183	22.70	21.20	22.70	307,385	N/A	N/A	N/A	N/A
July	23.84	22.00	23.35	326,105	23.19	22.50	22.74	254,480	N/A	N/A	N/A	N/A
August	23.28	20.10	20.75	218,353	22.82	21.14	21.50	373,071	N/A	N/A	N/A	N/A
September	21.79	20.55	21.62	85,468	22.95	21.35	22.90	526,599	N/A	N/A	N/A	N/A
October	22.22	21.38	21.57	101,959	24.22	22.46	23.54	201,585	N/A	N/A	N/A	N/A
November	22.85	21.65	22.71	118,858	24.31	23.40	23.90	262,439	N/A	N/A	N/A	N/A
December	23.31	22.40	23.31	283,923	24.84	23.47	24.33	165,377	25.57	24.5	24.75	36,877

	Series 25 (PPL.PF.E)[1]			
Month	**High ($)**	**Low ($)**	**Close ($)**	**Volume**
January	N/A	N/A	N/A	N/A
February	N/A	N/A	N/A	N/A
March	N/A	N/A	N/A	N/A
April	N/A	N/A	N/A	N/A
May	N/A	N/A	N/A	N/A
June	N/A	N/A	N/A	N/A
July	N/A	N/A	N/A	N/A
August	N/A	N/A	N/A	N/A
September	N/A	N/A	N/A	N/A
October	N/A	N/A	N/A	N/A
November	N/A	N/A	N/A	N/A
December	24.96	24.05	24.66	36,787

Note:
(1) The Series 23 and 25 Class A Preferred Shares were listed and posted for trading on the TSX on December 19, 2019.

Prior Sales

In 2019, options to purchase Common Shares were issued to employees pursuant to Pembina's Option Plan. For a discussion of options issued and the terms thereof, refer to Note 23 to Pembina's Financial Statements, the portions of which are found under the headings "Disclosure of share option plan" and "Share options granted" are incorporated by reference herein.

DIRECTORS AND OFFICERS

Directors of Pembina

The following table sets out the name and residence for each director of Pembina as of the date of this Annual Information Form, the date on which they were appointed as a director of Pembina and their principal occupations during the past five years.

Name and Residence	Date Appointed	Principal Occupation During the Past Five Years
Anne-Marie N. Ainsworth(4) Houston, Texas, U.S.	October 7, 2014	Independent businesswoman since March 2014; prior thereto, President and Chief Executive Officer and a member of the Board of Directors of the general partner of Oiltanking Partners, L.P. (a master limited partnership engaged in independent storage and transportation of crude oil, refined petroleum products and liquefied petroleum gas) and President and Chief Executive Officer of Oiltanking Holding Americas, Inc. from November 2012 to March 2014; prior thereto, Senior Vice President of Refining of Sunoco Inc. from November 2009 to March 2012. Currently a member of the board of directors of Archrock, Inc., Kirby Corporation and HollyFrontier Corporation.
Michael H. Dilger Calgary, Alberta, Canada	January 1, 2014	President and Chief Executive Officer of Pembina since January 1, 2014; prior thereto, President and Chief Operating Officer of Pembina from February 2012 until December 31, 2013; prior thereto, Vice President, Chief Operating Officer of Pembina from November 2008 to February 2012.
Randall J. Findlay(1)(5)(6)(7) Calgary, Alberta, Canada	March 8, 2007	Corporate director since 2006; prior thereto, President of Provident Energy Trust from 2001 to 2006. Currently a member of the board of directors of Superior Plus Corp.

Name and Residence	Date Appointed	Principal Occupation During the Past Five Years
Maureen E. Howe(2)(5)(11) Vancouver, British Columbia, Canada	October 2, 2017	Independent businesswoman since 2008; prior thereto, a Research Analyst and Managing Director at RBC Capital Markets from 1996 to 2008. Currently a member of the board of directors and the Chair of the Audit Committee of Mosaic Forest Management Corp. and a member of the board of directors of Methanex Corporation.
Gordon J. Kerr(2)(3)(9) Calgary, Alberta, Canada	January 15, 2015	Independent businessman since 2013; prior thereto, President and Chief Executive Officer and director of Enerplus Corporation (a North American energy producer) from May 2001 until July 2013.
David M.B. LeGresley(2)(3) Toronto, Ontario, Canada	August 16, 2010	Independent businessman since September 2008; prior thereto, Vice Chairman of National Bank Financial from 2006 to 2008. Currently a member and Chair of the board of directors of Equitable Group Inc.
Robert B. Michaleski(4) Calgary, Alberta, Canada	January 4, 2000	Corporate director since January 1, 2014; prior thereto, Chief Executive Officer of Pembina from January 2000 until December 31, 2013; until February 15, 2012, he also served as President. Currently a member of the board of directors of Essential Energy Services Ltd. and Vermilion Energy Inc.
Leslie A. O'Donoghue(3)(5) Calgary, Alberta, Canada	December 17, 2008	Former Executive Advisor to the Chief Executive Officer and Executive Vice President, Chief Strategy and Corporate Development Officer of Nutrien Ltd. from January 1, 2018 to June 1, 2020; prior thereto, Executive Vice President, Corporate Development and Strategy and Chief Risk Officer of Agrium Inc. (a retail supplier of agricultural products and services and a producer and marketer of agricultural nutrients and industrial products) since October 30, 2012; prior thereto, Executive Vice President, Operations of Agrium Inc. from April 30, 2011 to October 30, 2012; prior thereto, Chief Legal Officer and Senior Vice President, Business Development of Agrium Inc.
Bruce D. Rubin(2)(10) Swarthmore, Pennsylvania, U.S.	May 5, 2017	Independent businessman since 2014; Operating Advisor for The Carlyle Group from 2015 to 2017; prior thereto, Advisor for Braskem America Inc. from 2014 to 2017; Executive Advisor for Court Square Partners from 2013 to 2015; prior thereto, Chief Executive Officer of Braskem America Inc., and executive with Braskem America Inc. from 2010 until 2013; prior thereto, Chief Executive Officer of Sunoco Chemicals Inc. and Senior Vice President of Sunoco Inc. from 2008 until 2010. Currently a member of the board of directors of DISA Global Solutions (a Court Square Capital Partners company) and the M. Holland Company.
Jeffrey T. Smith(4)(5)(8) Calgary, Alberta, Canada	April 2, 2012	Independent businessman. Currently a member of the board of directors of NAL Resources Limited (an oil and gas company).
Henry Sykes(2)(3)(11)(12) Calgary, Alberta, Canada	October 2, 2017	Independent businessman since 2014; prior thereto, the President and a director of MGM Energy Corp. from January 2007 to June 2014; President of ConocoPhillips Canada Limited from 2001 to 2006; Executive Vice President, Business Development of Gulf Canada Resources Ltd.

Notes:

(1) Chair of the Board.

(2) Member of Audit Committee.

(3) Member of Human Resources, Health and Compensation Committee.

(4) Member of the Safety and Environment Committee.

(5) Member of the Governance, Nominating and Social Responsibility Committee.

(6) Mr. Findlay was a director of Wellpoint Systems Inc. (a TSX Venture Exchange listed company) from June 2008 until January 31, 2011. Wellpoint Systems Inc., a company supplying software to the energy industry in Canada, the U.S. and internationally, was placed into receivership by two of its lenders on January 31, 2011.

(7) Mr. Findlay was a director of Spyglass Resources Corp. (a TSX listed company) from March 2013 until May 13, 2015. Spyglass Resources Corp., an intermediate oil and gas exploration and production company, was placed into receivership by a syndicate of its lenders on November 26, 2015.

(8) Mr. Smith was a director of Spyglass Resources Corp. (a TSX listed company) from March 2013 until August 11, 2015. Spyglass Resources Corp., an intermediate oil and gas exploration and production company, was placed into receivership by a syndicate of its lenders on November 26, 2015.

(9) Mr. Kerr was a director of Laricina Energy Ltd., a private company, until February 5, 2016. Laricina Energy Ltd. was subject to proceedings under the Companies' Creditors Arrangement Act (Canada) in 2015. On February 1, 2016, the proceedings were conditionally discharged.

(10) On May 5, 2017, Pembina announced that Grant Billing did not stand for re-election and Bruce D. Rubin had been appointed to Pembina's Board of Directors.

(11) Following closing of the Veresen Acquisition, Maureen E. Howe and Henry Sykes were appointed to Pembina's Board of Directors effective October 2, 2017.

(12) Mr. Sykes was a director of Parallel Energy Trust (" **Parallel**") from March 2011 until February 2016. On or about November 9, 2015, Parallel filed an application in the Alberta Court of Queen's Bench for creditor protection under the Companies' Creditors Arrangement Act (Canada) and voluntary petitions for relief under Chapter 11 of the United States Bankruptcy Code. In the Chapter 11 proceedings, the Bankruptcy Court approved the sale of the assets of Parallel and the sale closed on January 28, 2016. Further, on March 3, 2016, the Canadian entities of Parallel filed for bankruptcy under the Bankruptcy and Insolvency Act (Canada) and a notice to creditors was sent by the trustee on March 4, 2016.

Shareholders elect the directors of Pembina at each annual meeting of the Shareholders. The directors of Pembina serve until the next annual meeting of the Shareholders or until their successors are duly elected or appointed. All of Pembina's directors are "independent" within the meaning of National Instrument 58–101 – *Disclosure of Corporate Governance Practices*, adopted by the Canadian Securities Administrators, with the exception of Mr. Dilger, who is President and Chief Executive Officer of Pembina. In addition, Pembina has adopted Standards for Director Independence which meet or exceed the requirements set out in National Policy 58–201 – *Corporate Governance Guidelines*, National Instrument 52–110 – *Audit Committees*, the SEC rules and regulations, the *Sarbanes-Oxley Act of 2002* and the NYSE rules.

The Board of Directors has four committees, the Audit Committee, the Safety and Environment Committee, the Human Resources, Health and Compensation Committee, and the Governance, Nominating and Corporate Social Responsibility Committee. Additional information regarding the responsibilities of these committees will be contained in Pembina's management information circular for its 2020 meeting of Shareholders.

Executive Officers of Pembina

The following table sets out the name, residence and office held with Pembina for each executive officer of the Company as at the date of this Annual Information Form, as well as their principal occupations during the past five years.

Name and Residence	Office with Pembina	Principal Occupation During the Past Five Years
Michael H. Dilger Calgary, Alberta, Canada	President and Chief Executive Officer	President and Chief Executive Officer since January 1, 2014; prior thereto, President and Chief Operating Officer of Pembina since February 15, 2012; prior thereto, Vice President, Chief Operating Officer of Pembina since November 2008.
Paul J. Murphy Calgary, Alberta, Canada	Senior Vice President and Corporate Services Officer	Senior Vice President and Corporate Services Officer since January 1, 2018; prior thereto, Senior Vice President, Pipeline and Crude Oil Facilities of Pembina since September 4, 2013; prior thereto, Vice President, Conventional Pipelines of Pembina since February 14, 2011; prior thereto, Vice President, NGL Extraction of Inter Pipeline Fund since July 2004.
Stuart V. Taylor Calgary, Alberta, Canada	Senior Vice President, Marketing and New Ventures and Corporate Development Officer	Senior Vice President, Marketing and New Ventures and Corporate Development Officer since January 1, 2018; prior thereto, Senior Vice President, NGL and Natural Gas Facilities of Pembina since September 4, 2013; prior thereto, Vice President, Gas Services of Pembina since July 1, 2009.
J. Scott Burrows Calgary, Alberta, Canada	Senior Vice President and Chief Financial Officer	Senior Vice President and Chief Financial Officer since August 1, 2017; prior thereto, Vice President, Finance and Chief Financial Officer of Pembina since January 1, 2015; prior thereto, Vice President, Capital Markets of Pembina since September 2013; prior thereto, Vice President, Corporate Development and Investor Relations of Pembina since March 2013; prior thereto, Senior Manager, Corporate Development and Planning of Pembina since January 2012.
Harold K. Andersen Calgary, Alberta, Canada	Senior Vice President, External Affairs and Chief Legal Officer	Senior Vice President, External Affairs and Chief Legal Officer since August 1, 2017; prior thereto, Vice President, Legal and General Counsel of Pembina since April 1, 2013; prior thereto, General Counsel of Pembina since December 2011; prior thereto, Partner and Associate at Stikeman Elliott LLP (a law firm) from June 2000 to December 2011.

Name and Residence	Office with Pembina	Principal Occupation During the Past Five Years
Jason T. Wiun Calgary, Alberta, Canada	Senior Vice President and Chief Operating Officer, Pipelines	Senior Vice President and Chief Operating Officer, Pipelines since January 1, 2018; prior thereto, Vice President, Conventional Pipelines of Pembina since January 1, 2014; prior thereto, Senior Manager, Business Development, Conventional Pipelines of Pembina since 2011.
Jaret A. Sprott Calgary, Alberta, Canada	Senior Vice President and Chief Operating Officer, Facilities	Senior Vice President and Chief Operating Officer, Facilities since January 1, 2018; prior thereto, Vice President, Gas Services of Pembina since January 1, 2015; prior thereto, Senior Manager, Peace River Arch (Alberta Montney), Northern Operating Area of Ovintiv since March 2013; prior thereto, Senior Manager, Bighorn (Deep Basin Cretaceous) of Ovintiv since April 2012.

As at February 21, 2020, the directors and executive officers of Pembina beneficially owned, or controlled or directed, directly or indirectly, an aggregate of 1,062,552 Common Shares, representing approximately 0.1 percent of the then outstanding Common Shares.

Conflicts of Interest

The directors and officers of Pembina may be directors or officers of entities which are in competition with or are customers or suppliers of Pembina or certain entities in which Pembina holds an equity investment. As such, these directors or officers of Pembina may encounter conflicts of interest in the administration of their duties with respect to Pembina. Directors and officers of Pembina are required to disclose the existence of potential conflicts in accordance with Pembina's Code of Ethics and other corporate governance policies which can be found on Pembina's website at www.pembina.com and in accordance with the ABCA. See "*Risk Factors – General Risk Factors – Potential Conflicts of Interest*."

AUDIT COMMITTEE INFORMATION

The Audit Committee's Charter

The Audit Committee Charter is set forth in Appendix "A" to this Annual Information Form.

Composition of the Audit Committee and Relevant Education and Experience

Pembina's Audit Committee is comprised of Gordon J. Kerr, as Chair, Maureen E. Howe, David M.B. LeGresley, Bruce D. Rubin and Henry W. Sykes, each of whom is independent and financially literate within the meaning of NI 52–110 and in accordance with Pembina's Standards for Director Independence available at www.pembina.com. Set forth below are additional details regarding each member of the Audit Committee.

Gordon J. Kerr

Mr. Kerr is the Chair of the Audit Committee and has been a member of the Audit Committee since February 27, 2015. Mr. Kerr is independent within the meaning of such term in NI 52–110, and in accordance with the rules prescribed by the SEC and the NYSE. Mr. Kerr is a member of the Management Advisory Council of the Haskayne School of Business at the University of Calgary. Mr. Kerr is a former President and Chief Executive Officer of Enerplus Corporation, a position he held from May 2001 until July 2013. He is also a past Chair of the Canadian Association of Petroleum Producers, a former director of Deer Creek Energy Limited and a past member of the Canadian Council of Chief Executives. Since beginning his career in 1979, he has gained extensive management experience in leadership positions at various oil and gas companies.

Mr. Kerr commenced employment with Enerplus Corporation and its predecessors in 1996, holding positions of increasing responsibility, including the positions of Chief Financial Officer and Executive Vice President. Mr. Kerr graduated from the University of Calgary in 1976 with a Bachelor of Commerce degree. He received a Chartered Accountant designation and was admitted as a member of the Institute of Chartered Accountants of Alberta in 1979 and was later appointed a Fellow of the Institute of Chartered Accountants of Alberta in February 2011. This business experience provides Mr. Kerr with the skill set and financial literacy required to carry out his duties as a member of the Audit Committee.

Maureen E. Howe

Maureen E. Howe has been a member of the Audit Committee since October 2, 2017. Ms. Howe is independent within the meaning of such term in NI 52–110, and in accordance with the rules prescribed by the SEC and the NYSE. Ms. Howe currently serves as a member of the board of directors and chair of the audit committee of TimberWest Forest Corp., a private company. She has served as Managing Director at RBC Capital Markets in equity research and was regularly a top ranked analyst in Canada by independent industry surveys. Prior to joining RBC Capital Markets, Ms. Howe held finance positions in the utility industry, investment banking and portfolio management. Ms. Howe holds a Bachelor of Commerce (Honours) from the University of Manitoba and a Ph.D. in Finance from the University of British Columbia. This business experience provides Ms. Howe with the skill set and financial literacy required to carry out her duties as a member of the Audit Committee.

David M.B. LeGresley

David M.B. LeGresley has been a member of the Audit Committee since April 2, 2012. Mr. LeGresley is independent within the meaning of such term in NI 52–110, and in accordance with the rules prescribed by the SEC and the NYSE. Mr. LeGresley is a former executive of National Bank Financial and spent 12 years with that company, most recently serving as Vice Chairman from 2006 to 2008. Prior to that assignment he held various senior investment banking positions at National Bank Financial including Executive Vice President and Head of Corporate and Investment Banking (1999 to 2006). Mr. LeGresley has extensive experience in the financial services industry, including positions at Salomon Brothers Canada and CIBC Wood Gundy. He also serves as a chairman and director of a TSX-listed company, Equitable Group Inc. Mr. LeGresley received a Bachelor of Applied Science Degree in Engineering from the University of Toronto in 1981 and a Master of Business Administration from Harvard Business School in 1986. He is a graduate of the Institute of Corporate Directors – Rotman Directors Education Program and a member of the Institute of Corporate Directors. This business experience provides Mr. LeGresley with the skill set and financial literacy required to carry out his duties as a member of the Audit Committee.

Bruce D. Rubin

Mr. Rubin has been a member of the Audit Committee since May 5, 2017. Mr. Rubin is independent within the meaning of such term in NI 52–110, and in accordance with the rules prescribed by the SEC and the NYSE. Mr. Rubin is an independent businessman with over 39 years of experience, including various executive and advisory positions and board memberships in the energy, refining and petrochemical sectors. He served as the Chief Executive Officer of Sunoco Chemicals and was a Senior Vice President of Sunoco Inc., from 2008 until 2010, and held various other executive positions during a 32-year career with that company. Mr. Rubin was Braskem America's first Chief Executive Officer, and he served with Braskem America in an executive capacity from 2010 until 2013. He oversaw the successful transition of Sunoco Chemicals to Braskem America and supported the successful acquisition by Braskem America of Dow Chemicals' polypropylene business. Mr. Rubin was an advisor for Braskem America. Mr. Rubin served on the board of directors of Sylvatex Inc. from 2012 to 2016, and currently serves on the board of DISA Global Solutions (a Court Square Capital Partners company). He is currently an advisor for Sylvatex Inc. and previously served as an Executive Advisor for Court Square Partners from 2013 to 2015 as well as an Operating Advisor for The Carlyle Group from 2015 to 2017. Mr. Rubin has a Master of Business Administration Degree from Widener University as well as a Bachelor of Science degree in Chemical Engineering from the University of Pennsylvania. This business experience provides Mr. Rubin with the skill set and financial literacy required to carry out his duties as a member of the Audit Committee.

Henry W. Sykes

Mr. Sykes has been a member of the Audit Committee since May 4, 2018. Mr. Sykes is independent within the meaning of such term in NI 52-110, and in accordance with the rules prescribed by the SEC and the NYSE. Mr. Sykes is the former President and director of MGM Energy Corp., a Canadian public energy company focused on the acquisition and development of hydrocarbon resources in Canada’s Northwest Territories and Arctic regions (January 2007 to June 2014). He was President of ConocoPhillips Canada (2001 to 2006) and Executive Vice-President, Business Development of Gulf Canada Resources Ltd. before that. Mr. Sykes began his career as a lawyer and specialized in mergers and acquisitions, securities and corporate law. He is past Chair and member of the boards of Arts Commons and The Arctic Institute of North America, and a director of several private companies involved in the oil and gas industry. He has a Bachelor of Arts in economics from McGill University and a law degree from the University of Toronto and a masters of law degree from the London School of Economics. Mr. Sykes is a member of the Institute of Corporate Directors. This business experience provides Mr. Sykes with the skill set and financial literacy required to carry out his duties as a member of the Audit Committee.

Pre-Approval Policies and Procedures for Audit and Non-Audit Services

As outlined in Pembina's Audit Committee Charter and the terms of engagement with Pembina's external auditors, the Audit Committee of the Board is directly responsible for overseeing the relationship, reports, qualifications, independence and performance of the external auditor and audit services by other registered public accounting firms engaged by Pembina. The Audit Committee has the authority and responsibility to recommend the appointment and the revocation of the appointment of the external auditors engaged for the purpose of preparing or issuing an audit report or performing other audit, review or attest services, and to fix their remuneration. The external auditor reports directly to the Audit Committee. The Audit Committee's appointment of the external auditor is subject to annual approval by the Shareholders.

The Audit Committee is also responsible for the pre-approval of all permissible non-audit services to be provided by the external auditors considering the potential impact of such services on the independence of external auditors and, subject to any *de minimis* exemption available under applicable laws. Such approval can be given either specifically or pursuant to pre-approval policies and procedures adopted by the Audit Committee, including the delegation of this ability to one or more members of the Audit Committee to the extent permitted by applicable law, provided that any pre-approvals granted pursuant to any such delegation must be detailed as to the particular service to be provided, may not delegate Audit Committee responsibilities to management of Pembina, and must be reported to the full Audit Committee at the first scheduled meeting of the Audit Committee following such pre-approval.

External Auditor Service Fees

The following table sets out the fees billed to Pembina for professional services provided by KPMG LLP during each of the last two financial years:

YEAR	AUDIT FEES(1)	AUDIT-RELATED FEES(2)	TAX FEES(3)	ALL OTHER FEES(4)
2019	$2,969,500	$134,000	$120,086	NIL
2018	$2,292,000	$159,250	$845,331	NIL

Notes:

(1) Audit fees were for professional services rendered by KPMG LLP for the audit of Pembina's annual financial statements and reviews of Pembina's quarterly financial statements, as well as services provided in connection with statutory and regulatory filings or engagements. In 2019, fees included additional expense for the 2019 Base Shelf Prospectus and 2019 MTN Prospectus, pricing supplements in relation to the sale and issue of Medium Term Notes Series 12, 13, 14 and 15. In 2018, fees included additional expense for pricing supplements in relation to the sale and issue of Medium Term Notes, Series 10 and 11.

(2) Audit-related fees are for assurance and related services, including French translations in connection with statutory and regulatory filings, reasonably related to the performance of the audit or review of Pembina's financial statements and not reported under "Audit Fees" above. In 2019 and 2018, these fees included audit fees for the pension plan and Younger facility pension plan audits of $30,000 and $20,000, respectively. Included in 2018 were fees relating to other audit related services of $37,250.

(3) Tax fees were for tax compliance of $39,925 (2018: $323,000) and tax advice and tax planning of $80,161 (2018: $522,331). In addition to the 2019 fees stated above, KPMG billed $21,000 in 2020 prior to the date hereof. The fees were for non-audit tax services. 2019 and 2018 fees included tax consultation and tax compliance fees incurred for preparing and filing the tax returns for Pembina's subsidiaries.

(4) All other fees are fees for products and services provided by Pembina's auditors other than those described as "*Audit Fees*", "*Audit-related Fees*" and "*Tax Fees*."

RISK FACTORS

The following information is a summary only of certain risk factors relating to Pembina, its subsidiaries and/or its Equity Accounted Investees, or an investment in securities of Pembina, and is qualified in its entirety by reference to, and must be read in conjunction with, the detailed information appearing elsewhere in this Annual Information Form. Shareholders and prospective investors should carefully consider these risk factors before investing in Pembina's securities, as each of these risks may negatively affect the trading price of Pembina's securities, the amount of dividends paid to Shareholders and holders of Class A Preferred Shares and the ability of Pembina to fund its debt obligations, including obligations under debt securities that Pembina may issue from time to time. Information regarding Pembina’s risk assessment and management processes can be found in Pembina’s management information circular for its 2020 annual meeting of Shareholders.

Prospective investors should carefully consider the risk factors set out below and consider all other information contained herein and in Pembina's other public filings before making an investment decision in respect of any securities of Pembina.

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 potential 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.

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, 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, 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 risk. 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 24 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. The AER and BCOGC in Alberta and British Columbia, respectively, may declare the operator

of a pipeline a common carrier of crude oil, NGLs or natural gas and, as such, must not discriminate between producers who seek access to the pipeline. Regulatory authorities that declare pipeline operators a common carrier 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 pipelines that cross provincial or international boundaries, which are regulated by the CER and/or the FERC. 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 ("**Impact Assessment Agency**"), the BCEAO, the Ontario Ministry of Natural Resources, the Saskatchewan Ministry of Economy and The Petroleum Branch of Manitoba Mineral Resources. In the U.S., tolls on pipelines are regulated by and reported to the FERC and pipeline operations are governed 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 compliance obligations are subject to change at the initiative of PHMSA. 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.

Bill C-69, an *Act to enact the Impact Assessment Act and the Canadian Energy Regulator Act, to amend the Navigation Protection Act and to make consequential amendments to other Acts* came into force on August 28, 2019. Bill C-69 resulted in the NEB being replaced by the CER. It also constituted an overhaul of the federal environmental assessment regime in Canada under the *Canadian Environmental Assessment Act* (Canada) ("**CEAA**") which has been replaced with the *Impact Assessment Act* (Canada) ("**IAA**"). Similarly, the Canadian Environmental Assessment Agency has been replaced with the new Impact Assessment Agency 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 will be 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. As new projects have yet to be 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, 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. 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 their equivalents 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.

See "*Other Information Relating to Pembina’s Business – Industry Regulation* ."

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 our 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, 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 our Vancouver Wharves Terminal or involving a vessel receiving products from our Vancouver Wharves Terminal, 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 our ability to effectively carry on operations at our Vancouver Wharves Terminal. 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 Corporate 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 at attractive rates, 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, Aboriginal, 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 Aboriginal 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 and 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.

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

Possible Failure to Realize Anticipated Benefits of Corporate Strategy or the Kinder Acquisition

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.

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

Pembina completed the Kinder Acquisition to acquire strategically located assets, including the Cochin pipeline system, the Edmonton storage and terminal business and Vancouver Wharves, a bulk storage and export/import business, that are highly integrated across Pembina's value chain, and provide further integration potential, while also enhancing Pembina's basin, currency and market diversification and strengthening Pembina's financial guardrails. Achieving the benefits of the Kinder Acquisition depends in part on successfully consolidating functions and integrating operations, procedures and personnel in a timely and efficient manner, as well as the ability of Pembina to realize the anticipated growth opportunities and synergies from combining the acquired businesses and operations of Kinder with those of Pembina. The integration of the assets from the Kinder Acquisition, including the Cochin Pipeline system, 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 result in the loss of key employees and the disruption of ongoing business, customer and employee relationships that may adversely affect Pembina's ability to achieve the anticipated benefits of the Kinder Acquisition.

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 NGLs. 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.

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 its 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 result in the reduction of throughput in Pembina's pipelines. Additionally, potential pricing differentials on the components of NGLs 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. Pembina also competes with other businesses for growth and business opportunities, which could impact its ability to grow through acquisitions and could impact earnings and cash flow available to pay dividends and to service obligations under Pembina's debt securities and other debt obligations.

See "*Description of Pembina's Business and Operations*".

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 were 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 – 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 terminalling and storage services. Any default by counterparties under such contracts or any expiration of such contracts or tolling arrangements without renewal or replacement may have an adverse effect on Pembina's business and results from operations. 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.

See "*Description of Pembina's Business and Operations*".

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. 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 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.

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.

In 2016, the Canadian federal government announced that its initial proposed pan-Canadian carbon tax would be $10 per tonne commencing in 2018 and would increase by $10 per tonne per year to $50 per tonne by 2022. As a regulatory backstop, the federal government has also implemented the *Greenhouse Gas Pollution Pricing Act* ("**GGPPA**"), which introduces a carbon pricing regime for those provinces that fail to impose adequate provincial measures. Constitutional challenges to the GGPPA launched by Saskatchewan and Ontario in 2019 were unsuccessful. Alberta and Manitoba have initiated similar challenges before their respective provincial courts. At a minimum, an appeal of the Saskatchewan Court of Appeal's decision affirming the constitutionality of the GGPPA will be heard by the Supreme Court of Canada, and the results of that appeal could significantly impact how greenhouse gas ("**GHG**") emissions are regulated throughout Canada.

In Alberta, the *Climate Leadership Act* and associated $30 per tonne carbon levy on all carbon-based heating and transportation fuels was repealed effective May 30, 2019. As a result, Alberta only partially satisfies federal requirements with respect to carbon pricing and will be subject to the federal carbon tax pursuant to the GGPPA as of January 1, 2020. The carbon price will be $20 per tonne on January 1, 2020 and raise to $30 per tonne on April 1, 2020. Pembina also continues to follow the changes to the federal regulatory framework for the reduction of methane from fugitive and vented gas emissions in the upstream oil and gas sector, many of which will come into effect as of January 1, 2020. 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.

Alberta's output-based emission allocations for large facility emitters under the *Carbon Competitiveness Incentive Regulation* ("**CCIR**") continues to facilitate emissions reductions relative to facilities that emitted 100,000 tonnes of GHGs or more in 2003 or any subsequent year. Pembina has three natural gas processing facilities subject to the large emitter regulations under the CCIR. 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 CCIR. The potential costs and benefits to Pembina of those facilities under the CCIR are continuing to be assessed.

The Government of Alberta, in its climate change legislation and guidelines, has legislated an overall cap on oil sands greenhouse gas 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 underway in British Columbia, Saskatchewan, and Manitoba. On July 3, 2018, Ontario announced the revocation of its previously enacted cap and trade emissions program and released its replacement GHG regime on November 29, 2018; however, the provisions of the GGPPA apply to Ontario. As indicated above, Ontario unsuccessfully challenged the constitutionality of the GGPPA, but may appeal that issue to the Supreme Court of Canada.

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 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 15 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 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. While most

legislative 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 NGLs 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.

Trade Disputes

Tariffs, retaliatory tariffs or other trade restrictions on products that we or our customers export could cause the prices of such products to increase, which could, in turn, reduce the demand for, or margins on, such products. Direct or unforeseen consequences of tariffs, retaliatory tariffs or other trade restrictions may also alter the competitive landscape of our or our customers' products in one or more jurisdictions. There can be no certainty with respect to how the domestic or foreign governments will act with respect to tariffs, international trade agreements and policies. A trade dispute or other governmental action related to tariffs or international trade agreements or policies has the potential to negatively impact ours and/or our customers' costs, demand for our or our customers' products, and/or the international economy or certain sectors thereof which may adversely impact our results from operations and financial condition.

Canada-United States-Mexico Agreement

On November 30, 2018, Canada, the U.S. and Mexico signed the trilateral Canada-United States-Mexico Agreement (" **CUSMA**"), which, once ratified, will replace the existing trilateral North American Free Trade Agreement ("**NAFTA**").

NAFTA imposes certain requirements on Canada with respect to exports of energy and basic petrochemicals, requiring that export measures be applied such that the proportion of total supply exported over a three-year period remains unchanged. This requirement does not appear in CUSMA and is, therefore, expected to permit Canada to expand its exports of crude oil and natural gas beyond the U.S. In addition, CUSMA includes a change to the crude oil and natural gas rules of origin, which should make it easier for Canadian exporters to qualify for duty-free treatment on shipments to the U.S. and Mexico. Canada must, however, notify the U.S. of its intention to enter into free trade talks with any "non-market economies" under CUSMA, which may include China or any other potential importers of Canadian oil and gas exports.

Although the agreement has been signed, CUSMA is still required to be ratified and implemented by legislators from each of the three countries according to their own domestic legislative processes before it takes effect and replaces NAFTA. The ratification and implementation process in each of Canada, the U.S. and Mexico is not yet complete.

If CUSMA is not ratified and implemented by all three countries, this may alter the terms of trade for energy and petrochemical resources in North America, which could impact Pembina's ability to sell and transport petroleum products within North America and could have an adverse impact on our results from operations and financial condition.

Alberta Production Curtailment

On December 2, 2018, the Alberta provincial government announced mandatory reductions to crude oil and bitumen production in Alberta in an attempt to narrow the price differentials on these products compared to North American benchmark prices. The reductions have been applied at the operator level based upon each operator’s combined crude oil and bitumen production, with the first 20,000 barrels per day produced by each operator exempt from the curtailment program. The temporary production cut commenced in January 2019, with an initial reduction of 325,000 barrels per day, representing approximately 8.7 percent of the aggregate production of crude oil and bitumen in Alberta. This level of curtailment has consistently been reduced from February 2019 to December 2019. The production rate will continue to be reviewed monthly by the Alberta Minister of Energy and revised, as necessary. Effective November 8, 2019, new wells drilled for conventional oil will be exempt from the production limit and, effective December 2019, operators can apply, on a monthly basis, to increase oil production, provided that the additional production is moved by new rail capacity. Under the current regulations, the provincial government's authority to curtail crude oil and bitumen production in Alberta will end on December 31, 2020.

In addition to reduced production volumes, the Alberta provincial government's curtailment strategy may have other unintended consequences that impact the oil and gas industry in Alberta, including, but not limited to, reduced demand for diluent, a reduction in drilling projects, reduced capital spending on new projects, reduced volumes of refined products and market uncertainty. These effects may lead to a reduction in the volume of product transported on our pipelines or processed at our facilities, which could have an adverse impact on our results from operations and financial condition.

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.

General Risk Factors

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 favourable 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 failed 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, 2019, letters of credit totaling approximately $90 million (December 31, 2018: $122 million) were held primarily in respect of customer trade receivables.

Pembina has typically collected its receivables in full. At December 31, 2019, approximately 95 percent (December 31, 2018: 99 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

At the end of 2019, Pembina had exposure to floating interest rates on approximately $2.1 billion (2018: $1.3 billion) in debt. Floating rate debt exposure is, in part, managed through the use of 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 favourable to Pembina, or at all.

Credit Ratings

Rating agencies regularly evaluate Pembina and base their ratings of its long-term and short-term debt and Class A Preferred Shares on a number of factors. This includes 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 and other Key Individuals

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. Further, the costs associated with retaining key individuals could adversely affect Pembina's business opportunities and financial results. There is no assurance that Pembina will continue to attract and retain all personnel necessary for the development and operation of its business.

Aboriginal Land Claims and Consultation Obligations

Aboriginal people have claimed title and rights to a considerable portion of the lands in western Canada. The successful assertion of Aboriginal title or other Aboriginal 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, where appropriate, accommodate Aboriginal people where the interests of the Aboriginal 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 the Aboriginal 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 Aboriginal 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 introduction of the CER Act, IAA, and associated amendments to the *Fisheries Act* and the *Navigation Protection Act* took place on August 28, 2019. A number of the federal regulatory process amendments pertain to the participation of Aboriginal groups and the protection of Aboriginal 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 Aboriginal rights, as well as Aboriginal 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 Aboriginal 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 Aboriginal traditional knowledge in certain cases.

On February 14, 2018, the federal government announced that it will develop, in consultation with Aboriginal people (First Nations, Inuit and Métis), a Recognition and Implementation of Rights Framework ("**Rights Framework**"). The contents of the Rights Framework will be determined based on information obtained from engagement activities led by the Minister of Crown-Indigenous Relations, which were undertaken between February and May 2018. The Canadian federal government initially intended to implement the Rights Framework and any associated legislation or policies before October 2019, but no such legislation has been proposed as of the date hereof. Pembina will continue to monitor and assess the impacts the Rights Framework may have on its business as legislation and/or policies continue to be developed.

In 2018, the British Columbia government enacted Bill 51 - 2018 *Environmental Assessment Act* (the "**2018 EA Act**") as part of its commitment to revitalize environmental assessment in the province and facilitate its commitment to implementing the United Nations Declaration on the Rights of Indigenous Peoples ("**UNDRIP**"). The 2018 EA Act came into force in late 2019. The 2018 EA Act is designed as a "consent-based" environmental assessment model and is intended to support reconciliation with Aboriginal peoples and the implementation of UNDRIP. The legislation requires the BCEAO to seek participating Aboriginal groups' consent with respect to, among other things, the decision to issue an environmental assessment certificate to a given project. While the 2018 EA Act does not strictly require consent in most cases, the legislation creates significant new participation opportunities for participating Aboriginal 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. Similar objectives are proposed pursuant to Bill 41, the *Declaration of the Rights of Indigenous Peoples Act* , introduced by the British Columbia government on October 24, 2019. The purpose of the legislation is to affirm the application of UNDRIP to all laws in British Columbia, but the practical effects of the legislation are yet to be determined as it will simply require the government to prepare and implement an action plan to do so, and annually report on its progress. Pembina continues to actively monitor the development of the regulations required to facilitate the implementation of the 2018 EA Act and the progress of Bill 41 through the British Columbia legislature.

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 our 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.

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, which 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. There is also a risk of a cyber-attack targeting the industry is also increasing. A 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. Pembina's security strategy focuses on information technology security risk management, which includes continuous monitoring, threat detection and an incident response protocol.

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, 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.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

To the knowledge of the directors and executive officers of Pembina, none of the directors or executive officers of Pembina, and no person or company that is the direct or indirect beneficial owner of, or who exercises control or direction over, more than 10 percent of the Common Shares, and no associate or affiliate of any of the foregoing, has had any material interest, direct or indirect, in any transaction with Pembina since January 1, 2015 that has materially affected Pembina, or in any proposed transaction that would reasonably be expected to materially affect Pembina.

MATERIAL CONTRACTS

Other than as set forth herein, no contracts material to Pembina and its subsidiaries were entered into during 2019 or 2020 to date or are currently in effect, other than contracts entered into in the ordinary course of business.

LEGAL PROCEEDINGS AND REGULATORY ACTIONS

Other than as set forth herein, there are no outstanding legal proceedings, or regulatory actions, penalties or sanctions imposed by a court or regulatory body material to Pembina to which Pembina or any of its direct or indirect subsidiaries is or was a party or in respect of which any of the properties of Pembina or any of its direct or indirect subsidiaries are or were subject, during Pembina's most recent financial year, nor are there any such proceedings, actions, penalties or sanctions known to be contemplated.

On October 14, 2016, Aux Sable Canada received an amended statement of claim filed against it by BP Canada Energy Company, BP Canada Energy Group ULC, BP Products North America, Inc., BP Energy Company and BP Canada Energy Marketing Corp. (collectively, "**BP**") in the Court of Queen's Bench (Alberta) claiming USD$350 million in relation to a dispute arising out of a product supply agreement among the parties. On January 5, 2017, Aux Sable filed a Statement of Defence with respect to this claim and BP filed a reply on January 31, 2017.

REGISTRAR AND TRANSFER AGENT

The registrar and transfer agent for the Common Shares, the Medium Term Notes and the Class A Preferred Shares is Computershare Trust Company of Canada, at its principal offices in Calgary, Alberta, Canada and Toronto, Ontario, Canada. The

co-transfer agent and registrar for the Common Shares in the U.S. is Computershare Investor Services U.S., at its principal offices in Golden, Colorado, U.S.

INTERESTS OF EXPERTS

KPMG LLP are the auditors of the Company and have confirmed that they are independent with respect to the Company within the meaning of the relevant rules and related interpretations prescribed by the relevant professional bodies in Canada and any applicable legislation or regulations and also that they are independent accountants with respect to the Company under all relevant U.S. professional and regulatory standards.

ADDITIONAL INFORMATION

Additional information relating to Pembina filed with the Canadian securities commissions and the SEC can be found on Pembina's profile on the SEDAR website at www.sedar.com, the EDGAR website at www.sec.gov, and on Pembina's website at www.pembina.com. Additional information, including directors' and officers' remuneration and indebtedness, principal holders of Pembina's securities and securities authorized for issuance under equity compensation plans, as applicable, is contained in Pembina's management information circular for its most recent annual meeting of Shareholders that involved the election of directors. Additional financial information relating to Pembina is provided in Pembina's Financial Statements and MD&A, which have also been filed on SEDAR and EDGAR.

Any document referred to in this Annual Information Form and described as being filed on SEDAR at www.sedar.com and on EDGAR at www.sec.gov (including those documents referred to as being incorporated by reference in this Annual Information Form) may be obtained free of charge from us by contacting our Investor Relations Department by telephone (toll free 1-855-880-7404) or by email (investor-relations@pembina.com).

AUDIT COMMITTEE CHARTER

I. ROLE AND OBJECTIVES

The Audit Committee (the “Committee”) is a committee of the Board of Directors (the "Board") of Pembina Pipeline Corporation (the "Corporation") to which the Board has delegated certain oversight responsibilities relating to the Corporation’s financial statements, the external auditors, the internal audit function, compliance with legal and regulatory requirements and management information technology. In this Charter, the Corporation and all entities controlled by the Corporation are collectively referred to as "Pembina".

The Committee carries out its responsibilities with a view to the purpose of Pembina, and its role is to support Pembina’s commitment to providing sustainable industry-leading total returns to investors.

The objectives of the Committee are to maintain oversight of:

(a) the integrity of Pembina’s financial statements, the reporting process and internal controls over financial reporting;

(b) the relationship, reports, qualifications, independence and performance of the external auditor;

(c) the internal audit function;

(d) the financial risk identification, assessment and management program;

(e) compliance with legal and regulatory requirements related to financial reporting and financial controls;

(f) management of information technology related to financial reporting and financial controls; and

(g) maintenance of open avenues of communication among management of the Corporation, the external auditors, the internal auditors and the Board.

II. MEMBERSHIP AND ACCESS

The Board will appoint or reappoint members of the Committee. Each member shall serve until his or her successor is appointed unless the member resigns, is removed or ceases to be a director. The Board may add or remove members of the Committee or fill a vacancy that occurs in the Committee at any time.

The Committee must be composed of not less than three (3) members of the Board, each of whom must be independent pursuant to the Corporation's Standards for Director Independence and financially literate as determined by the Board using its business judgment. In addition, at least one member must be an "audit committee financial expert" within the meaning of that term under the United States Securities Exchange Act of 1934, as amended, and the rules adopted by the United States Securities and Exchange

Commission thereunder. The Board Chair, in consultation with the Governance, Nominating and Corporate Social Responsibility Committee, will appoint or reappoint the Chair of the Committee from amongst its members.

The Committee may at any time retain outside financial, legal or other advisors as it determines necessary to carry out its duties, at the expense of Pembina. Pembina shall provide for appropriate funding, as determined by the Committee in its capacity as a committee of the Board, for payment of: (i) compensation to the external auditor for the purpose of preparing or issuing an audit report or performing other audit, review or attestation services for Pembina, (ii) compensation to any advisors employed by the Committee, and (iii) ordinary administrative expenses of the Committee that are necessary or appropriate in carrying out its duties.

In discharging its duties under this Charter, the Committee may investigate any matter brought to its attention and will have access to all books, records, facilities and personnel, may conduct meetings or interview any officer or employee, the Corporation's legal counsel, external auditors and consultants, and may invite any such persons to attend any part of any meeting of the Committee.

The Committee has neither the duty nor the responsibility to conduct audit, accounting or legal reviews, or to ensure that the Corporation's financial statements are complete, accurate and in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"); rather, management is responsible for the financial reporting process, internal review process, and the preparation of the Corporation's financial statements in accordance with IFRS, and the Corporation's external auditor is responsible for auditing those financial statements.

III. FUNCTIONS

A. Pembina's Financial Statements, the Reporting Process and Internal Controls over Financial Reporting

The Committee will meet with management, the internal auditor and the external auditor to review and discuss annual and quarterly financial statements, management's discussion and analyses ("MD&A"), the earnings press releases, and other financial disclosures and determine whether to recommend the approval of such documents to the Board.

(a) In connection with these procedures, the Committee will, as applicable and without limitation, review and discuss with management, internal audit and the external auditor:

i. the information to be included in the financial statements and financial disclosures which require approval by the Board including Pembina's annual and quarterly financial statements, notes thereto, MD&A and earnings press releases paying particular attention to any use of "pro forma", "adjusted" and "non-GAAP" information, and ensuring that adequate procedures are in place for the review of the Corporation's public disclosure of financial information extracted or derived from the financial statements;

ii. any significant financial reporting issues identified during the reporting period;

iii. any change in accounting policies, or selection or application of accounting principles, and their impact on the results and the disclosure;

iv. all, significant risks and uncertainties identified and significant estimates and judgments made in connection with the preparation of Pembina's financial statements that may have a material impact to the financial statements;

v. any significant deficiencies or material weaknesses identified by management, internal auditors or the external auditor, compensating or mitigating controls and final assessment and impact on disclosure;

vi. any major issues as to the adequacy of the internal controls and any special audit steps adopted in light of material control deficiencies;

vii. significant adjustments identified by management, internal auditor, or the external auditor and assessment of associated internal control deficiencies, as applicable;

viii. any unresolved issues between management and the external auditor that could materially impact the financial statements and other financial disclosures;

ix. any material correspondence with regulators, government agencies, any employee or whistleblower complaints, reports of non-compliance which raise issues regarding the Corporation's financial statements or accounting policies and significant changes in regulations which may have a material impact on the Corporation’s financial statements;

x. the effect of regulatory and accounting initiatives, as well as any off-balance sheet structures;

xi. the competencies and performance of employees in the Corporation’s internal audit department and identify staffing needs;

xii. significant matters of concern respecting audits and financial reporting processes, including any illegal acts, that have been identified in the course of the preparation or audit of Pembina's financial statements; and

xiii. any analyses prepared by management and/or the external auditor setting forth significant financial reporting issues and judgments made in connection with the preparation of financial statements including analyses of the effects of IFRS on the financial statements.

(b) In connection with the annual audit of Pembina's financial statements, the Committee will review with the external auditor:

i. prior to commencement of the annual audit, plans, scope, staffing, engagement terms and proposed fees;

ii. reports or opinions to be rendered in connection therewith including the external auditor's review or audit findings report including alternative treatments of significant financial information within IFRS that have been discussed with management and associated impacts on disclosure; and

iii. the adequacy of internal controls, any audit problems or difficulties, including:

a) any restrictions on the scope of the external auditor's activities or on access to requested information;

b) any significant disagreements with management, and management's response (including discussion among management, the external auditor and, as necessary, internal and external legal counsel);

c) any litigation, claim or contingency, including tax assessments and claims, that could have a material impact on the financial position of the Corporation; and

d) the impact on current or potential future disclosures.

In connection with its review of the annual audited financial statements and quarterly financial statements, the Committee will also review any significant concerns raised during the Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO") certifications with respect to the financial statements and Pembina's disclosure controls and internal controls. In particular, the

Committee will review with the CEO, CFO, internal auditor and external auditor: (i) all significant deficiencies, material weaknesses or significant changes in the design or operation of Pembina's internal control over financial reporting that could adversely affect Pembina's ability to record, process, summarize and report financial information required to be disclosed by the Corporation in the reports that it files or submits under applicable securities laws, within the required time periods; and (ii) any fraud, whether or not material, that involves management of Pembina or other employees who have a significant role in Pembina's internal control over financial reporting. In addition, the Committee will review with the CEO, CFO and the internal auditor Pembina's disclosure controls and procedures and at least annually will review management's conclusions about the efficacy of disclosure controls and procedures, including any significant deficiencies, material weaknesses or material non-compliance with disclosure controls and procedures.

The Committee will also maintain a Whistleblower Policy, including procedures for the:

(a) receipt retention and treatment of complaints received, including those regarding accounting, internal accounting controls or auditing matters; and

(b) confidential, anonymous submissions of concerns, including those regarding questionable accounting or auditing matters.

B. The External Auditor

The Committee, in its capacity as a committee of the Board, is directly responsible for overseeing the relationship, reports, qualifications, independence and performance of the external auditor and audit services by other registered public accounting firms engaged by the Corporation. The Committee shall have the authority and responsibility to recommend the appointment and the revocation of the appointment of the external auditors engaged for the purpose of preparing or issuing an audit report or performing other audit, review or attest services, and to fix their remuneration.

The external auditor will report directly to the Committee. The Committee's appointment of the external auditor is subject to annual approval by the Shareholders.

With respect to the external auditor, the Committee is responsible for:

(a) the appointment, termination, compensation, retention and oversight of the work of the external auditor engaged by the Corporation including the review and approval of the terms of the external auditors annual engagement letter and the proposed fees;

(b) resolution of disagreements or disputes between management and the external auditor regarding financial reporting for audit, review or attestation services;

(c) pre-approval of all legally permissible non-audit services to be provided by the external auditors considering the potential impact of such services on the independence of external auditors and, subject to any *de minimis* exemption available under applicable laws. Such approval can be given either specifically or pursuant to preapproval policies and procedures adopted by the committee including the delegation of this ability to one or more members of the Committee to the extent permitted by applicable law, provided that any pre-approvals granted pursuant to any such delegation may not delegate Committee responsibilities to management of Pembina, and must be reported to the full Committee at the first scheduled meeting of the Committee following such pre-approval;

(d) obtaining and reviewing, at least annually, a written report by the external auditor describing the external auditor's internal quality-control procedures, any material issues raised by the most recent internal quality-control review, or peer review, of the firm, or by any inquiry or investigation by governmental or professional authorities, within the preceding

five years, respecting one or more independent audits carried out by the firm, and any steps taken to deal with any such issues and all relationships between the external auditors and the Corporation;

(e) review of the external auditor which assesses three key factors of audit quality for the Committee to consider and assess including: independence, objectivity and professional skepticism; quality of the engagement team; and quality of communications and interactions with the external auditor. A written comprehensive review of the external auditor to be considered if required each year and completed at least every five (5) years which will include an:

i. assessment of quality of services and sufficiency of resources provided by the external auditor;

ii. assessment of auditor independence, objectivity and professional skepticism;

iii. assessment of value of services provided by the external auditor;

iv. assessment of written input from external auditor summarizing:

a) background of firm, size, resources, geographical coverage, relevant industry experience, including reputational challenges, systemic audit quality issues identified by Canadian Public Accountability Board ("CPAB") and Public Company Accounting Oversight Board ("PCAOB") in public reports;

b) industry experience of the audit team and plans for training and development of the team;

c) how the external auditor demonstrated objectivity and professional skepticism during the audit;

d) how the firm and team met all criteria for independence including identification of all relationships that the external auditor has with the Corporation and its affiliates and steps taken to address possible institutional threats;

e) involvement of engagement quality control review ("EQCR") partner and significant concerns raised by the EQCR partner;

f) matters raised to national office or specialists during the review;

g) significant disagreements between management and the external auditors and steps taken to resolve;

h) satisfaction with communication and cooperation with management and the Committee; and

i) findings and firm responses to reviews of the Corporation by CPAB and PCAOB;

v. communication of the results of the comprehensive review of the external auditor to the Board and recommending that the Board take appropriate action, in response to the review, as required. It is understood that the Committee may recommend tendering the external auditor engagement at their discretion. In addition to rotation of the EQCR partner as required by law, the Committee, together with the Board, will also consider whether it is necessary to periodically rotate the external audit firm itself. It will be at the discretion of the Committee if the incumbent external auditor is invited to participate in the tendering process; and

vi. setting clear hiring policies for Pembina regarding external auditor partners and employees and former partners and employees of the present and former external auditor of the Corporation. Before any external auditor partner, senior manager or manager is offered employment by the Corporation, prior approval from the Committee Chair must be received and a one year grace period must pass from the date any work was completed on a Pembina

audit engagement before an external auditor employee can be considered for contract or employment by the Corporation.

C. The Internal Audit Process

The Committee, in its capacity as a committee of the Board will carry out the following responsibilities with regard to the internal audit function:

(a) review with management and the head of internal audit the charter, activities, staffing, and organizational structure of internal audit, including the performance of the internal audit function;

(b) have final authority to review and approve the annual audit plan and all major changes to the plan;

(c) annually convey its view of the performance of the head of internal audit to the Chief Executive Officer as input into the compensation approval process;

(d) ensure there are no unjustified restrictions or limitations, and review and concur in the appointment, replacement, or dismissal of the head of internal audit; and

(e) on a regular basis, meet separately with the head of internal audit to discuss any matters that the Committee or the head of internal audit believes should be discussed privately.

D. Other

The Committee will also:

(a) meet separately with management, the Chief Financial Officer, the internal auditor, the external auditor and, as is appropriate, internal and external legal counsel and independent advisors in respect of issues not elsewhere listed concerning any other audit, finance or financial risk matters;

(b) review the appointment of the CFO and any other key financial executives who are involved in the financial reporting process;

(c) review the Corporation’s information technology practices and developments as they relate to financial reporting;

(d) from time to time discuss the staffing levels and competencies of the finance team with the External Auditor;

(e) review incidents, alleged or otherwise, as reported by whistleblowers, management, internal audit, the external auditor, internal or external counsel or otherwise, of fraud, illegal acts or conflicts of interest and establish procedures for receipt, treatment and retention of records of incident investigations;

(f) assist board oversight in respect of issues not elsewhere listed concerning the integrity of the listed company's financial statements, the listed company's compliance with legal and regulatory requirements, the independent auditor's qualifications and independence, and the performance of the listed company's internal audit function and independent auditors;

(g) monitor the funding exposure of the Corporation’s pension plan;

(h) receive and review reports from the Corporate Pension Committee at Pembina and recommend or approve changes as appropriate with respect to risk management of pension assets and liabilities, actuarial valuation as required by statute, the Statement of Investment Policies and Procedures, funding policy and corporate performance for the pension plans;

(i) jointly with the Human Resources and Compensation Committee, report on the status of the pension plans to the Board at least annually; and

(j) have the authority and responsibility to recommend the appointment and the revocation of the appointment of registered public accounting firms (in addition to the external auditors) engaged for the purpose of preparing or issuing an audit report or performing other audit, review or attest services, and to fix their remuneration.

In addition, the Committee will perform such other functions as are assigned by law and the Corporation's by-laws, and on the instructions of the Board.

IV. MEETINGS

The Committee will meet quarterly, or more frequently at the discretion of the members of the Committee, as circumstances require.

Additionally, the external auditor may call a meeting of the Committee provided the external auditor abides by the notice requirements set forth below.

Notice of each meeting of the Committee will be given to each member and to the internal and external auditors, who are invited to attend each meeting of the Committee. The notice will:

(a) be in writing (which may be communicated by fax or email);

(b) be accompanied by an agenda that states the nature of the business to be transacted at the meeting in reasonable detail;

(c) be given at least 48 hours preceding the time stipulated for the meeting, unless notice is waived by the Committee members; and

(d) if documentation is to be considered at the meeting, it should be provided seven (7) days in advance of the meeting if practicable, and in any event with reasonably sufficient time to review documentation.

A quorum for a meeting of the Committee is a majority of the members present in person, by video conference, webcast or telephone.

If the Chair is not present at a meeting of the Committee, a Chair will be selected from among the members present. The Chair will not have a second or deciding vote in the event of an equality of votes.

At each meeting, the Committee will meet "in-camera", without management or internal or external auditors present, and will meet in separate sessions with each of the head of internal audit and the lead partner of the external auditor at least annually.

The Committee may invite others to attend any part of any meeting of the Committee as it deems appropriate. This includes other directors, members of management, any employee, the Corporation's internal or external legal counsel, external auditors, advisors and consultants.

Minutes will be kept of all meetings of the Committee. The minutes will include copies of all resolutions passed at each meeting, will be maintained with the Corporation's records, and will be available for review by members of the Committee, the Board, and the external auditor.

V. ADDITIONAL RESPONSIBILITIES

A. Review of Charter

The Committee shall review and reassess the adequacy of this Charter at least annually or otherwise, as it deems appropriate, and propose recommended changes to the Governance, Nominating and Corporate Social Responsibility Committee.

B. Review of Policies

The Committee shall review proposed changes to Board policies relating to the matters set out in this Charter, annually or as it otherwise deems appropriate.

C. Financial Risk Management

The Committee shall provide oversight of financial risk management with respect to the areas outlined in this Charter.

D. Evaluation

The assessment of the Committee shall be facilitated annually by the Board Chair.

E. Reporting and Board Advisory Role

The Committee shall report regularly to the Board on its activities, including the results of meetings and reviews undertaken, and any associated recommendations. The Committee shall periodically facilitate and promote education of the Board with regard to the matters set out in this Charter, including education sessions with external consultants at the Committee’s discretion.

The Committee shall facilitate information sharing with other Board committees as required to address matters of mutual interest or concern in respect of matters set out in this Charter. The Committee will perform such other functions as are assigned by law and the Corporation's by-laws, and on the instructions of the Board.

REPORT TO SHAREHOLDERS

Year ended December 31, 2019

MANAGEMENT'S DISCUSSION AND ANALYSIS

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Basis of Presentation

The following Management's Discussion and Analysis ("MD&A") of the financial and operating results of Pembina Pipeline Corporation ("Pembina" or the "Company") is dated February 27, 2020, and is supplementary to, and should be read in conjunction with, Pembina's audited consolidated financial statements as at and for the year ended December 31, 2019 ("Consolidated Financial Statements"). The Consolidated Financial Statements have been prepared in accordance with International Financial Reporting Standards ("IFRS"), using the accounting policies described in Note 4 of the Consolidated Financial Statements. All dollar amounts contained in this MD&A are expressed in Canadian dollars unless otherwise noted. 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 operating and 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 measure, of such non-GAAP measures.

Risk Factors and Forward-Looking Information

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 "Risk Factors" and "Forward-Looking Statements & Information" sections 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 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; is growing an export terminals business; and is currently constructing a petrochemical facility to convert propane into polypropylene. 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 WCSB 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.

Kinder Acquisition

On December 16, 2019, Pembina completed its acquisition of Kinder Morgan Canada Limited ("Kinder Morgan Canada") by way of a plan of arrangement pursuant to Section 193 of the *Business Corporations Act* (Alberta) and the U.S. portion of the Cochin Pipeline system from Kinder Morgan, Inc. (collectively the "Kinder Acquisition"). The total consideration paid in respect of the Kinder Acquisition was $4.25 billion including $2.0 billion in cash, net of cash received, $1.71 billion of common shares and $536 million of class A preferred shares.

Upon closing of the Kinder Acquisition, Pembina announced it would increase its monthly dividend by $0.01 per common share, commencing with the dividend paid on February 14, 2020.

2. FINANCIAL & OPERATING OVERVIEW

Consolidated Financial Overview Three Months Ended December 31

Results of Operations

($ millions, except where noted)	**2019**	2018	Change	% Change
Revenue	**1,754**	1,726	28	2
Net revenue[1]	**837**	706	131	19
Gross profit	**603**	663	(60)	(9)
Earnings	**145**	368	(223)	(61)
Earnings per common share – basic *(dollars)*	**0.21**	0.66	(0.45)	(68)
Earnings per common share – diluted *(dollars)*	**0.21**	0.66	(0.45)	(68)
Cash flow from operating activities	**728**	674	54	8
Cash flow from operating activities per common share – basic *(dollars)*[1]	**1.41**	1.33	0.08	6
Adjusted cash flow from operating activities[1]	**576**	543	33	6
Adjusted cash flow from operating activities per common share – basic *(dollars)*[1]	**1.11**	1.07	0.04	4
Capital expenditures	**429**	356	73	21
Adjusted EBITDA[1]	**787**	715	72	10
Total volume *(mboe/d)*[2]	**3,577**	3,453	124	4

Bridge Analysis of Earnings *($ millions)*

Results Overview

Earnings in the fourth quarter of 2019 were positively impacted by higher gross profit in both Pipelines and Facilities from new assets placed into service and additional assets from the Kinder Acquisition. Marketing & New Ventures benefited from higher margins on crude and the impact of IFRS 16, more than offset by unrealized losses on commodity-related derivatives due to contracts maturing in the period, and increasing forward prices for crude and NGL compared to contract positions. In addition, Pembina recorded an impairment charge of $300 million ($220 million net of tax) on its convertible preferred interest in Ruby. The impairment charge was the result of an assessment triggered by pending contract expirations in a business environment in the Rockies Basin that remains challenged. Deferred tax expense decreased due to the deferred tax recovery on the Ruby impairment and the prior year partnership earnings that are included in current tax expense in the current period.

Changes in Results for the Three Months Ended December 31		
Revenue	▲	$28 million increase, primarily driven by new assets placed into service (see the "Projects and New Developments" sections), higher deferred revenue recognized during the fourth quarter of 2019 and the contribution from new assets following the Kinder Acquisition, partially offset by lower marketing revenues due to lower NGL volumes and lower prices for propane and crude.
Operating expenses	▼	$12 million increase due to higher labour and power costs driven by growth in the business, costs associated with the reclamation of previous site contamination and the contribution from new assets following the Kinder Acquisition, partially offset by savings following Redwater Co-generation going into service in March 2019.
Share of profit from equity accounted investees	▼	$41 million decrease, largely due to lower propane margins at Aux Sable resulting from a decrease in sales prices, combined with a narrower Chicago-AECO natural gas differential resulting in lower interruptible volumes and tolls on Alliance.
Realized gain on commodity-related derivatives	●	Consistent realized gains relating to the settlement of NGL based derivatives.
Unrealized loss (gain) on commodity-related derivatives	▼	$112 million negative variance primarily due to crude and NGL contracts maturing in the period, and an increase in the forward price of crude and NGL which drove the associated derivative contracts into a loss position.
General & administrative and other expense	●	Consistent with prior period as higher corporate general & administrative and other expenses in 2019, due to growth in the business and acquisition costs, were largely offset by project write-downs taken during the fourth quarter of 2018.
Impairment of investment in equity accounted investee	▼	Pembina recognized an impairment charge of $300 million (pre-tax) on its convertible preferred interest in Ruby. The impairment charge was the result of an assessment triggered by pending contract expirations in a business environment in the Rockies Basin that remains challenged.
Net finance costs	●	Consistent with prior period as additional interest expense associated with higher average debt levels, combined with higher interest expense recognized on the adoption of IFRS 16, was largely offset by higher foreign exchanges gains.
Current tax expense	▼	$24 million increase primarily due to the growth in prior year partnership earnings as a result of expansions that are recognized in taxable income in the current year.
Deferred tax expense	▲	$168 million decrease in deferred expense primarily due to the recovery on the impairment discussed above and growth in partnership earnings in the prior year that are recognized in taxable income in the current year.
Earnings	▼	$223 million decrease from the fourth quarter of 2018 driven by the items noted above.
Cash flow from operating activities	▲	$54 million increase, primarily driven by an increase in operating results after adjusting for non-cash items, $34 million change in non-cash working capital and the $13 million impact from the adoption of IFRS 16, partially offset by the $35 million decrease in distributions from equity accounted investees and $36 million increase in taxes paid.
Adjusted cash flow from operating activities(1)	▲	$33 million increase largely due to the same items impacting cash flow from operating activities, discussed above, net of the $34 million change in non-cash working capital and $24 million increase in current tax expense, partially offset by the $36 million increase in taxes paid.
Adjusted EBITDA(1)	▲	$72 million increase due to new assets placed into service in Pipelines and Facilities, the $18 million contribution from new assets following the Kinder Acquisition, higher margins on crude in Marketing & New Ventures and the $16 million impact from the adoption of IFRS 16, partially offset by lower propane margins decreasing the contribution from Aux Sable and the narrower Chicago-AECO natural gas differential impacting Alliance. Included in adjusted EBITDA is $196 million (2018: $233 million) related to equity accounted investees.
Total volume *(mboe/d)*(2)	▲	124 mboe/d increase due to the larger asset base and temporary interruptible volumes on the Ruby Pipeline, partially offset by lower supply volumes at the Redwater Complex, combined with decreased volumes at Veresen Midstream. Revenue volumes include 368 mboe/d (2018: 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.

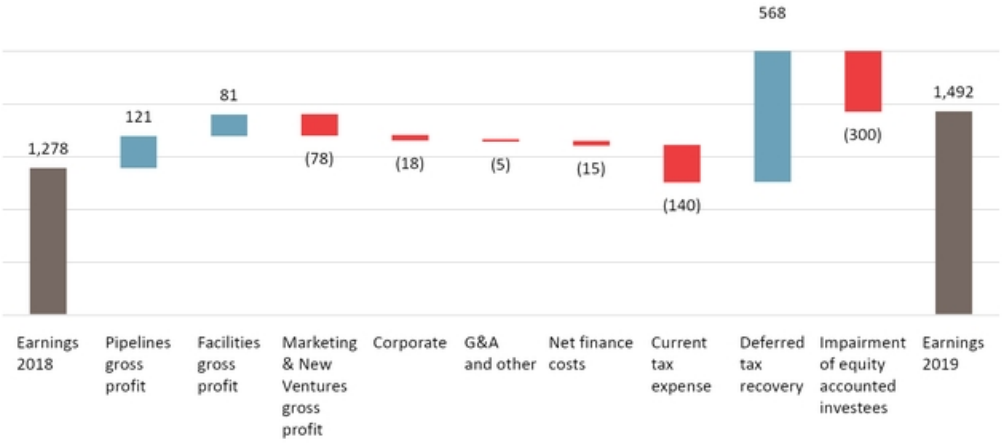
(1) Refer to the "Non-GAAP Measures" section.
(2) Total revenue volumes. See "Abbreviations" for definition. Marketed NGL volumes are excluded from volumes to avoid double counting. Refer to the "Marketing & New Ventures" section for further information.

Consolidated Financial Overview 12 Months Ended December 31

Results of Operations

($ millions, except where noted)	**2019**	2018	Change	% Change
Revenue	**7,230**	7,351	(121)	(2)
Net revenue[1]	**3,120**	2,836	284	10
Gross profit	**2,433**	2,327	106	5
Earnings	**1,492**	1,278	214	17
Earnings per common share – basic *(dollars)*	**2.66**	2.28	0.38	17
Earnings per common share – diluted *(dollars)*	**2.65**	2.28	0.37	16
Cash flow from operating activities	**2,532**	2,256	276	12
Cash flow from operating activities per common share – basic *(dollars)*[1]	**4.94**	4.47	0.47	11
Adjusted cash flow from operating activities[1]	**2,234**	2,154	80	4
Adjusted cash flow from operating activities per common share – basic *(dollars)*[1]	**4.36**	4.27	0.09	2
Capital expenditures	**1,645**	1,226	419	34
Adjusted EBITDA[1]	**3,061**	2,835	226	8
Total volume *(mboe/d)*[2]	**3,451**	3,398	53	2

Bridge Analysis of Earnings *($ millions)*



Results Overview

Earnings for the 12 months ended December 31, 2019 were positively impacted by higher gross profit in both Pipelines and Facilities from new assets placed into service. Facilities also benefited from higher propane and butane terminalling revenue. Marketing & New Ventures gross profit decreased largely due to lower share of profit in Aux Sable following a decrease in propane pricing and higher depreciation expense following the adoptions of IFRS 16. Higher current tax expense was offset by the deferred tax recovery, primarily due to the reduction in Alberta income tax rate from 12 percent to eight percent over a four-year period. Earnings were further impacted by the $300 million ($220 million net of tax) impairment charge on Pembina's convertible preferred interest in Ruby.

Changes in Results for the 12 Months Ended December 31		
Revenue	▼	$121 million decrease, primarily due to lower NGL and crude prices, partially offset by revenue associated with new assets placed into service (see the "Projects and New Developments" sections) and the contribution from new assets following the Kinder Acquisition, increased terminalling revenue, a $33 million arbitration award payment and increased recovery of operating expenses.
Operating expenses	▼	$51 million increase largely due to increases in power costs as a result of both increased power pool prices and higher consumption from new assets placed into service, combined with higher labour costs and repairs and maintenance due to the larger asset base.
Share of profit from equity accounted investees	▼	$41 million decrease largely due to lower propane margins at Aux Sable resulting from lower sales prices during 2019 and narrower Chicago-AECO natural gas differential impacting Alliance, partially offset by the impact of a $24 million finance gain reversal recorded in the first half of 2018.
Realized (gain) loss on commodity-related derivatives	▲	$84 million increase due to decreasing market prices creating a gain for NGL and crude-based derivatives settled during the period.
Unrealized loss (gain) on commodity-related derivatives	▼	$86 million increase in unrealized loss primarily due to crude and NGL contracts maturing in the period.
General & administrative and other expense	●	Consistent with prior period as higher corporate general & administrative and other expenses in 2019, due to growth in the business and acquisition costs, were largely offset by project write-downs taken during 2018.
Impairment of investment in equity accounted investee	▼	Impairment charge of $300 million on Pembina's convertible preferred interest in Ruby, discussed above.
Net finance costs	▼	$15 million increase due to additional interest expense associated with higher average debt levels, combined with higher interest expense recognized on the adoption of IFRS 16, partially offset by higher foreign exchanges gains.
Current tax expense	▼	$140 million increase is primarily due to the growth in prior year partnership earnings, as a result of expansions that are recognized in taxable income in the current year, as well as higher earnings in the current year.
Deferred tax recovery	▲	$568 million decrease in deferred tax primarily due to the reduction in the Alberta tax rate from 12 percent to eight percent over a four-year period, the recovery on the impairment discussed above, and growth in the partnership earnings in the prior year that are recognized in taxable income in the current year.
Earnings	▲	$214 million increase compared to 2018, driven by the items noted above.
Cash flow from operating activities	▲	$276 million increase, primarily driven by an increase in operating results after adjusting for non-cash items, $189 million change in non-cash working capital, combined with the $56 million impact from the adoption of IFRS 16, partially offset by the $115 million increase in taxes paid and $47 million decrease in distributions from equity accounted investees.
Adjusted cash flow from operating activities(1)	▲	$80 million increase largely due to the increase in cash flow from operating activities, combined with the $118 million increase in taxes paid, partially offset by the $140 million increase in current tax expense and the $189 million change in non-cash working capital.
Adjusted EBITDA(1)	▲	$226 million increase primarily due to the contribution from new assets placed into service and the contribution from new assets following the Kinder Acquisition, combined with the impact from the realized gain on commodity-related derivatives, the recognition of variable revenues related to capital recoveries, increased terminalling and storage revenues and $61 million impact from the adoption of IFRS 16, partially offset by decreased NGL and crude market prices in Marketing & New Ventures. Included in adjusted EBITDA is $802 million (2018: $850 million) related to equity accounted investees.
Total volume *(mboe/d)*(2)	▲	53 mboe/d increase due to new assets placed into service, higher temporary interruptible volumes on the Ruby Pipeline, partially offset by lower supply volumes at the Redwater Complex. Revenue volumes include 332 mboe/d (2018: 313 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 "Abbreviations" for definition. Marketed NGL volumes are excluded from volumes to avoid double counting. Refer to the "Marketing & New Ventures" section for further information.

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 manages pipeline transportation capacity of 3.1 mmboe/d[(1)], above ground storage of 11 mmbbls[(1)] and rail terminalling capacity of approximately 145 mboe/d [(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 crudes, 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 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 operated 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 six[(2)] bcf/d for its customers. Virtually all of the condensate and NGL extracted through Canadian-based facilities are transported by Pembina's Pipelines Division. In addition all NGL transported along the Alliance Pipeline are extracted through Pembina operated Channahon Facility at the terminus. The Facilities Division includes approximately 326 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. The Marketing & New Ventures Division includes an integrated PDH/PP Facility being constructed by Pembina's joint venture, CKPC and the proposed Jordan Cove LNG project.

(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						12 Months Ended December 31					
	2019			2018			2019			2018		
($ millions, except where noted)	**Volumes(1)**	**Gross Profit**	**Adjusted EBITDA(2)**	Volumes(1)	Gross Profit	Adjusted EBITDA(2)	**Volumes(1)**	**Gross Profit**	**Adjusted EBITDA(2)**	Volumes(1)	Gross Profit	Adjusted EBITDA(2)
Pipelines	**2,667**	**345**	**467**	2,529	301	417	**2,566**	**1,376**	**1,854**	2,521	1,255	1,703
Facilities	**910**	**169**	**254**	924	155	233	**885**	**655**	**955**	877	574	880
Marketing & New Ventures(3)	**—**	**93**	**120**	—	203	109	**—**	**406**	**423**	—	484	409
Corporate	**—**	**(4)**	**(54)**	—	4	(44)	**—**	**(4)**	**(171)**	—	14	(157)
Total	**3,577**	**603**	**787**	3,453	663	715	**3,451**	**2,433**	**3,061**	3,398	2,327	2,835

(1) 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.

Pipelines

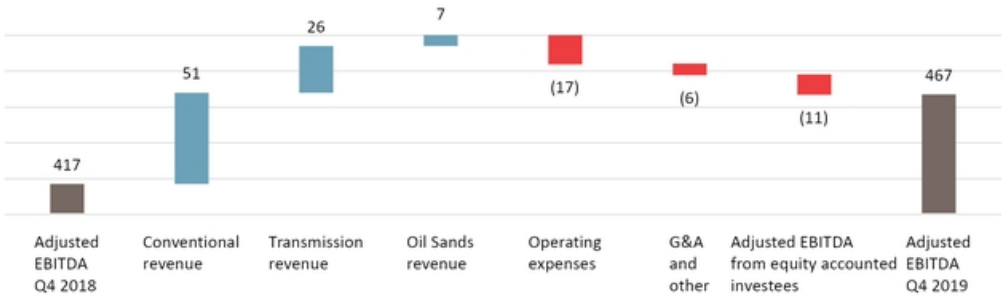
Financial Overview Three Months Ended December 31

Results of Operations

($ millions, except where noted)	**2019**	2018	Change	% Change
Conventional revenue[1]	**354**	303	51	17
Transmission revenue[1]	**60**	34	26	76
Oil Sands revenue[1]	**73**	66	7	11
Pipelines revenue[1]	**487**	403	84	21
Operating expenses[1]	**137**	120	17	14
Share of profit from equity accounted investees	**61**	74	(13)	(18)
Depreciation and amortization included in operations	**66**	56	10	18
Gross profit	**345**	301	44	15
Adjusted EBITDA[2]	**467**	417	50	12
Volumes *(mboe/d)*[3]	**2,667**	2,529	138	5
Distributions from equity accounted investees	**80**	88	(8)	(9)

Change in Results		
Conventional revenue[1]	▲	Increase due to revenues associated with Phase IV and V assets placed into service in December 2018, a timing difference in the recognition of deferred revenue, which was primarily recognized in the fourth quarter of 2019 compared to the third quarter of 2018, and increased recovery of operating expenses.
Transmission revenue[1]	▲	Increase largely due to the contribution from the Cochin Pipeline following the Kinder Acquisition, combined with higher average tolls following the recontracting of Alberta Ethane Gathering System and return to normal operations on the Vantage Pipeline following a year-long third-party force majeure.
Oil Sands revenue[1]	▲	Increase primarily due to contribution from the Edmonton Terminals following the Kinder Acquisition.
Operating expenses[1]	▼	Increase primarily due to higher labour driven by growth in the business, costs associated with the reclamation of previous site contamination and the contribution from new assets following the Kinder Acquisition.
Share of profit from equity accounted investees	▼	Decrease largely due to lower interruptible volumes and tolls on the Alliance Pipeline, driven by a narrower AECO-Chicago natural gas differential.
Depreciation and amortization included in operations	▼	Increase in depreciation due to larger asset base as Pembina continued to expand its conventional pipeline system, placing Phase IV and V assets into service in December 2018 and the newly acquired assets from the Kinder Acquisition.
Distributions from equity accounted investees	▼	$80 million consists of $50 million (2018: $56 million) from Alliance and $30 million (2018: $31 million) from Ruby.
Volumes *(mboe/d)*[3]	▲	Increase in revenue volumes primarily due to increased volumes on the Peace Pipeline system, explained in revenue above and temporary interruptible volumes on the Ruby Pipeline, partially offset by lower volumes on the Alliance Pipeline due to a narrower AECO-Chicago natural gas differential. Revenue volumes include 134 mboe/d (2018: 146 mboe/d) related to Alliance and 146 mboe/d (2018: 89 mboe/d) related to Ruby.
Adjusted EBITDA[2]	▲	$50 million increase primarily due to increase in revenues, partially offset by increased operating expenses and lower contribution from Alliance, explained above, combined with higher general & administrative and other expenses due to the larger asset base. Included in adjusted EBITDA is $76 million (2018: $88 million) related to Alliance and $52 million (2018: $52 million) related to Ruby.

Bridge Analysis of Adjusted EBITDA[2] *($ millions)*



(1) Includes inter-division transactions. See note 20 of the Consolidated Financial Statements.
(2) Refer to the "Non-GAAP Measures" section.
(3) Revenue volumes. See "Abbreviations" for definition.

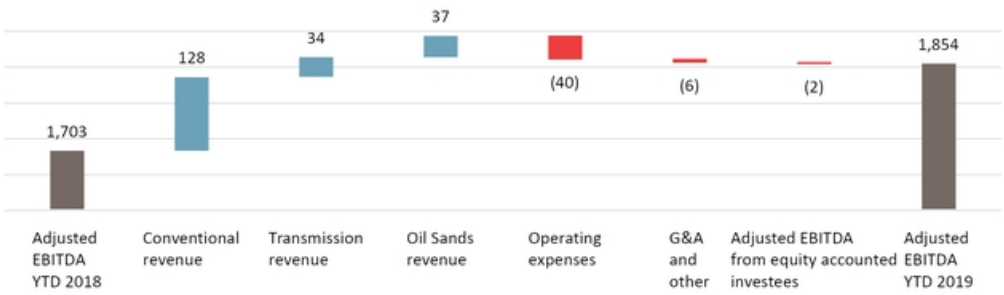
Financial Overview 12 Months Ended December 31

Results of Operations

($ millions, except where noted)	**2019**	2018	Change	% Change
Conventional revenue[1]	**1,314**	1,186	128	11
Transmission revenue[1]	**189**	155	34	22
Oil Sands revenue[1]	**284**	247	37	15
Total revenue[1]	**1,787**	1,588	199	13
Operating expenses[1]	**436**	396	40	10
Share of profit from equity accounted investees	**270**	279	(9)	(3)
Depreciation and amortization included in operations	**245**	216	29	13
Gross profit	**1,376**	1,255	121	10
Adjusted EBITDA[2]	**1,854**	1,703	151	9
Volumes *(mboe/d)*[3]	**2,566**	2,521	45	2
Distributions from equity accounted investees	**390**	380	10	3

Change in Results		
Conventional revenue[1]	▲	Increase due to additional revenues associated with Phase IV and V assets and higher recovery of applicable operating expenses, driven by increases in repairs and maintenance, higher power pool prices and power consumption.
Transmission revenue[1]	▲	Increase largely due to the contribution from the Cochin Pipeline following the Kinder Acquisition, higher average tolls on the Alberta Ethane Gathering System and the end of the year-long third-party force majeure combined with favourable foreign exchange rate impacts on the Vantage Pipeline.
Oil Sands revenue[1]	▲	Increase primarily due to the recognition of $23 million of variable revenue related to year-to-date and prior year capital recoveries, the contribution from the Edmonton Terminals following the Kinder Acquisition and higher recovery of operating expenses due to increased power pool prices.
Operating expenses[1]	▼	Increase primarily due to increased labour and power costs as a result of the larger asset base and higher power pool prices, combined with increased repairs and maintenance.
Share of profit from equity accounted investees	▼	Decrease largely due to lower interruptible volumes on the Alliance Pipeline during the fourth quarter, driven by narrower AECO-Chicago natural gas differential, partially offset by general & administrative expense savings associated with transitioning Alliance to an owner-operator model.
Depreciation and amortization included in operations	▼	Increase in depreciation due to larger asset base as Pembina placed Phase IV and V assets into service in December 2018 and the newly acquired assets from the Kinder Acquisition.
Distributions from equity accounted investees	▲	$390 million consists of $268 million (2018: $259 million) from Alliance and $121 million (2018: $120 million) from Ruby.
Volumes *(mboe/d)*[3]	▲	Increase primarily due to conventional Phase IV and V assets placed into service in December 2018 combined with higher interruptible volumes on the Ruby Pipeline. Revenue volumes include 141 mboe/d (2018: 143 mboe/d) related to Alliance and 103 mboe/d (2018: 89 mboe/d) related to Ruby.
Adjusted EBITDA[2]	▲	$151 million increase primarily due to the increase in revenues, partially offset by the increase in operating expenses, discussed above, combined with higher general & administrative and other expenses due to the larger asset base. Included in adjusted EBITDA is $328 million (2018: $342 million) related to Alliance and $202 million (2018: $191 million) related to Ruby.

Bridge Analysis of Adjusted EBITDA[2] *($ millions)*



(1) Includes inter-division transactions. See Note 20 of the Consolidated Financial Statements.
(2) Refer to the "Non-GAAP Measures" section.
(3) Revenue volumes. See "Abbreviations" for definition.

Operational Overview

	3 Months Ended December 31						12 Months Ended December 31					
	2019			2018			2019			2018		
($ millions, except where noted)	**Volumes(1)**	**Gross Profit**	**Adjusted EBITDA(2)**	Volumes(1)	Gross Profit	Adjusted EBITDA(2)	**Volumes(1)**	**Gross Profit**	**Adjusted EBITDA(2)**	Volumes(1)	Gross Profit	Adjusted EBITDA(2)
Pipelines												
Conventional	**958**	**216**	**253**	897	182	215	**910**	**849**	**993**	878	776	907
Transmission	**646**	**96**	**173**	566	86	162	**591**	**384**	**684**	570	352	643
Oil Sands	**1,063**	**33**	**41**	1,066	33	40	**1,065**	**143**	**177**	1,073	127	153
Total	**2,667**	**345**	**467**	2,529	301	417	**2,566**	**1,376**	**1,854**	2,521	1,255	1,703

(1) Revenue volumes. See "Abbreviations" for definition.
(2) Refer to the "Non-GAAP Measures" section.

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 V Peace Pipeline Expansion	December 2018
Phase IV Peace Pipeline Expansion	December 2018

As previously announced, during the quarter, Pembina approved the first stage of an additional expansion of the Peace Pipeline System ("Phase IX"), which will add additional capacity in the northwest Alberta to Gordondale corridor to accommodate increased activity in the Montney. This expansion has an estimated cost of approximately $100 million and is supported by 10-year contracts with predominantly investment grade counterparties under significant take-or-pay provisions. This portion of the Phase IX expansion allows Pembina to fully utilize approximately 100 mbpd of latent capacity that will be created on Peace Pipeline east of La Glace as a result of the Phase VII and VIII expansions. Once this expansion is completed, Pembina will have achieved segregated liquids transportation service for ethane-plus, propane-plus, crude and condensate across multiple pipeline systems between Gordondale and the Edmonton, Alberta area. Phase IX is anticipated to be placed into service in the fourth quarter of 2021, subject to regulatory and environmental approvals.

Pembina continues to evaluate the need for additional pump stations in the Fox Creek to Namao corridor to achieve Pembina's fully powered-up market delivery capacity of 1.3 mmbpd across the Peace and Northern systems. Engineering is currently underway and based on further commercial support, the scope of Phase IX may be revised in the future to include these projects. In addition, the elimination of batching and other hydraulic optimization initiatives, which Pembina refers to as Phase X, could create up to an incremental 100 mbpd of capacity with minimal capital spending.

Collectively, the projects in Pipelines are trending on budget. The following outlines the significant projects currently underway and new developments within Pipelines:

Phase VI Peace Pipeline Expansion		
Capital Budget: $280 million	**In-service Date:** In stages starting first quarter of 2020 through mid-2020	**Status:** Initial stage is delayed, trending over budget
This expansion includes upgrades at Gordondale; a 16-inch pipeline in the La Glace to Wapiti corridor and associated pump station and terminal upgrades; and a 20-inch pipeline in the Kakwa to Lator corridor. Commissioning of the first stage of the expansion is underway and construction of the second stage is ongoing.		

Phase VII Peace Pipeline Expansion		
Capital Budget: $950 million	**In-service Date:** First half of 2021	**Status:** On time, trending under budget
This expansion is expected to add approximately 240 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-kilometer pipeline in the La Glace-Valleyview-Fox Creek corridor, as well as six new pump stations or terminal upgrades, between La Glace and Edmonton, Alberta. Pipeline construction commenced in January 2020.		

Phase VIII Peace Pipeline Expansion		
Capital Budget: $500 million	**In-service Date(2):** In stages starting in 2020 through the first half of 2022	**Status:** On time, trending on budget
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. Engineering work is progressing as planned to support a construction start date in the second half of 2020.		

Phase IX Peace Pipeline Expansion		
Capital Budget: $100 million	**In-service Date(2):** Fourth quarter of 2021	**Status:** On time, trending on budget
This expansion currently 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. Engineering work is progressing as planned.		

NEBC Montney Infrastructure		
Capital Budget: Not disclosed separately(3)	**In-service Date:** Complete and awaiting a third-party downstream connection	**Status:** On time, on budget
This infrastructure includes producer tie-in connections to Pembina's Birch Terminal as well as upgrades to the terminal including additional storage and pumps, along with minor site modifications. Construction on the new facilities and associated lateral is complete.		

Wapiti Condensate Lateral		
Capital Budget: Not disclosed separately(3)	**In-service Date:** First quarter of 2020	**Status:** Delayed, trending on budget
This is a 12-inch lateral, which will connect growing condensate volumes from a third-party owned facility in the Pipestone Montney region into Pembina's Peace Pipeline. Construction is complete and commissioning is underway.		

(1) For further details on Pembina's significant assets, including definitions, refer to Pembina's Annual Information Form for the year ended December 31, 2019 (the "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) Subject to environmental and regulatory approvals. See the "Forward-Looking Statements & Information" section.
(3) Combined capital budget is $120 million.

Facilities

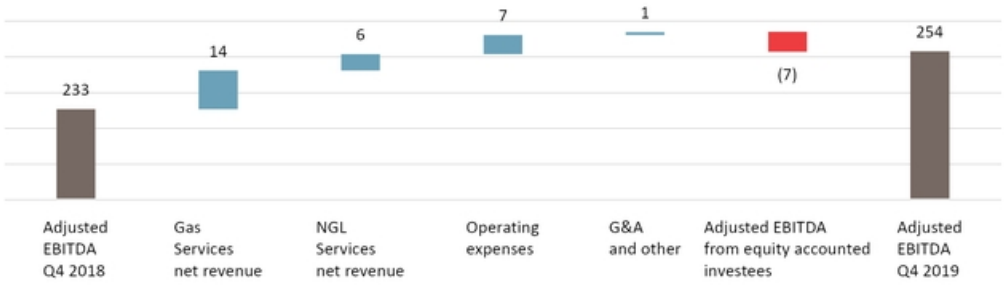
Financial Overview Three Months Ended December 31

Results of Operations

($ millions, except where noted)	**2019**	2018	Change	% Change
Gas Services net revenue[1][2][3]	**152**	138	14	10
NGL Services net revenue[1][2][3]	**133**	127	6	5
Facilities net revenue[1][2][3]	**285**	265	20	8
Operating expenses[1]	**80**	87	(7)	(8)
Share of profit from equity accounted investees	**14**	16	(2)	(13)
Depreciation and amortization included in operations	**50**	39	11	28
Gross profit	**169**	155	14	9
Adjusted EBITDA[3]	**254**	233	21	9
Volumes *(mboe/d)*[4]	**910**	924	(14)	(2)
Distributions from equity accounted investees	**21**	39	(18)	(46)

Changes in Results		
Gas Services net revenue[1][2][3]	▲	Increase is largely attributable to revenues associated with Duvernay II being placed into service in November 2019, combined with increased take-or-pay revenues at Kakwa River.
NGL Services net revenue[1][2][3]	▲	Increase primarily due to Redwater Co-generation and Burstall Ethane Storage going into service in March 2019 and January 2019, respectively, combined with additional revenues from the Vancouver Wharves following the Kinder Acquisition, partially offset by lower supply volumes at the Redwater Complex.
Operating expenses[1]	▲	Decrease largely due to a refund adjustment from a third-party, combined with a reduction in power costs following Redwater Co-generation going into service in March 2019, partially offset by higher labour costs as a result of Burstall Ethane Storage and Redwater Co-generation going into service.
Share of profit from equity accounted investees	●	Consistent with prior period.
Depreciation and amortization included in operations	▼	Increase primarily due to Redwater Co-generation and Burstall Ethane Storage going into service in March 2019 and January 2019, respectively.
Distributions from equity accounted investees	▼	$21 million consists of $20 million (2018: $38 million) from Veresen Midstream and $1 million (2018: $1 million) from Fort Corp. The decrease in the Veresen Midstream distribution is primarily due to the conversion of Veresen Midstream Class B Units to Class A Units by Pembina's joint venture partner, reducing Pembina's distribution to its ownership percentage.
Volumes *(mboe/d)*[4]	▼	Decrease in revenue volumes primarily due to lower supply volumes at the Redwater Complex, combined with decreased volumes from Veresen Midstream's Dawson facilities due to lower volumes, partially offset by additional volumes associated with Duvernay II being placed into service. Revenue volumes include 88 mboe/d (2018: 97 mboe/d) related to Veresen Midstream.
Adjusted EBITDA[3]	▲	$21 million increase primarily due to higher net revenues and lower operating expenses, discussed above, partially offset by lower revenues from Veresen Midstream, due to lower volumes. Included in adjusted EBITDA is $48 million (2018: $54 million) related to Veresen Midstream.

Bridge Analysis of Adjusted EBITDA[3] *($ millions)*



(1) Includes inter-division transactions. See Note 20 of the Consolidated Financial Statements.
(2) Revenue and cost of goods sold reported for all 2018 periods have been restated to reflect updated presentation for 2019, where the majority of cost of goods sold and corresponding revenues are reported in Marketing & New Ventures.
(3) Refer to the "Non-GAAP Measures" section.
(4) Revenue volumes. See "Abbreviations" for definition.

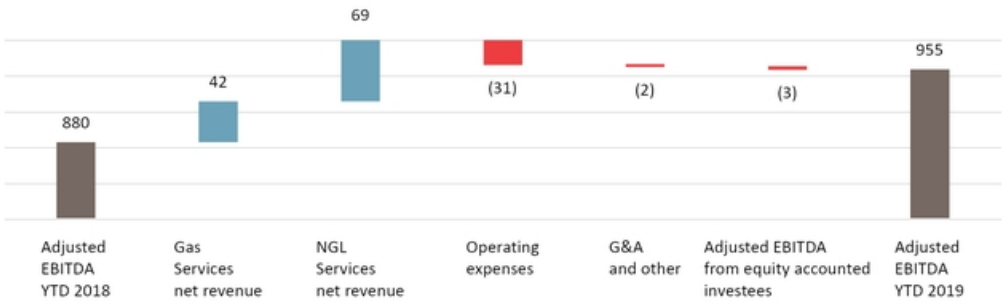
Financial Overview 12 Months Ended December 31

Results of Operations

($ millions, except where noted)	**2019**	2018	Change	% Change
Gas Services net revenue[1][2][3]	**588**	546	42	8
NGL Services net revenue[1][2][3]	**529**	460	69	15
Facilities net revenue[1][2][3]	**1,117**	1,006	111	11
Operating expenses[1]	**344**	313	31	10
Share of profit from equity accounted investees	**50**	30	20	67
Depreciation and amortization included in operations	**168**	149	19	13
Gross profit	**655**	574	81	14
Adjusted EBITDA[3]	**955**	880	75	9
Volumes *(mboe/d)*[4]	**885**	877	8	1
Distributions from equity accounted investees	**101**	133	(32)	(24)

Changes in Results		
Gas Services net revenue[1][2][3]	▲	Increase is largely attributable to higher operating expense recoveries as a result of higher power and repairs and maintenance costs, increased demand at the Saturn Complex and Cutbank Complex and Duvernay II being placed into service in November 2019.
NGL Services net revenue[1][2][3]	▲	Increase primarily due to increased terminalling revenues for propane and butane, the contribution from Redwater Co-generation and Burstall Ethane Storage going into service March 2019 and January 2019, respectively.
Operating expenses[1]	▼	Increase due to higher power consumption from Burstall Ethane Storage being placed into service, increased repairs and maintenance, higher power pool prices and increased labour costs as a result of a larger headcount associated with new assets placed into service, partially offset by a reduction in the Redwater Complex power costs following Redwater Co-generation going into service in March 2019.
Share of profit from equity accounted investees	▲	Increase mainly due to a $24 million finance gain reversal recorded in 2018, partially offset by a one-time revenue adjustment of $5 million related to Veresen Midstream's Dawson facilities.
Depreciation and amortization included in operations	▼	Increase primarily due to Redwater Co-generation and Burstall Ethane Storage going into service March 2019 and January 2019, respectively.
Distributions from equity accounted investees	▼	$101 million consists of $96 million (2018: $124 million) from Veresen Midstream and $5 million (2018: $9 million) from Fort Corp. The decrease in distributions from Veresen Midstream is due to the same reasons mentioned above.
Volumes *(mboe/d)*[4]	▲	Increase primarily due to additional volumes from Veresen Midstream due to the North Central Liquids Hub being placed into service in June 2018 and higher volumes at the Saturn Complex and Cutbank Complex, partially offset by lower volumes at the Younger facility due to third-party outages and lower volumes at the Redwater Complex. Revenue volumes include 88 mboe/d (2018: 81 mboe/d) related to Veresen Midstream.
Adjusted EBITDA[3]	▲	$75 million increase primarily due to strong NGL Services and Gas Services revenues, partially offset by higher operating expenses, discussed above. Included in adjusted EBITDA is $182 million (2018: $183 million) related to Veresen Midstream.

Bridge Analysis of Adjusted EBITDA[3] *($ millions)*



(1) Includes inter-division transactions. See Note 20 of the Consolidated Financial Statements.
(2) Revenue and cost of goods sold reported for all 2018 periods have been restated to reflect updated presentation for 2019, where the majority of cost of goods sold and corresponding revenues are reported in Marketing & New Ventures.
(3) Refer to the "Non-GAAP Measures" section.
(4) Revenue volumes. See "Abbreviations" for definition.

Operational Overview

	3 Months Ended December 31						12 Months Ended December 31					
	2019			2018			2019			2018		
($ millions, except where noted)	**Volumes(1)**	**Gross Profit**	**Adjusted EBITDA(2)**	Volumes(1)	Gross Profit	Adjusted EBITDA(2)	**Volumes(1)**	**Gross Profit**	**Adjusted EBITDA(2)**	Volumes(1)	Gross Profit	Adjusted EBITDA(2)
Facilities												
Gas Services	**690**	**90**	**146**	683	83	142	**678**	**337**	**551**	664	301	537
NGL Services	**220**	**79**	**108**	241	72	91	**207**	**318**	**404**	213	273	343
Total	**910**	**169**	**254**	924	155	233	**885**	**655**	**955**	877	574	880

(1) Revenue volumes. See "Abbreviations" for definition.
(2) Refer to the "Non-GAAP Measures" section.

Projects & New Developments

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(1)	**In-service Date**
Duvernay II	November 2019
Redwater Co-generation	March 2019
Burstall Ethane Storage	January 2019
Rail Yard Expansion	December 2018
Cavern Storage	Throughout 2018
Veresen Midstream(2)	
North Central Liquids Hub	June 2018
Saturn Phase II Gas Plant	January 2018

As previously announced, Pembina approved the development of a $120 million co-generation facility at the Empress NGL Extraction facility (the "Empress Co-generation Facility"). The Empress Co-generation Facility will reduce overall operating costs and greenhouse gas emissions by providing power and heat to the extraction and fractionation facilities and has an expected in-service date in mid-2022, subject to regulatory and environmental approval.

As previously announced, the anticipated startup of the Prince Rupert LPG Export Terminal has generated significant interest from our customers and offtakers and Pembina has decided to move forward with an expansion of the terminal (the "Prince Rupert Terminal Expansion"), which will increase propane export capacity to approximately 40 mbpd. The Prince Rupert Terminal Expansion is expected to cost approximately $175 million and has an anticipated in-service date in the first half of 2023, subject to regulatory and environmental approvals.

As previously announced, in conjunction with the Hythe Developments project, Veresen Midstream entered into a contract with NuVista Energy ("NuVista") whereby NuVista retained an option to have Veresen Midstream own and fund the Pipestone North compressor station in exchange for an annual capital fee. NuVista has elected to exercise their option. As planned, NuVista will build and operate the compressor station. Upon completion the compressor station will be transfered at cost to Pembina. As a result of NuVista's election, the capital budget for the Hythe Developments project has increased from $185 million to $240 million, net to Pembina.

Collectively, the projects in Facilities are trending on budget.

The following outlines the projects currently underway and new developments within Facilities:

Duvernay III		
Capital Budget: $200 million	**In-service Date:** Mid to late 2020	**Status:** On time, trending on budget
Duvernay III is the second tranche of infrastructure development under the 20-year infrastructure development and service agreement with Chevron Canada Limited and Kuwait Foreign Petroleum Exploration Company. This development includes a 100 MMcf/d sweet gas, shallow cut processing train, 20 mbpd of inlet condensate stabilization and other associated infrastructure. Detailed design is complete, long-lead equipment fabrication is nearing completion and piling has been completed on site. Based on the customers' request for additional infrastructure the capital cost of this project was increased from the original cost of $175 million.		

Duvernay Sour Treatment Facilities		
Capital Budget: $65 million	**In-service Date:** First quarter of 2020	**Status**: On time, trending on budget
Sour gas treating facilities at the Duvernay Complex including 150 MMcf/d sour gas sweetening system with 300 MMcf/d of amine regeneration capability and up to one tonne of sulphur per day of acid gas incineration. Construction was completed in mid-February and commissioning is currently progressing.		

Prince Rupert Terminal		
Capital Budget: $250 million	**In-service Date(3):** Second half of 2020	**Status:** On time, trending 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. Facility mechanical construction continues with modules setting, equipment install and piping work well underway. On site sphere assembly is nearly complete and marine retrofit work on the wharf is progressing.		

Prince Rupert Terminal Expansion		
Capital Budget: $175 million	**In-service Date(3):** First half of 2023	**Status:** On time, trending on budget
The Prince Rupert Terminal Expansion will increase propane export capacity to approximately 40 mbpd. Front End Engineering Design ("FEED") work has started.		

Hythe Developments		
Capital Budget(4): $240 million	**In-service Date:** Late 2020	**Status:** On time, trending on budget
Pembina and its 45 percent owned joint venture, Veresen Midstream, will construct natural gas gathering and processing infrastructure in the Pipestone Montney region. 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 and various laterals will be owned and constructed by Pembina. All long-lead equipment has been ordered and construction has commenced.		

Empress Infrastructure		
Capital Budget: $120 million	**In-service Date:** Late 2020	**Status:** On time, trending on budget
This expansion will add new fractionation and terminalling facilities, which are expected to add approximately 30 mbpd of propane-plus fractionation capacity to Pembina's Empress NGL Extraction Facility. Mechanical construction is progressing on the fractionation and rail sites. Electrical construction has commenced on both sites. Pipeline construction began in February and rail track construction is expected to commence in May 2020.		

Empress Co-generation		
Capital Budget: $120 million	**In-service Date(3):** Mid-2022	**Status:** On time, trending on budget
This project enables Pembina to be more efficient with its production, utilize heat recovery and provide a second source of power through the installation of a co-generation unit at the Empress NGL Extraction Facility. FEED work was completed in the fourth quarter of 2019 and detailed engineering started in January 2020.		

(1) For further details on Pembina's significant assets, including definitions, 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) Investment in equity accounted investee, which Pembina has a 45 percent interest in as of December 31, 2019. Results from Veresen Midstream impact share of profit from equity accounted investees and proportionally consolidated metrics. See Note 10 to the Consolidated Financial Statements.
(3) Subject to environmental and regulatory approvals. See the "Forward-Looking Statements & Information" section.
(4) Net to Pembina.

Marketing & New Ventures

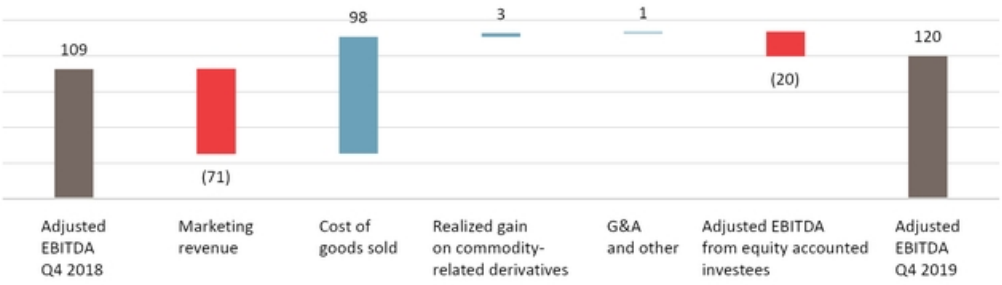
Financial Overview Three Months Ended December 31

Results of Operations

($ millions, except where noted)	**2019**	2018	Change	% Change
Marketing revenue[1][2]	**1,092**	1,163	(71)	(6)
Cost of goods sold[1][2]	**989**	1,087	(98)	(9)
Net revenue[1][3]	**103**	76	27	36
Share of profit from equity accounted investees	**13**	39	(26)	(67)
Realized gain on commodity-related derivative financial instruments	**(8)**	(5)	3	(60)
Unrealized loss (gain) on commodity-related derivative financial instruments	**23**	(89)	(112)	126
Depreciation and amortization included in operations	**8**	6	2	33
Gross profit	**93**	203	(110)	(54)
Adjusted EBITDA[3]	**120**	109	11	10
Volumes *(mboe/d)*[4]	**190**	201	(11)	(5)
Distributions from equity accounted investees	**22**	31	(9)	(29)

Change in Results		
Marketing revenue[1][2]	▼	Decrease due to lower marketed NGL volumes, combined with lower crude and NGL prices during the fourth quarter of 2019.
Cost of goods sold[1][2]	▲	Decrease due to lower crude and NGL prices, lower NGL sales and the $11 million impact of adopting IFRS 16 that reduced cost of goods sold and increased depreciation and finance costs.
Share of profit from equity accounted investees	▼	Decrease largely due to lower propane margins at Aux Sable resulting from a decrease in sales prices, combined with a narrower Chicago-AECO natural gas differential.
Realized gain on commodity-related derivatives	●	Consistent realized gains relating to the settlement of NGL-based derivatives.
Unrealized loss (gain) on commodity-related derivatives	▼	Unrealized loss primarily due to an increase in the forward price of crude and NGL which drove the associated derivative contracts into a loss position.
Depreciation and amortization included in operations	●	$9 million of additional depreciation was recognized on leased rail cars following the adoption of IFRS 16, offset by a decrease in amortization due to certain fully amortized intangibles.
Distributions from equity accounted investees	▼	Decrease of $9 million due to the lower margins at Aux Sable, discussed in share of profit from equity accounted investees above.
Volumes *(mboe/d)*[4]	▼	NGL sales volumes decreased due to lower supply volumes from the Redwater Complex, combined with higher butane sales made in the fourth quarter of 2018, partially offset by increased volumes at Aux Sable. Revenue volumes includes 32 mboe/d (2018: 28 mboe/d) related to Aux Sable.
Adjusted EBITDA[3]	▲	Increase due to higher margins on crude and the $11 million impact of the adoption of IFRS 16, partially offset by lower a contribution from Aux Sable and higher general & administrative and other expenses in New Ventures. Included in adjusted EBITDA is $18 million (2018: $34 million) related to Aux Sable.

Bridge Analysis of Adjusted EBITDA[3] *($ millions)*



(1) Includes inter-division transactions. See Note 20 of the Consolidated Financial Statements.
(2) Revenue and cost of goods sold reported for all 2018 periods have been restated to reflect updated presentation for 2019, where the majority of cost of goods sold and corresponding revenues are reported in Marketing & New Ventures.
(3) Refer to the "Non-GAAP Measures" section.
(4) Marketed NGL volumes. See "Abbreviations" for definition.

Financial Overview 12 Months Ended December 31

Results of Operations

($ millions, except where noted)	**2019**	2018	Change	% Change
Marketing revenue[1][2]	**4,804**	5,175	(371)	(7)
Cost of goods sold[1][2]	**4,417**	4,789	(372)	(8)
Net revenue[1][3]	**387**	386	1	—
Share of profit from equity accounted investees	**50**	102	(52)	(51)
Realized (gain) loss on commodity-related derivative financial instruments	**(33)**	51	84	165
Unrealized loss (gain) on commodity-related derivative financial instruments	**13**	(73)	(86)	118
Depreciation and amortization included in operations	**51**	26	25	96
Gross profit	**406**	484	(78)	(16)
Adjusted EBITDA[3]	**423**	409	14	3
Volumes *(mboe/d)*[4]	**189**	175	14	8
Distributions from equity accounted investees	**84**	109	(25)	(23)

Change in Results		
Marketing revenue[1][2]	▼	Decrease primarily due to lower NGL and crude prices, partially offset by higher NGL sales volumes and a $33 million arbitration award payment that was resolved during the first quarter of 2019.
Cost of goods sold[1][2]	▲	Decrease largely due to lower crude and NGL market prices, discussed above, combined with a $41 million adjustment on the adoption of IFRS 16 that reduced cost of goods sold and increased depreciation and finance costs.
Share of profit from equity accounted investees	▼	Decrease due to lower propane margins at Aux Sable resulting from lower sales prices during 2019 and narrower Chicago-AECO natural gas differential, combined with an outage during June 2019 to complete regular maintenance at Aux Sable.
Realized (gain) loss on commodity-related derivatives	▲	Increase due to decreasing market prices creating a gain for NGL and crude-based derivatives settled during the period.
Unrealized loss (gain) on commodity-related derivatives	▼	Unrealized loss primarily due to crude and NGL contracts maturing in the period.
Depreciation and amortization included in operations	▼	Increase largely due to $36 million of depreciation on leased rail cars, which are recognized as a right-of-use asset and depreciated following the adoption of IFRS 16, partially offset by a decrease in amortization due to fully amortized intangibles.
Distributions from equity accounted investees	▼	Decrease of $25 million largely due to the lower margins at Aux Sable, discussed in share of profit from equity accounted investees above.
Volumes *(mboe/d)*[4]	▲	Increased NGL sales volumes primarily driven by higher butane volumes, partially offset by lower ethane volumes at Aux Sable. Revenue volumes includes 33 mboe/d (2018: 35 mboe/d) related to Aux Sable.
Adjusted EBITDA[3]	▲	Increase primarily due to higher realized gains on commodity-related derivatives, combined with the $41 million impact of the adoption of IFRS 16 and lower general & administrative and other expenses in New Ventures, offset by lower margins after adjusting for the $33 million arbitration award payment discussed above. Included in adjusted EBITDA is $74 million (2018: $114 million) related to Aux Sable.

Bridge Analysis of Adjusted EBITDA[3][5] *($ millions)*

(1) Includes inter-division transactions. See Note 20 of the Consolidated Financial Statements.
(2) Revenue and cost of goods sold reported for all 2018 periods have been restated to reflect updated presentation for 2019, where all cost of goods sold and corresponding revenues are reported in Marketing & New Ventures.
(3) Refer to the "Non-GAAP Measures" section.
(4) Marketed NGL volumes. See "Abbreviations" for definition.
(5) Marketing revenue excludes the positive arbitration award payment of $33 million.

Operational Overview

	3 Months Ended December 31						12 Months Ended December 31					
	2019			2018			2019			2018		
($ millions, except where noted) (unaudited)	**Volumes(1)**	**Gross Profit**	**Adjusted EBITDA(2)**	Volumes(1)	Gross Profit	Adjusted EBITDA(2)	**Volumes(1)**	**Gross Profit**	**Adjusted EBITDA(2)**	Volumes(1)	Gross Profit	Adjusted EBITDA(2)
Marketing & New Ventures												
Marketing	**190**	**96**	**127**	201	203	111	**189**	**407**	**440**	175	484	432
New Ventures(3)	**—**	**(3)**	**(7)**	—	—	(2)	**—**	**(1)**	**(17)**	—	—	(23)
Total	**190**	**93**	**120**	201	203	109	**189**	**406**	**423**	175	484	409

(1) Marketed NGL volumes. Volumes are stated in mboe/d.
(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

As previously announced, subsequent to the quarter, CKPC executed a lump sum engineering, procurement and construction ("EPC") contract related to the construction of the PDH plant within its integrated PDH/PP Facility. With this contract, CKPC has fixed approximately 60 percent of the cost of the PDH/PP Facility thus far. In conjunction with the execution of the lump sum contract, Pembina also revised its proportionate share of the capital cost of the PDH/PP Facility from $2.5 billion to $2.7 billion. Pembina now expects the PDH/PP Facility to be placed into commercial service in the second half of 2023.

Subsequent to the quarter, CKPC entered into a reimbursable engineering and procurement services contract with TR Canada E&C Inc. ("TR") for the PP plant. TR and its parent company, Técnicas Reunidas S.A., are well experienced in the design and engineering of PP and other petrochemical facilities. All major engineering and procurement contracts have now been awarded for the PDH/PP Facility.

Regulatory processes for the proposed Jordan Cove LNG Project are ongoing. Subsequent to the quarter, the U.S. Federal Energy Regulatory Commission delayed a decision originally expected on February 13, 2020. Pembina looks forward to obtaining a final decision. Pembina is focused on getting all the remaining permits required to proceed with this project. These permits are a critical component of the regulatory process and are necessary to enable the commercial viability of the project and allow this investment to move forward. The timing and ultimate approval of this project is uncertain and dependent upon receipt of these remaining approvals.

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

PDH/PP Facility

Capital Budget(1): $2.7 billion **In-service Date:** Second half of 2023

The PDH/PP Facility will be located adjacent to Pembina's Redwater fractionation complex and will convert approximately 23,000 bpd of locally supplied propane into polypropylene, a high value recyclable polymer used in a wide range of finished products including but not limited to automobiles, medical devices, food packaging and home electronic appliances, among others. All long-lead equipment orders have been placed and early works site preparation continues to progress, with completion of that work targeted for the first half of 2020. All major engineering and procurement contracts have now been awarded for the PDH/PP Facility.

Jordan Cove LNG Project (proposed)

The proposed Jordan Cove LNG project ("Jordan Cove") is a world-scale LNG export facility, which would transport North American natural gas to world markets. The project is made up of two parts: the LNG terminal, with a planned design capacity of 7.8 million tonnes per annum, and the Pacific Connector Gas pipeline which would transport natural gas from Malin, Oregon to an LNG terminal in Coos County, Oregon.

The carrying value of the project at December 31, 2019 is $352 million, including capitalized borrowing costs of $12 million.

In conjunction with a final investment decision, the Company intends to seek partners for both the Pacific Connector Gas Pipeline and LNG Terminal thereby reducing its 100 percent ownership interest to a net ownership interest of between 40 and 60 percent with the intention to reduce the capital, operating, and other project risks.

(1) Net to Pembina.

4. LIQUIDITY & CAPITAL RESOURCES

Available Sources of Liquidity

As at December 31 *($ millions)*	**2019**	2018
Working capital[1]	**(470)**	(477)
Variable rate debt[2][3]		
Bank debt	**2,100**	1,305
Total variable rate debt outstanding (weighted average of 3.3% (2018: 3.2%))	**2,100**	1,305
Fixed rate debt[2]		
Senior unsecured notes	**273**	540
Senior unsecured medium-term notes	**7,800**	5,700
Total fixed rate debt outstanding (weighted average of 4.0% (2018: 4.2%))	**8,073**	6,240
Finance lease liability[4]	**—**	19
Total debt outstanding	**10,173**	7,564
Cash and unutilized debt facilities	**1,040**	2,372

(1) As at December 31, 2019, working capital includes $74 million (December 31, 2018: $480 million) associated with the current portion of loans and borrowings.
(2) Face value.
(3) At December 31, 2019, US$454 million was drawn on the unsecured $2.5 billion revolving credit facility (December 31, 2018: nil).
(4) Finance lease liabilities reported separately following the adoption of IFRS 16, see "Changes in Accounting Policies".

Pembina 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 short-term and long-term operating obligations, capital investment requirements and to fund its dividends. Pembina expects to source funds required for capital projects and contributions to investments in equity accounted investees 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. Refer to "*Risk Factors – Additional Financing and Capital Resources*" below and Note 24 to the Consolidated Financial Statements for more information. Management 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 make adjustments to 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 new debt terms, repay existing debt, seek new borrowing, issue additional equity and/or repurchase shares.

As at December 31, 2019, Pembina's credit facilities consisted of an unsecured $2.5 billion (December 31, 2018: $2.5 billion) revolving credit facility, which includes a $750 million (December 31, 2018: $750 million) accordion feature and matures in May 2024, an unsecured $500 million (December 31, 2018: $1.0 billion) non-revolving term loan which matures in August 2022, and an operating facility of $20 million (December 31, 2018: $20 million) which is due in May 2020 and is typically renewed on an annual basis. There are no repayments due over the term of these facilities. On December 16, 2019, Pembina entered into an unsecured $500 million non-revolving term loan. On September 19, 2019, Pembina fully repaid an unsecured $1.0 billion (December 31, 2018: $1.0 billion) non-revolving term loan. As at December 31, 2019, Pembina had $1.0 billion (December 31, 2018: $2.4 billion) of cash and unutilized debt facilities. At December 31, 2019, Pembina had loans and borrowings (excluding deferred financing costs) of $10.2 billion (December 31, 2018: $7.5 billion). Pembina is required to meet certain specific and customary affirmative and negative financial covenants under its senior unsecured notes, medium-term notes, revolving credit facility, non-revolving term loan and operating facility, including a requirement to maintain certain financial ratios. Pembina is also subject to customary restrictions on its operations and activities under its notes and credit facilities, including restrictions on the granting of security, incurring indebtedness and the sale of its assets.

On January 10, 2020, Pembina closed an offering of $1.0 billion of senior unsecured medium-term notes. The fixed rate notes were used to partially repay the variable rate bank debt outstanding at December 31, 2019. See the "Financing Activity" section for further details of the notes issued.

Covenants

Pembina's financial covenants include the following:

Debt Instrument	Financial Covenant[1]	Ratio	Ratio at December 31, 2019
Senior unsecured medium-term notes	Funded Debt to Capitalization	Maximum 0.70	0.38
Revolving unsecured credit facility and non-revolving term loan	Debt to Capital	Maximum 0.65	0.37
	EBITDA to Senior Interest Coverage	Minimum 2.5:1.0	9.4

(1) Terms as defined in relevant agreements.

In addition to the covenants discussed in the table above, Pembina has customary covenants on its other senior unsecured notes. Pembina was in compliance with all covenants under its notes and credit facilities as at December 31, 2019 (December 31, 2018: in compliance).

Pembina continues to actively monitor and reassess the creditworthiness of its counterparties. Financial assurances to mitigate and reduce risk may include guarantees, letters of credit and cash. Letters of credit totaling $90 million (December 31, 2018: $122 million) were held at December 31, 2019, primarily in respect of customer trade receivables.

Outstanding Share Data[1]

Issued and outstanding (thousands)	February 24, 2020
Common shares	**549,727**
Stock options	**16,536**
Stock options exercisable	**7,554**
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's common shareholders and Class A preferred shareholders, by separate class votes, approved a special resolution to amend Pembina's articles to increase the limit on the number of Class A preferred shares Pembina is authorized to issue (the "Amendment"). Pembina filed Articles of Amendment effecting the Amendment on June 25, 2019. A copy of Pembina's articles can be found online at www.sedar.com.

Financing Activity

On April 3, 2019, Pembina closed an offering of $800 million of senior unsecured medium-term notes. The offering was conducted in two tranches, consisting of $400 million in senior unsecured medium-term notes, series 12, having a fixed coupon of 3.62 percent per annum, paid semi-annually, and maturing on April 3, 2029 and $400 million in senior unsecured medium-term notes, series 13, having a fixed coupon of 4.54 percent per annum, paid semi-annually, and maturing on April 3, 2049.

On May 31, 2019, Pembina completed an extension on its unsecured $2.5 billion revolving credit facility, which now matures on May 31, 2024.

On June 13, 2019, Pembina's $200 million senior unsecured medium term note 4A matured and was fully repaid.

On September 12, 2019, Pembina closed an offering of $1.5 billion of senior unsecured medium-term notes. The offering was conducted in three tranches, consisting of $600 million in senior unsecured medium-term notes, series 14, having a fixed coupon of 2.56 percent per annum, paid semi-annually, and maturing on June 1, 2023; $600 million in senior unsecured medium-term notes, series 15, having a fixed coupon of 3.31 percent per annum, paid semi-annually, and maturing on February 1, 2030; and $300 million issued through a re-opening of Pembina's senior unsecured medium-term notes, series 13, having a fixed coupon of 4.54 percent per annum, paid semi-annually, and maturing on April 3, 2049.

On September 19, 2019, Pembina fully-repaid its unsecured $1.0 billion non-revolving term loan.

On November 18, 2019, Pembina's $267 million senior unsecured note, series D, matured and was fully repaid.

On December 16, 2019, Pembina closed a $500 non-revolving term loan with certain existing lenders. The term loan has an initial term of three years and is pre-payable at Pembina's option. The other terms and conditions of the term loan, including financial covenants, are substantially similar to Pembina's $2.5 billion revolving credit facility.

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 day of February, May, August and November in each year, if, as and when declared by the Board of Directors.

Subsequent to year-end, 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, paid 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, paid 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, paid semi-annually and maturing on April 3, 2029.

Credit Ratings

The following information with respect to Pembina's credit ratings is provided as it 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 rates Pembina's senior unsecured notes and senior unsecured medium-term notes 'BBB' and Class A Preferred Shares Pfd-3. The long-term corporate credit rating from Standard & Poor's Rating Services, a division of the McGraw-Hill Companies, on Pembina is 'BBB' and its rating of the Class A Preferred Shares is P-3 (High).

Contractual Obligations and Off-Balance Sheet Arrangements

Contractual Obligations

Pembina had the following contractual obligations outstanding at December 31, 2019:

Contractual Obligations[1]	**Payments Due By Period**				
($ millions)	**Total**	**Less than 1 year**	**1 – 3 years**	**3 – 5 years**	**After 5 years**
Leases[2]	1,152	130	237	179	606
Loans and borrowings[3]	14,565	477	2,379	3,337	8,372
Construction commitments[4]	1,766	1,128	123	33	482
Other[5]	659	109	158	93	299
Total contractual obligations	18,142	1,844	2,897	3,642	9,759

(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 10 years and involve the purchase of NGL products from producers. Assuming product is available, Pembina has secured between 20 and 175 mbpd each year up to and including 2028. Power purchase agreements range from one to 25 years and involve the purchase of power from electrical service providers. The Company has secured up to 67 megawatts per day each year up to and including 2043.
(2) Includes terminals, rail, office space, land and vehicle leases.
(3) Excluding deferred financing costs. Including interest payments on senior unsecured notes.
(4) Excluding significant projects that are awaiting regulatory approval at December 31, 2019, projects which Pembina is not committed to construct, and projects that are executed by equity accounted investees. See "Selected Equity Accounted Investee Information" for details regarding the nature of Pembina's commitments to fund equity accounted investees.
(5) Includes $65 million in commitments related to leases that have not yet commenced.

Pembina is, subject to certain conditions, contractually committed to the construction and operation of Phase VI, Phase VII, Duvernay III and Duvernay Sour Treatment Facilities, as well as certain pipeline connections and laterals and other corporate infrastructure. See "Forward-Looking Statements & Information".

Off-Balance Sheet Arrangements

Pembina does not believe it has any guarantees or 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 expenditures.

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.

Pembina has $103 million (2018: $69 million) in letters of credit issued to facilitate commercial transactions with third parties and to support regulatory requirements.

5. CAPITAL INVESTMENTS

	3 Months Ended December 31		12 Months Ended December 31	
($ millions)	**2019**	2018	**2019**	2018
Pipelines	**254**	187	**892**	711
Facilities	**143**	101	**569**	348
Marketing & New Ventures	**22**	46	**157**	134
Corporate and other projects	**10**	22	**27**	33
Total capital	**429**	356	**1,645**	1,226
Contributions to equity accounted investees[1][2]	**120**	—	**263**	58

(1) Contributions for the three months ended December 31, 2019, include $13 million (2018: nil) to Alliance, $23 million (2018: nil) to Veresen Midstream, $1 million (2018: nil) to Aux Sable and $83 million (2018: nil) to CKPC.
(2) Contributions for the 12 months ended December 31, 2019, include $13 million (2018: nil) to Alliance, $73 million (2018: $56 million) to Veresen Midstream, $4 million (2018: $2 million) to Aux Sable and $173 million (2018: $nil) to CKPC.

For the three months ended December 31, 2019, capital invested was $429 million, compared to $356 million during the corresponding three-month period of 2018. For the 12 months ended December 31, 2019, capital invested was $1.6 billion, compared to $1.2 billion during the corresponding period of 2018. In both 2019 and 2018, Pipelines capital investments were primarily related to Pembina's ongoing pipeline expansion projects. In 2019, Facilities capital investments were largely related to construction on Duvernay II, Empress Infrastructure and the Prince Rupert Terminal. In 2018, Facilities capital investments were largely related to construction of Duvernay II, Burstall Ethane Storage, Redwater Co-generation and the Prince Rupert Terminal. Capital investments in Marketing & New Ventures in both 2019 and 2018 were primarily related to the Jordan Cove LNG project.

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 the Board of Directors, which considers earnings, cash flow, capital requirements, the financial condition of Pembina and other relevant factors when making its dividend determination.

On May 2, 2019, Pembina's Board of Directors approved a five percent increase to its monthly common share dividend rate (from $0.19 per common share to $0.20 per common share), commencing with the dividend paid on June 14, 2019.

On December 16, 2019, upon closing of the Kinder Acquisition, Pembina's Board of Directors approved a $0.01 per common share increase to its monthly common share dividend rate (from $0.20 per common share to $0.21 per common share), commencing with the dividend paid on February 14, 2020.

Preferred Share Dividends

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. 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.

On January 30, 2019, Pembina announced that it did not intend to exercise its right to redeem the six million Cumulative Redeemable Rate Reset Class A Preferred Shares, Series 3 ("Series 3 Shares") shares outstanding on March 1, 2019. The annual dividend rate for the Series 3 Shares for the five-year period from and including March 1, 2019 to, but excluding, March 1, 2024 is 4.478 percent.

On March 1, 2019, Pembina announced that it did not intend to exercise its right to redeem the six million Cumulative Redeemable Rate Reset Class A Preferred Shares, Series 17 ("Series 17 Shares") shares outstanding on March 31, 2019. The annual dividend rate for the Series 17 Shares for the five-year period from and including March 31, 2019 to, but excluding, March 31, 2024 is 4.821 percent.

On May 2, 2019, Pembina announced that it did not intend to exercise its right to redeem the 10 million Cumulative Redeemable Rate Reset Class A Preferred Shares, Series 5 ("Series 5 Shares") shares outstanding on June 3, 2019. The annual dividend rate for the Series 5 Shares for the five-year period from and including June 1, 2019 to, but excluding, June 1, 2024 is 4.573 percent.

On November 1, 2019, Pembina announced that it did not intend to exercise its right to redeem the 10 million Cumulative Redeemable Rate Reset Class A Preferred Shares, Series 7 ("Series 7 Shares") shares outstanding on December 2, 2019. The annual dividend rate for the Series 7 Shares for the five-year period from and including December 1, 2019 to, but excluding, December 1, 2024 is 4.38 percent.

7. SELECTED QUARTERLY INFORMATION

Selected Quarterly Operating Information

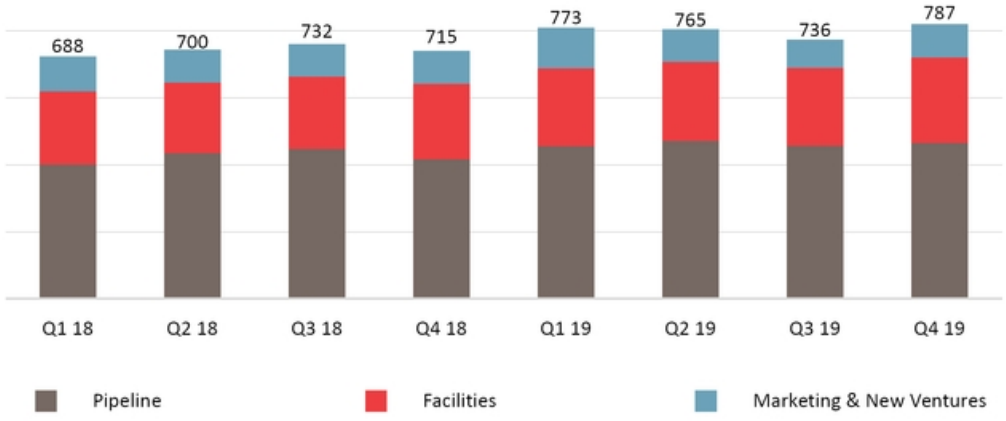
(mboe/d)	2019				2018			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Volumes(1)(2)								
Pipelines								
Conventional Pipelines	**958**	908	895	880	897	946	900	766
Transmission Pipelines	**646**	594	558	563	566	571	559	584
Oil Sands Pipelines	**1,063**	1,068	1,065	1,064	1,066	1,076	1,077	1,074
Facilities								
Gas Services	**690**	672	668	682	683	669	650	636
NGL Services	**220**	194	198	214	241	203	199	206
Total	**3,577**	3,436	3,384	3,403	3,453	3,465	3,385	3,266

(1) Revenue volumes. See "Abbreviations" for definition.
(2) Includes Pembina's proportionate share of results from equity accounted investees.

Deferred Take-or-pay Revenue

($ millions)	2019				2018			
	Q4	**Q3**	**Q2**	Q1	Q4	Q3	Q2	Q1
Pipelines								
Opening balance	**17**	23	19	7	—	26	35	8
Revenue deferred	**31**	27	27	36	34	33	35	32
Revenue recognized	**(40)**	(33)	(23)	(24)	(27)	(59)	(44)	(5)
Ending take-or-pay contract liability balance	**8**	17	23	19	7	—	26	35
Facilities								
Opening balance	**—**	—	1	2	3	—	3	—
Revenue deferred	**—**	—	2	—	—	4	1	3
Revenue recognized	**—**	—	(3)	(1)	(1)	(1)	(4)	—
Ending take-or-pay contract liability balance	**—**	—	—	1	2	3	—	3

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



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

Quarterly Financial Information

($ millions, except where noted)	2019				2018			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2[2]	Q1
Revenue	**1,754**	1,700	1,808	1,968	1,726	2,045	1,743	1,837
Net revenue[1]	**837**	751	758	774	706	742	669	719
Operating expenses	**177**	151	134	140	165	136	100	150
Realized (gain) loss on commodity-related derivative financial instruments	**(8)**	(5)	(1)	(19)	(5)	29	9	18
Share of profit from equity accounted investees	**88**	89	97	96	129	110	96	76
Gross profit	**603**	613	629	588	663	585	511	568
Earnings	**145**	370	664	313	368	334	246	330
Earnings per common share – basic *(dollars)*	**0.21**	0.66	1.23	0.55	0.66	0.60	0.43	0.59
Earnings per common share – diluted *(dollars)*	**0.21**	0.66	1.23	0.55	0.66	0.60	0.42	0.59
Cash flow from operating activities	**728**	535	661	608	674	481	603	498
Cash flow from operating activities per common share – basic *(dollars)*[1]	**1.41**	1.05	1.29	1.20	1.33	0.95	1.20	0.99
Adjusted cash flow from operating activities[1]	**576**	530	550	578	543	523	558	530
Adjusted cash flow from operating activities per common share – basic *(dollars)*[1]	**1.11**	1.04	1.08	1.14	1.07	1.03	1.11	1.05
Common shares outstanding *(millions)*:								
Weighted average – basic	**518**	512	511	509	507	506	504	503
Weighted average – diluted	**519**	513	513	511	509	509	508	508
End of period	**548**	512	511	510	508	506	504	503
Common share dividends declared	**314**	307	302	290	289	288	282	272
Dividends per common share	**0.60**	0.60	0.59	0.57	0.57	0.57	0.56	0.54
Preferred share dividends declared	**34**	31	30	31	31	30	31	30
Capital expenditures	**429**	421	434	361	356	291	255	324
Contributions to equity accounted investees	**120**	25	28	90	—	—	—	58
Distributions from equity accounted investees	**123**	142	140	170	158	170	168	126
Adjusted EBITDA[1]	**787**	736	765	773	715	732	700	688

(1) Refer to the "Non-GAAP Measures" section.
(2) Pembina corrected revenue and costs of goods sold in Marketing & New Ventures in 2018. The adjustments reduce revenue and cost of goods sold for the quarter ending June 30, 2018 ($202 million). There was no impact to earnings as a result of the adjustments.

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

- The Kinder Acquisition on December 16, 2019;
- The narrowing of the Chicago-AECO natural gas differential;
- Increased production in key operating areas and resource plays within the WCSB (Deep Basin, Montney and Duvernay), which increased revenue and sales volumes on Pembina's existing assets in Pipelines and Facilities;
- 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;
- Impairment of Pembina's convertible preferred interest in Ruby in the fourth quarter of 2019;
- Lower Alberta tax rates following the enactment of Bill 3 in June 2019;
- Higher net finance costs impacting earnings associated with debt related to financing acquisitions and growth projects;
- Increased common and preferred shares outstanding and corresponding dividends due to the Kinder Acquisition; and
- The adoption of IFRS 16 on January 1, 2019. See the "Accounting Policies & Estimates" section.

8. SELECTED EQUITY ACCOUNTED INVESTEE INFORMATION

Loans and Borrowings of Equity Accounted Investees

Under equity accounting, the assets and liabilities of the 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 these investments, loans and borrowings associated with investments in equity accounted investees are presented below based on Pembina's proportionate ownership at December 31, 2019. 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 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 "Abbreviations" 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]	**2019**	2018
Pipelines	**1,057**	1,250
Facilities	**1,150**	1,227
Marketing & New Ventures	**—**	1
Total	**2,207**	2,478

Amortization Schedule of Loans and Borrowings of Equity Accounted Investees

($ millions)[1]	**12 Months Ended December 31, 2019**	**2020**	**2021**	**2022**	**2023**	**2024+**
Pipelines	**237**	175	96	563	62	161
Facilities	**105**	—	12	36	36	1,066
Marketing & New Ventures	**1**	—	—	—	—	—
Total	**343**	175	108	599	98	1,227

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

Financing Activities for Equity Accounted Investees

On March 28, 2019, Ruby Pipeline, L.L.C., in which Pembina owns a 50 percent preferred interest, amended the maturity date of its 364-day term loan to March 26, 2020. The term loan will continue to amortize at US$16 million per quarter (US$8 million per quarter net to Pembina), beginning March 2019, until a final bullet payment of US$78 million (US$39 million net to Pembina) is payable March 26, 2020, unless otherwise extended.

On September 26, 2019, Veresen Midstream, successfully amended and extended its senior secured credit facilities, which were originally scheduled to mature on April 20, 2022, to April 20, 2024. Under the terms of the amendment and extension reached with a syndicate of lenders, Veresen Midstream increased its borrowing capacity to $225 million under the revolving credit facility and to $2.6 billion of availability under the term facility. Amortization payments of the term facility are deferred twenty-four months, recommencing again on September 30, 2021. The funding will be used for on-going expansions.

On December 10, 2019, Alliance Pipeline Limited Partnership amended and extended its revolving credit facility. The maturity date was extended to December 12, 2022, and the supplemental commitments provision was exercised, increasing total borrowing capacity by $100 million to $300 million.

Subsequent to year-end, on February 27, 2020, Canada Kuwait Petrochemical Limited Partnership closed a syndicated senior secured credit agreement consisting of a US$1.7 billion amortizing term facility, and a US$150 million revolving facility, which have been guaranteed equally by the owners through the completion of construction on a several basis. The final maturity date of the term facility and revolving facility is February 27, 2027.

Commitments to Equity Accounted Investees

Pembina is contractually committed to provide CKPC with funding to construct assets that will form part of CKPC's PDH/PP Facility, subject to certain conditions being met.

Pembina has a contractual commitment to advance US $39 million to Ruby by March 26, 2020.

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

Ruby Impairment

In December 2019, Pembina recognized an impairment charge of $300 million ($220 million net of tax) on its convertible preferred interest in Ruby. The impairment charge was the result of an assessment triggered by upcoming contract expirations in a business environment in the Rockies Basin that remains challenged.

9. OTHER

Selected Annual Financial Information

($ millions, except where noted)	**2019**	2018	2017[1]
Revenue	**7,230**	7,351	5,400
Earnings	**1,492**	1,278	883
Per common share - basic *(dollars)*	**2.66**	2.28	1.87
Per common share - diluted *(dollars)*	**2.65**	2.28	1.86
Total assets	**33,153**	26,664	25,566
Long-term financial liabilities[2]	**12,020**	7,996	8,199
Common share dividends declared *($ per share)*	**2.36**	2.24	2.04
Preferred share dividends declared	**126**	122	83

(1) Financial results reported for 2017 period have been restated to reflect the adoption of IFRS 15.
(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, 2019 and 2018. The year ended December 31, 2017 was largely impacted by Pembina's acquisition of Veresen Inc. on October 2, 2017.

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 27 to the Consolidated Financial Statements.

Pension Liability

Pembina maintains defined contribution plans and defined benefit pension plans covering 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 2019, the pension plans carried a net obligation of $35 million compared to a net obligation of $31 million at the end of 2018. At December 31, 2019, plan obligations amounted to $266 million (2018: $224 million) compared to plan assets of $231 million (2018: $193 million). In 2019, the pension plans' expense was $15 million (2018: $15 million). Pembina's contributions to the pension plans totaled $20 million in 2019 (2018: $19 million).

Disclosure Controls and Procedures ("DC&P") and Internal Controls over Financial Reporting ("ICFR")

Disclosure Controls and Procedures

Pembina maintains disclosure controls and procedures designed to provide reasonable assurance that information required to be disclosed in Pembina's annual filings, interim filings and other reports is recorded, processed, summarized and reported accurately and in the appropriate time period.

As at December 31, 2019, an evaluation of the effectiveness of the design and operation of Pembina's disclosure controls and procedures, as defined in Rule 13a - 15(e) and 15d - 15(e) *under the United States Securities Exchange Act of 1934* , as amended (the "Exchange Act") and National Instrument 52-109 *Certification of Disclosure in Issuer's Annual and Interim Filings* ("NI 52-109"), was carried out by management, including the Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO"). Based on that evaluation, the CEO and CFO have concluded that the design and operation of Pembina's disclosure controls and procedures were effective as at December 31, 2019 to ensure that material information relating to Pembina is made known to the CEO and CFO by others.

It should be noted that while the CEO and CFO believe that Pembina's disclosure controls and procedures provide a reasonable level of assurance that they are effective, they do not expect that Pembina's disclosure controls and procedures will prevent all errors or fraud. A control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

Management's Annual Report on Internal Control over Financial Reporting

Pembina maintains internal control over financial reporting 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.

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a - 15(f) and 15d - 15(f) under the Exchange Act and under NI 52-109.

Management, including the CEO and the CFO, has conducted an evaluation of Pembina's internal control over financial reporting based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on management's assessment as at December 31, 2019, the CEO and CFO have concluded that Pembina's internal control over financial reporting is effective.

In accordance with the provisions of NI 52-109 and consistent with SEC guidance, the scope of the evaluation did not include internal controls over financial reporting of Kinder Morgan Canada Limited or controls associated with the U.S. portion of the Cochin Pipeline system, both of which Pembina acquired on December 16, 2019, and were excluded from management's evaluation of the effectiveness of Pembina's internal control over financial reporting as at December 31, 2019 due to the proximity of the Kinder Acquisition to year-end. Further details related to the Kinder Acquisition are disclosed in Note 6 to the Consolidated Financial Statements. The assets and revenue acquired in the Kinder Acquisition represented approximately 16 percent and nil percent, respectively, of Pembina's total assets and revenue as at December 31, 2019.

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 effectiveness of internal control over financial reporting as at December 31, 2019 was audited by KPMG LLP, an independent registered public accounting firm, as stated in their Report of Independent Registered Public Accounting Firm, which is included in the Consolidated Financial Statements.

Changes in Internal Control over Financial Reporting

Pembina's internal controls over financial reporting commencing December 16, 2019 include the systems, processes and controls associated with the Kinder Acquisition, as well as additional controls designed to result in complete and accurate consolidation of the financial information relating to the Kinder Acquisition. Other than the Kinder Acquisition, there has been no change in Pembina's internal control over financial reporting that occurred during the year ended December 31, 2019 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

New Standards Adopted in 2019

Except for the changes described below, accounting policies as disclosed in Note 4 of the Consolidated Financial Statements have been applied to all periods consistently.

IFRS 16 *Leases ("IFRS 16")*

Pembina adopted IFRS 16 effective January 1, 2019. IFRS 16 introduced a new lease definition that increases the focus on control of the underlying asset. In addition, IFRS 16 introduced a single, on balance sheet accounting model for lessees that has resulted in Pembina recording right-of-use assets representing its right to use the underlying assets and lease liabilities representing its obligation to make lease payments. Lessor accounting has remained unchanged, except for changes in the classification of subleases.

IFRS 16 has been applied using the modified retrospective approach, under which the cumulative effect of initial application was recognized in equity at January 1, 2019 as further disclosed below. Accordingly, the comparative financial information has not been restated and continues to be reported under International Accounting Standard ("IAS") 17 *Leases* and International Financial Reporting Interpretations Committee Interpretation 4 *Determining whether an arrangement contains a lease* ("IFRIC 4"). The details of Pembina's accounting policies under IAS 17 and IFRIC 4, for the comparative period, are disclosed separately below.

On transition to IFRS 16, Pembina elected to apply the practical expedient to grandfather the assessment of whether a contract entered into before the date of initial application was, or contained, a lease under IFRIC 4, rather than reassess based on the new definition of a lease under IFRS 16. Contracts previously identified as leases were recognized and measured in accordance with IFRS 16.

a. Accounting Policies Applicable from January 1, 2019

The details of significant accounting policies under IFRS 16 and the nature of the changes to previous accounting policies under IAS 17 are outlined below.

i. Leases

For all contracts entered into or amended on or after January 1, 2019, Pembina applies the definition of a lease under IFRS 16 to determine if a contract is, or contains, a lease. 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.

ii. 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 include terminals, rail, buildings, storage tanks and land and other assets.

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.

iii. 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. Under IAS 17, Pembina also classified lessor subleases as operating or finance leases based on an overall assessment of whether the lease transferred substantially all of the risks and rewards incidental to ownership of the underlying asset, considering certain indicators such as whether the lease was for the major part of the economic life of the asset.

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 amounts receivable, 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.

Lease payments from operating leases are recognized as income on either a straight-line basis or a systematic basis representative of the pattern in which benefit from the use of the underlying asset is received.

b. Accounting Policies Applicable Prior to January 1, 2019

The details of significant accounting policies under IAS 17 and IFRIC 4, under which comparative balances continue to be reported, are outlined below.

At inception of an arrangement, Pembina determines whether such an arrangement is or contains a lease. A specific asset is the subject of a lease if fulfilment of the arrangement is dependent on the use of that specified asset. An arrangement conveys the right to use the asset if the arrangement conveys to a lessee the right to control the use of the underlying asset.

At inception or upon reassessment of the arrangement, Pembina separates payments and other consideration required by such an arrangement into those for the lease and those for other elements on the basis of their relative fair values.

Leases which Pembina assumes substantially all the risks and rewards of ownership are classified as finance leases. The leased asset is initially recognized at an amount equal to the lower of its fair value and the present value of the minimum lease payments. Subsequent to initial recognition, the asset is accounted for in accordance with the accounting policy applicable to that asset.

Minimum lease payments made under finance leases are apportioned between the finance cost and the reduction of the outstanding liability. The finance cost is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

Other leases are operating leases and are not recognized in Pembina's consolidated statement of financial position.

Payments made under lessee operating leases are recognized in earnings on a straight-line basis over the term of the lease. Lease incentives received are deferred and recognized over the term of the lease.

Payments received under lessor operating leases are recognized in earnings in accordance with the benefit received by the customer.

c. Transition

i. Lessee

At transition, lease liabilities for contracts previously identified as operating leases under IAS 17 were measured at the present value of the remaining lease payments, discounted at Pembina's incremental borrowing rate as at January 1, 2019. For all leases, right-of-use assets were measured at an amount equal to the lease liability. Pembina applied the following practical expedients on transition:

- Pembina applied a single discount rate to a portfolio of leases with similar characteristics rather than multiple discount rates to match the term of each lease;
- Pembina has relied on onerous lease contract assessments previously performed under IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* as an alternative to an impairment review on right-of-use assets, resulting in an adjustment of the right-of-use asset balance by the amount of the onerous lease contract provision outstanding immediately before the date of initial application; and
- Pembina elected not to recognize right-of-use assets and corresponding lease liabilities for leases with terms of less than 12 months remaining.

There has been no change to the accounting for contracts previously identified as finance leases under IAS 17. The carrying amount of the right-of-use asset and lease liability on transition were determined to be equal to the carrying amount of the lease asset and lease liability under IAS 17.

ii. Lessor

Sub-lease contracts previously classified as operating leases are recognized as finance leases under IFRS 16.

d. Financial Statement Impacts

On transition to IFRS 16, Pembina recognized significant right-of-use assets and lease liabilities related to rail, buildings and land. Further disclosures related to leases are provided in Note 13 to the Consolidated Financial Statements.

i. Consolidated Statement of Financial Position

The impacts of adoption of IFRS 16 as at January 1, 2019 are as follows :

($ millions)	As at December 31, 2018	Adjustments	**Opening Value January 1, 2019**
Assets			
Current assets			
Trade receivables and other[1]	604	1	**605**
Non-current assets			
Property, plant and equipment[2]	14,730	(18)	**14,712**
Right-of-use assets[3]	—	427	**427**
Advances to related parties and other assets[1][4]	144	33	**177**
Liabilities and Equity			
Current liabilities			
Trade payables and other[4]	870	(7)	**863**
Loans and borrowings[5]	480	(8)	**472**
Lease liabilities	—	64	**64**
Non-current liabilities			
Loans and borrowings[5]	7,057	(11)	**7,046**
Lease liabilities	—	416	**416**
Deferred tax liabilities	2,774	8	**2,782**
Other liabilities[4]	239	(41)	**198**
Equity			
Attributable to shareholders	14,344	22	**14,366**

(1) Includes lessor finance lease receivables.
(2) Finance lease assets previously recorded in property, plant and equipment were reclassified to right-of-use assets.
(3) Right-of-use assets are recorded at a value equal to the associated lease liability of $480 million, less $33 million for sublease arrangements, less onerous lease liability balance at December 31, 2018 of $20 million.
(4) Operating lease payments were previously recognized on a straight-line basis, with the difference between cash payments and expense (income) recorded to a deferred lease asset or deferred lease liability. These deferrals were derecognized on adoption of IFRS 16. In addition, $20 million of onerous lease liabilities were offset against right-of-use assets.
(5) Finance leases previously recorded in loans and borrowings were reclassified to lease liabilities.

ii. Reconciliation of Lease Liability

($ millions)	
Lease commitments, disclosed at December 31, 2018	796
Leases not yet commenced	(33)
Non-lease components	(217)
Renewal options reasonably certain to be exercised	53
Total undiscounted lease payments	599
Discounting impact[1]	(119)
Lease liabilities recognized as at January 1, 2019	480

(1) Pembina discounted lease payments using the incremental credit-risk adjusted borrowing rate applicable to the contract. The weighted-average rate applied on transition for all lease liabilities was 4.01 percent.

iii. Financial Impact on three and 12 Months Ended December 31, 2019

The nature of expenses related to identified lessee arrangements changed as IFRS 16 replaced straight-line operating lease expense with depreciation of right of use assets and interest expense relating to lease liabilities. The change did not have a significant impact on earnings. For the three and 12 months ended December 31, 2019, adjusted EBITDA increased $16 million and $61 million. In addition, cash flow from operating activities and adjusted cash flow from operating activities each

increased $13 million and $56 million for the three and 12 months ended December 31, 2019, respectively, and cash flow from financing activities decreased by the same amount, as lease obligation repayments are now reported as financing activities on Pembina's Consolidated Statement of Cash Flows. There was no net impact on cash flows.

New Standards and Interpretations Not Yet Adopted

A number of new standards are effective for annual periods beginning after January 1, 2020 and earlier application is permitted; however, Pembina has not early adopted the new or amended standards in preparing Pembina's consolidated financial statements.

The following amended standards and interpretations are not expected to have a significant impact on Pembina's consolidated financial statements, on adoption January 1, 2020.

- Amendments to References to Conceptual Framework in IFRS Standards.
- Definition of a Business (Amendments to IFRS 3).
- Definition of Material (Amendments to IAS 1 and IAS 8).

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.

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 there are sufficient internal or external factors that would indicate that an asset, investment, or cash generating unit ("CGU") is impaired. 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 to sell 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.

(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 24 of the Consolidated Financial Statements.

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, 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, 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 risk. 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 24 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. The AER and BCOGC in Alberta and British Columbia, respectively, may declare the operator of a pipeline a common carrier of crude oil, NGLs or natural gas and, as such, must not discriminate between producers who seek access to the pipeline. Regulatory authorities that declare pipeline operators a common carrier 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 pipelines that cross provincial or international boundaries, which are regulated by the CER and/or the FERC. 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 ("Impact Assessment Agency"), the BCEAO, the Ontario Ministry of Natural Resources, the Saskatchewan Ministry of Economy and The Petroleum Branch of Manitoba Mineral Resources. In the U.S., tolls on pipelines are regulated by and reported to the FERC and pipeline operations are governed 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 compliance obligations are subject to change at the initiative of PHMSA. 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.

Bill C-69, an *Act to enact the Impact Assessment Act and the Canadian Energy Regulator Act, to amend the Navigation Protection Act and to make consequential amendments to other Acts* came into force on August 28, 2019. Bill C-69 resulted in the NEB being replaced by the CER. It also constituted an overhaul of the federal environmental assessment regime in Canada under the *Canadian Environmental Assessment Act* (Canada) ("CEAA") which has been replaced with the *Impact Assessment Act* (Canada) ("IAA"). Similarly, the Canadian Environmental Assessment Agency has been replaced with the new Impact Assessment Agency 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 will be 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. As new projects have yet to be 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, 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. 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 their equivalents 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 our 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, 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 our Vancouver Wharves Terminal or involving a vessel receiving products from our Vancouver Wharves Terminal, 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 our ability to effectively carry on operations at our Vancouver Wharves Terminal. 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 Corporate 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 at attractive rates, 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, Aboriginal, 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 Aboriginal 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 and 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 or the Kinder Acquisition

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.

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

Pembina completed the Kinder Acquisition to acquire strategically located assets, including the Cochin pipeline system, the Edmonton storage and terminal business and Vancouver Wharves, a bulk storage and export/import business, that are highly integrated across Pembina's value chain, and provide further integration potential, while also enhancing Pembina's basin, currency and market diversification and strengthening Pembina's financial guardrails. Achieving the benefits of the Kinder Acquisition depends in part on successfully consolidating functions and integrating operations, procedures and personnel in a timely and efficient manner, as well as the ability of Pembina to realize the anticipated growth opportunities and synergies from combining the acquired businesses and operations of Kinder with those of Pembina. The integration of the assets from the Kinder Acquisition, including the Cochin Pipeline system, 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 result in the loss of key employees and the disruption of ongoing business, customer and employee relationships that may adversely affect Pembina's ability to achieve the anticipated benefits of the Kinder Acquisition.

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 NGLs. 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.

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 its 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 result in the reduction of throughput in Pembina's pipelines. Additionally, potential pricing differentials on the components of NGLs 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. Pembina also competes with other businesses for growth and business opportunities, which could impact its ability to grow through acquisitions 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 were 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 – 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 terminalling and storage services. Any default by counterparties under such contracts or any expiration of such contracts or tolling arrangements without renewal or replacement may have an adverse effect on Pembina's business and results from operations. 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.

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. 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 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.

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.

In 2016, the Canadian federal government announced that its initial proposed pan-Canadian carbon tax would be $10 per tonne commencing in 2018 and would increase by $10 per tonne per year to $50 per tonne by 2022. As a regulatory backstop, the federal government has also implemented the *Greenhouse Gas Pollution Pricing Act* ("GGPPA"), which introduces a carbon pricing regime for those provinces that fail to impose adequate provincial measures. Constitutional challenges to the GGPPA launched by Saskatchewan and Ontario in 2019 were unsuccessful. Alberta and Manitoba have initiated similar challenges before their respective provincial courts. At a minimum, an appeal of the Saskatchewan Court of Appeal's decision affirming the constitutionality of the GGPPA will be heard by the Supreme Court of Canada, and the results of that appeal could significantly impact how greenhouse gas ("GHG") emissions are regulated throughout Canada.

In Alberta, the *Climate Leadership Act* and associated $30 per tonne carbon levy on all carbon-based heating and transportation fuels was repealed effective May 30, 2019. As a result, Alberta only partially satisfies federal requirements with respect to carbon pricing and will be subject to the federal carbon tax pursuant to the GGPPA as of January 1, 2020. The carbon price will be $20 per tonne on January 1, 2020 and raise to $30 per tonne on April 1, 2020. Pembina also continues to follow the changes to the federal regulatory framework for the reduction of methane from fugitive and vented gas emissions in the upstream oil and gas sector, many of which will come into effect as of January 1, 2020. 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.

Alberta's output-based emission allocations for large facility emitters under the *Carbon Competitiveness Incentive Regulation* ("**CCIR**") continues to facilitate emissions reductions relative to facilities that emitted 100,000 tonnes of GHGs or more in 2003 or any subsequent year. Pembina has three natural gas processing facilities subject to the large emitter regulations under the CCIR. 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 CCIR. The potential costs and benefits to Pembina of those facilities under the CCIR are continuing to be assessed.

The Government of Alberta, in its climate change legislation and guidelines, has legislated an overall cap on oil sands greenhouse gas 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 underway in British Columbia, Saskatchewan, and Manitoba. On July 3, 2018, Ontario announced the revocation of its previously enacted cap and trade emissions program and released its replacement GHG regime on November 29, 2018; however, the provisions of the GGPPA apply to Ontario. As indicated above, Ontario unsuccessfully challenged the constitutionality of the GGPPA, but may appeal that issue to the Supreme Court of Canada.

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 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 15 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 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. While most legislative 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 NGLs 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.

Trade Disputes

Tariffs, retaliatory tariffs or other trade restrictions on products that we or our customers export could cause the prices of such products to increase, which could, in turn, reduce the demand for, or margins on, such products. Direct or unforeseen consequences of tariffs, retaliatory tariffs or other trade restrictions may also alter the competitive landscape of our or our customers' products in one or more jurisdictions. There can be no certainty with respect to how the domestic or foreign governments will act with respect to tariffs, international trade agreements and policies. A trade dispute or other governmental action related to tariffs or international trade agreements or policies has the potential to negatively impact ours and/or our customers' costs, demand for our or our customers' products, and/or the international economy or certain sectors thereof which may adversely impact our results from operations and financial condition.

Canada-United States-Mexico Agreement

On November 30, 2018, Canada, the U.S. and Mexico signed the trilateral Canada-United States-Mexico Agreement (" CUSMA"), which, once ratified, will replace the existing trilateral North American Free Trade Agreement ("NAFTA").

NAFTA imposes certain requirements on Canada with respect to exports of energy and basic petrochemicals, requiring that export measures be applied such that the proportion of total supply exported over a three-year period remains unchanged. This requirement does not appear in CUSMA and is, therefore, expected to permit Canada to expand its exports of crude oil and natural gas beyond the U.S. In addition, CUSMA includes a change to the crude oil and natural gas rules of origin, which should make it easier for Canadian exporters to qualify for duty-free treatment on shipments to the U.S. and Mexico. Canada must, however, notify the U.S. of its intention to enter into free trade talks with any "non-market economies" under CUSMA, which may include China or any other potential importers of Canadian oil and gas exports.

Although the agreement has been signed, CUSMA is still required to be ratified and implemented by legislators from each of the three countries according to their own domestic legislative processes before it takes effect and replaces NAFTA. The ratification and implementation process in each of Canada, the U.S. and Mexico is not yet complete.

If CUSMA is not ratified and implemented by all three countries, this may alter the terms of trade for energy and petrochemical resources in North America, which could impact Pembina's ability to sell and transport petroleum products within North America and could have an adverse impact on our results from operations and financial condition.

Alberta Production Curtailment

On December 2, 2018, the Alberta provincial government announced mandatory reductions to crude oil and bitumen production in Alberta in an attempt to narrow the price differentials on these products compared to North American benchmark prices. The reductions have been applied at the operator level based upon each operator's combined crude oil and bitumen production, with the first 20,000 barrels per day produced by each operator exempt from the curtailment program. The temporary production cut commenced in January 2019, with an initial reduction of 325,000 barrels per day, representing approximately 8.7 percent of the aggregate production of crude oil and bitumen in Alberta. This level of curtailment has consistently been reduced from February 2019 to December 2019. The production rate will continue to be reviewed monthly by the Alberta Minister of Energy and revised, as necessary. Effective November 8, 2019, new wells drilled for conventional oil will be exempt from the production limit and, effective December 2019, operators can apply, on a monthly basis, to increase oil production, provided that the additional production is moved by new rail capacity. Under the current regulations, the provincial government's authority to curtail crude oil and bitumen production in Alberta will end on December 31, 2020.

In addition to reduced production volumes, the Alberta provincial government's curtailment strategy may have other unintended consequences that impact the oil and gas industry in Alberta, including, but not limited to, reduced demand for diluent, a reduction in drilling projects, reduced capital spending on new projects, reduced volumes of refined products and market uncertainty. These effects may lead to a reduction in the volume of product transported on our pipelines or processed at our facilities, which could have an adverse impact on our results from operations and financial condition.

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.

General Risk Factors

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 favourable 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 failed 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, 2019, letters of credit totaling approximately $90 million (December 31, 2018: $122 million) were held primarily in respect of customer trade receivables.

Pembina has typically collected its receivables in full. At December 31, 2019, approximately 95 percent (December 31, 2018: 99 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

At the end of 2019, Pembina had exposure to floating interest rates on approximately $2.1 billion (2018: $1.3 billion) in debt. Floating rate debt exposure is, in part, managed through the use of 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 favourable to Pembina, or at all.

Credit Ratings

Rating agencies regularly evaluate Pembina and base their ratings of its long-term and short-term debt and Class A Preferred Shares on a number of factors. This includes 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 and other Key Individuals

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. Further, the costs associated with retaining key individuals could adversely affect Pembina's business opportunities and financial results. There is no assurance that Pembina will continue to attract and retain all personnel necessary for the development and operation of its business.

Aboriginal Land Claims and Consultation Obligations

Aboriginal people have claimed title and rights to a considerable portion of the lands in western Canada. The successful assertion of Aboriginal title or other Aboriginal 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, where appropriate, accommodate Aboriginal people where the interests of the Aboriginal 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 the Aboriginal 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 Aboriginal 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 introduction of the CER Act, IAA, and associated amendments to the *Fisheries Act* and the *Navigation Protection Act* took place on August 28, 2019. A number of the federal regulatory process amendments pertain to the participation of Aboriginal groups and the protection of Aboriginal 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 Aboriginal rights, as well as Aboriginal 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 Aboriginal 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 Aboriginal traditional knowledge in certain cases.

On February 14, 2018, the federal government announced that it will develop, in consultation with Aboriginal people (First Nations, Inuit and Métis), a Recognition and Implementation of Rights Framework ("Rights Framework"). The contents of the Rights Framework will be determined based on information obtained from engagement activities led by the Minister of Crown-Indigenous Relations, which were undertaken between February and May 2018. The Canadian federal government initially intended to implement the Rights Framework and any associated legislation or policies before October 2019, but no

such legislation has been proposed as of the date hereof. Pembina will continue to monitor and assess the impacts the Rights Framework may have on its business as legislation and/or policies continue to be developed.

In 2018, the British Columbia government enacted Bill 51 - 2018 *Environmental Assessment Act* (the "2018 EA Act") as part of its commitment to revitalize environmental assessment in the province and facilitate its commitment to implementing the United Nations Declaration on the Rights of Indigenous Peoples ("UNDRIP"). The 2018 EA Act came into force in late 2019. The 2018 EA Act is designed as a "consent-based" environmental assessment model and is intended to support reconciliation with Aboriginal peoples and the implementation of UNDRIP. The legislation requires the BCEAO to seek participating Aboriginal groups' consent with respect to, among other things, the decision to issue an environmental assessment certificate to a given project. While the 2018 EA Act does not strictly require consent in most cases, the legislation creates significant new participation opportunities for participating Aboriginal 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. Similar objectives are proposed pursuant to Bill 41, the *Declaration of the Rights of Indigenous Peoples Act* , introduced by the British Columbia government on October 24, 2019. The purpose of the legislation is to affirm the application of UNDRIP to all laws in British Columbia, but the practical effects of the legislation are yet to be determined as it will simply require the government to prepare and implement an action plan to do so, and annually report on its progress. Pembina continues to actively monitor the development of the regulations required to facilitate the implementation of the 2018 EA Act and the progress of Bill 41 through the British Columbia legislature.

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 our 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.

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, which 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. There is also a risk of a cyber-attack targeting the industry is also increasing. A 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. Pembina's security strategy focuses on information technology security risk management, which includes continuous monitoring, threat detection and an incident response protocol.

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, 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.

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 suggest 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.

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										
($ millions)	**Pipelines**		**Facilities**		**Marketing & New Ventures**		**Corporate & Inter-division Eliminations**		**Total**	
	2019	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018
Revenue	**487**	403	**287**	267	**1,092**	1,163	**(112)**	(107)	**1,754**	1,726
Cost of goods sold, including product purchases	**—**	—	**2**	2	**989**	1,087	**(74)**	(69)	**917**	1,020
Net revenue	**487**	403	**285**	265	**103**	76	**(38)**	(38)	**837**	706

12 Months Ended December 31 ($ millions)	Pipelines		Facilities		Marketing & New Ventures		Corporate & Inter-division Eliminations		Total	
	2019	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018
Revenue	**1,787**	1,588	**1,121**	1,014	**4,804**	5,175	**(482)**	(426)	**7,230**	7,351
Cost of goods sold, including product purchases	**—**	—	**4**	8	**4,417**	4,789	**(311)**	(282)	**4,110**	4,515
Net revenue	**1,787**	1,588	**1,117**	1,006	**387**	386	**(171)**	(144)	**3,120**	2,836

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. 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 ($ millions, except per share amounts)	Pipelines		Facilities		Marketing & New Ventures		Corporate & Inter-division Eliminations		Total	
	2019	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018
Earnings before income tax	**29**	292	**161**	142	**94**	178	**(136)**	(97)	**148**	515
Adjustments to share of profit from equity accounted investees and other	**69**	67	**37**	42	**2**	(4)	**—**	—	**108**	105
Net finance costs	**2**	3	**6**	2	**(8)**	6	**60**	45	**60**	56
Depreciation and amortization	**66**	56	**50**	39	**8**	6	**15**	7	**139**	108
Unrealized loss (gain) on commodity-related derivative financial instruments	**—**	—	**—**	—	**23**	(89)	**—**	—	**23**	(89)
(Gain) loss on disposal of assets	**1**	—	**—**	**—**	**—**	**—**	**(2)**	—	**(1)**	—
Transaction costs incurred in respect of acquisitions	**—**	—	**—**	**—**	**—**	**—**	**10**	2	**10**	2
Impairment charges (reversals) and non-cash provisions	**300**	(1)	**—**	**8**	**1**	**12**	**(1)**	(1)	**300**	18
Adjusted EBITDA	**467**	417	**254**	233	**120**	109	**(54)**	(44)	**787**	715
Adjusted EBITDA per common share – basic *(dollars)*									**1.52**	1.41

12 Months Ended December 31 *($ millions, except per share amounts)*	Pipelines		Facilities		Marketing & New Ventures		Corporate & Inter-division Eliminations		Total	
	2019	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018
Earnings before income tax	**1,034**	1,220	**618**	546	**376**	415	**(500)**	(439)	**1,528**	1,742
Adjustments to share of profit from equity accounted investees and other	**265**	258	**146**	169	**21**	12	**—**	—	**432**	439
Net finance costs	**9**	9	**23**	6	**(8)**	16	**270**	248	**294**	279
Depreciation and amortization	**245**	216	**168**	149	**51**	26	**47**	26	**511**	417
Unrealized loss (gain) on commodity-related derivative financial instruments	**—**	—	**—**	—	**13**	(73)	**—**	—	**13**	(73)
Arbitration award payment	**—**	—	**—**	—	**(33)**	—	**—**	—	**(33)**	—
Loss on disposal of assets	**1**	—	**—**	**—**	**—**	**—**	**—**	—	**1**	—
Transaction costs incurred in respect of acquisitions	**—**	—	**—**	**—**	**—**	**—**	**12**	9	**12**	9
Impairment charges (reversals) and non-cash provisions	**300**	—	**—**	**10**	**3**	**13**	**—**	(1)	**303**	22
Adjusted EBITDA	**1,854**	1,703	**955**	880	**423**	409	**(171)**	(157)	**3,061**	2,835
Adjusted EBITDA per common share – basic *(dollars)*									**5.97**	5.62

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	
($ millions, except per share amounts)	**2019**	2018	**2019**	2018
Cash flow from operating activities	**728**	674	**2,532**	2,256
Cash flow from operating activities per common share – basic *(dollars)*	**1.41**	1.33	**4.94**	4.47
Add (deduct):				
Change in non-cash operating working capital	**(99)**	(65)	**(106)**	83
Current tax expense	**(32)**	(8)	**(210)**	(70)
Taxes paid, net of foreign exchange	**23**	(13)	**141**	23
Accrued share-based payments	**(13)**	(8)	**(50)**	(48)
Share-based payments	**—**	—	**50**	32
Preferred share dividends paid	**(31)**	(37)	**(123)**	(122)
Adjusted cash flow from operating activities	**576**	543	**2,234**	2,154
Adjusted cash flow from operating activities per common share – basic *(dollars)*	**1.11**	1.07	**4.36**	4.27

13. ABBREVIATIONS

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

Other	
B.C.	British Columbia
GAAP	Canadian generally accepted accounting principles
IFRS	International Financial Reporting Standards
LNG	Liquified natural gas
LPG	Liquified 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	For Pipelines and Facilities volumes are revenue volumes, defined as physical volumes plus volumes recognized from take-or-pay commitments. For Marketing & New Ventures volumes 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	
mbbls	thousands of barrels	AER	Alberta Energy Regulator
mbpd	thousands of barrels per day	BCEA	British Columbia Environmental Assessment Office
mmbpd	millions of barrels per day	BCOGC	British Columbia Oil and Gas Commission
mmbbls	millions of barrels	CER	Canadian Energy Regulator
mboe/d	thousands of barrels of oil equivalent per day	NEB	National Energy Board
mmboe/d	millions of barrels of oil equivalent per day	PHMSA	Pipeline and Hazardous Material Safety Administration
MMcf/d	millions of cubic feet per day		
bcf/d	billions of cubic feet per day		
km	kilometer		

Investments in Equity Accounted Investees	
Pipelines:	
Alliance	50 percent interest in the Alliance Pipeline
Ruby	50 percent convertible preferred interest in the Ruby Pipeline
Facilities:	
Veresen Midstream	45 percent interest in Veresen Midstream, 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 propane dehydrogenation ("PDH") plant and polypropylene ("PP") upgrading facility ("PDH/PP Facility")

Readers are referred to the AIF dated February 27, 2020 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 Kinder Acquisition, including the strategic rationale and the anticipated benefits thereof;
- the future levels and sustainability of cash dividends that Pembina intends to pay to its shareholders, the dividend payment date and the tax treatment thereof;
- planning, construction, locations, capital expenditure estimates, schedules, regulatory and environmental applications and anticipated approvals, expected capacity, incremental volumes, in-service dates, rights, sources of product, activities, benefits and operations with respect to new construction of, or expansions on existing, pipelines, gas services facilities, 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;
- anticipated synergies between assets under development, assets being acquired and existing assets of Pembina;
- 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 Aboriginal, landowner and other stakeholder consultation requirements;
- Pembina's estimates of and strategy for payment of future abandonment costs and decommissioning obligations, and deferred tax liability;
- 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 at 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 to fund growth plans, operating obligations and dividends and the use of proceeds from financings;
- Pembina's expectations regarding involvement of partners on the Jordan Cove project;
- 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;
- the adoption and impact of new accounting standards;
- inventory and pricing in North American liquids market;
- the impact of the current commodity price environment on Pembina; and
- competitive conditions and Pembina's ability to position itself competitively in the industry.

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 and 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 failure to realize the anticipated benefits and synergies of the Kinder Acquisition following closing;
- the regulatory environment and decisions and Aboriginal and landowner consultation requirements;
- the impact of competitive entities and pricing;
- labour and material shortages;
- 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;
- constraints on, or the unavailability of adequate infrastructure;
- changes in 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 catastrophe; and
- the other factors discussed under "Risk Factors" herein and in Pembina's AIF for the year ended December 31, 2019, which are available at www.pembina.com and in Canada under Pembina's company profile on www.sedar.com and in the U.S. on the Company's profile at www.sec.gov.

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 Controls over Financial Reporting

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

Management, including the Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO"), has conducted an evaluation of Pembina's internal control over financial reporting based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on management's assessment as at December 31, 2019, the CEO and CFO have concluded that Pembina's internal control over financial reporting is effective.

In accordance with the provisions of NI 52-109 and consistent with U.S. Securities and Exchange Commission (the "SEC") guidance, the scope of the evaluation did not include internal controls over financial reporting of Kinder Morgan Canada Limited or controls associated with the U.S. portion of the Cochin Pipeline system, both of which Pembina acquired on December 16, 2019 (collectively the "Kinder Acquisition") and were excluded from management's evaluation of the effectiveness of Pembina's internal control over financial reporting as at December 31, 2019 due to the proximity of the Kinder Acquisition to year-end. Further details related to the Kinder Acquisition are disclosed in Note 6 to Pembina's consolidated financial statements for the year ended December 31, 2019. The assets and revenue acquired in the Kinder Acquisition represented approximately 16 percent and nil percent, respectively, of Pembina's total assets and revenue as at December 31, 2019.

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, 2019 in accordance with the standards of the Public Company Accounting Oversight Board (United States). The independent auditors have full and unrestricted access to the Audit Committee to discuss their audit and their related findings.

Changes in Internal Control over Financial Reporting

Pembina's internal controls over financial reporting commencing December 16, 2019 include the systems, processes and controls associated with the Kinder Acquisition, as well as additional controls designed to result in complete and accurate consolidation of the financial information relating to the Kinder Acquisition. Other than the Kinder Acquisition, there has been no change in Pembina's internal control over financial reporting that occurred during the year ended December 31, 2019 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

February 27, 2020

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, 2019 and 2018, the related consolidated statements of earnings and comprehensive income, 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, 2019 and 2018, and the results of its operations 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, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 27, 2020 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

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

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

Critical Audit Matters

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

Assessment of goodwill impairment

As discussed in Notes 4 and 9 to the consolidated financial statements, the Company performs goodwill impairment testing on an annual basis. The recoverable amount was determined using a fair value less costs of disposal approach which is based on a discounted cash flow model. 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. The goodwill balance as of December 31, 2019 was $4,684 million.

We identified the assessment of goodwill impairment as a critical audit matter. A high degree of subjective auditor judgment was required to evaluate the significant revenue assumptions such as contract renewal volumes and rates, projected commodity pricing ("forecasted cash flow assumptions") and discount rates used in the discounted cash flow model. Minor changes to those assumptions significantly impacted the Company's assessment of the recoverable amount of the operating segments.

The primary procedures we performed to address this critical audit matter included the following. We tested certain internal controls over the Company's estimate of the recoverable amount of the operating segments, including controls related to forecasted cash flow assumptions and the discount rate used in the determination of the recoverable amount. We evaluated the Company's projected commodity pricing assumptions by comparing to publicly available forward price curves. We compared the Company's historical forecasted results, including contract renewal volumes and rates, to actual results to assess the Company's ability to accurately forecast. In addition, we involved a valuation professional with specialized skills and knowledge, who assisted in:

- Evaluating the discount rates used in the valuation for each operating segment by comparing them against publicly available market data for comparable entities; and
- Developing an estimate of the recoverable amount of the operating segments by performing a sensitivity analysis over the estimate of the Company's forecasted cash flows and the discount rate, and compared the results of our estimate of fair value to the Company's estimate.

Evaluation of the fair value measurement of the customer relationships intangible assets acquired in the Kinder Acquisition

As discussed in Note 6 to the consolidated financial statements, on December 16, 2019, the Company acquired all the issued and outstanding shares of Kinder Morgan Canada Limited 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 $4,255 million. The acquisition date fair value for the customer relationships intangible assets recognized was $1,254 million.

We identified the evaluation of the fair value measurement of the customer relationships intangible assets acquired as a critical audit matter. There was a high degree of subjectivity in evaluating the Company's assumptions over forecasted revenue growth rates, contract renewal rates, and the discount rates. There was limited observable market information and the calculated fair value of such assets was sensitive to possible changes to these assumptions.

The primary procedures we performed to address this critical audit matter included the following. We tested certain internal controls over the Company's estimate of acquisition date fair values, including controls related to assumptions over forecasted revenue growth rates, contract renewal rates and the discount rates. We evaluated the Company's forecasted revenue growth rates from existing customers by comparing to the acquired assets' historical actual results, as well as by comparing contractual revenue details to signed contracts to assess the accuracy of the Company's forecast. In addition, we involved valuation professionals with specialized skills and knowledge, who assisted in:

- Evaluating the contract renewal assumptions used by the Company as an input in the fair value of the intangible assets by examining existing contract terms and assessing future contract renewal expectations based on industry knowledge and experience from comparable market transactions;
- Evaluating the methodologies used by the Company to determine discount rates used in addition to comparing the discount rates to publicly available market data for comparable entities; and
- Assessing the methodologies used by the Company to determine the fair value of the customer relationships intangible assets and testing the accuracy of calculations of fair value.

Assessment of impairment of the Ruby investment

As discussed in Note 10 to the consolidated financial statements, the Company recognized an impairment charge on its convertible preferred share interest in Ruby of $300 million. At December 31, 2019, the Company's investment in Ruby, subsequent to the impairment charge, accounted for $1,273 million of the carrying value of its total equity investments of $5,954 million. The carrying amounts of the Company'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. The recoverable amount of the Ruby investment was determined to be $1,273 million using a value in use approach by discounting expected cash flows resulting from the Company's convertible preferred share interest.

We identified the assessment of impairment of the Ruby investment as a critical audit matter. A high degree of subjective auditor judgment was required to evaluate the Company's assumptions used to determine the recoverable amount, including future contracts, renewals, volumes, future financing within the investment, ability to utilize tax deductions ("forecasted cash flow assumptions"), and the discount rate. These assumptions were challenging to test as minor changes to those assumptions had a significant effect on the Company's assessment of the recoverable amount of the investment in Ruby.

The primary procedures we performed to address this critical audit matter included the following. We tested certain internal controls over the Company's estimate of recoverable amount, including controls related to forecasted cash flow assumptions and the discount rate used in the determination of the recoverable amount. We evaluated the Company's expected future contracts, renewals and volumes by comparing them to historical contracted volumes adjusted for market projections. We compared the Company's historical cash flow forecasts to actual results to assess the Company's ability to accurately forecast. We developed an estimate of the recoverable amount of the Ruby investment using the estimate of the forecasted cash flows and the discount rate evaluated by our valuation professional, and compared the results of our estimate of value in use to the Company's estimate. We involved a tax professional with specialized skills and knowledge who assisted in evaluating the projection of the utilization of available tax deductions. In addition, we involved a valuation professional with specialized skills and knowledge, who assisted in:

- Evaluating the future financing alternatives against comparable market financing transactions for similar entities; and
- Evaluating the discount rate used in the valuation by comparing it against publicly available market data for comparable investments.



Chartered Professional Accountants

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

Calgary, Canada
February 27, 2020

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, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, 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, 2019 and 2018, the related consolidated statements of earnings and comprehensive income, changes in equity, and cash flows for the years then ended, and the related notes (collectively, the consolidated financial statements), and our report dated February 27, 2020 expressed an unqualified opinion on those consolidated financial statements.

The Company acquired Kinder Morgan Canada Limited and the U.S. portion of the Cochin Pipeline system (collectively, the "Kinder Acquisition"), on December 16, 2019, and management excluded from its assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2019, Kinder Acquisition's internal control over financial reporting associated with approximately 16 percent of total assets and nil percent of total revenues included in the consolidated financial statements of the Company as of and for the year ended December 31, 2019. Our audit of internal control over financial reporting of the Company also excluded an evaluation of the internal control over financial reporting of the Kinder Acquisition.

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.



Chartered Professional Accountants

Calgary, Canada
February 27, 2020

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

As at December 31 *($ millions)*	**2019**	2018[1]
Assets **Current assets**		
Cash and cash equivalents	**129**	157
Trade receivables and other (Note 7)	**692**	604
Inventory	**126**	198
Derivative financial instruments (Note 24)	**40**	54
	987	1,013
Non-current assets		
Property, plant and equipment (Note 8)	**18,775**	14,730
Investments in equity accounted investees (Note 10)	**5,954**	6,368
Intangible assets and goodwill (Note 9)	**6,429**	4,409
Right-of-use assets (Note 13)	**822**	—
Advances to related parties and other assets (Note 27)	**186**	144
	32,166	25,651
Total assets	**33,153**	26,664
Liabilities and equity **Current liabilities**		
Trade payables and other (Note 12)	**1,013**	803
Loans and borrowings (Note 14)	**74**	480
Dividends payable	**110**	97
Lease liabilities	**112**	—
Contract liabilities (Note 18)	**39**	37
Taxes payable	**103**	67
Derivative financial instruments (Note 24)	**6**	6
	1,457	1,490
Non-current liabilities		
Loans and borrowings (Note 14)	**10,078**	7,057
Lease liabilities	**707**	—
Decommissioning provision (Note 15)	**864**	569
Contract liabilities (Note 18)	**192**	131
Deferred tax liabilities (Note 11)	**2,906**	2,774
Other liabilities	**179**	239
	14,926	10,770
Total liabilities	**16,383**	12,260
Equity		
Attributable to shareholders	**16,710**	14,344
Attributable to non-controlling interest	**60**	60
Total equity	**16,770**	14,404
Total liabilities and equity	**33,153**	26,664

[1] Pembina has applied IFRS 16 *Leases* at January 1, 2019 using the modified retrospective approach and has not restated comparative information. See Note 3.

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 AND COMPREHENSIVE INCOME

For the years ended December 31 *($ millions, except per share amounts)*	**2019**	2018[1]
Revenue (Note 18)	**7,230**	7,351
Cost of sales	**5,187**	5,457
Gain on commodity-related derivative financial instruments	**(20)**	(22)
Share of profit from equity accounted investees (Note 10)	**370**	411
Gross profit	**2,433**	2,327
General and administrative	**296**	279
Other expense	**15**	27
Impairment of investment in equity accounted investees (Note 10)	**300**	—
Results from operating activities	**1,822**	2,021
Net finance costs (Note 19)	**294**	279
Earnings before income tax	**1,528**	1,742
Current tax expense (Note 11)	**210**	70
Deferred tax (recovery) expense (Note 11)	**(174)**	394
Income tax expense	**36**	464
Earnings attributable to shareholders	**1,492**	1,278
Other comprehensive (loss) income		
Exchange (loss) gain on translation of foreign operations	**(213)**	330
Remeasurements of defined benefit liability, net of tax (Note 22)	**(6)**	(6)
Total comprehensive income attributable to shareholders	**1,273**	1,602
Earnings attributable to common shareholders, net of preferred share dividends (Note 21)	**1,361**	1,157
Earnings per common share – basic *(dollars)* (Note 21)	**2.66**	2.28
Earnings per common share – diluted *(dollars)* (Note 21)	**2.65**	2.28
Weighted average number of common shares *(millions)*		
Basic (Note 21)	**512**	505
Diluted (Note 21)	**514**	509

(1) Pembina has applied IFRS 16 Leases at January 1, 2019 using the modified retrospective approach and has not restated comparative information. See Note 3.

See accompanying notes to the consolidated financial statements

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

	Attributable to Shareholders of the Company						
($ millions)	Common Share Capital	Preferred Share Capital	Deficit	Accumulated Other Comprehensive (Loss) Income	Total	Non-Controlling Interest	Total Equity
December 31, 2018[1]	13,662	2,423	(2,058)	317	14,344	60	14,404
Impact of change in accounting policy (Note 3)	—	—	22	—	22	—	22
Opening Value January 1, 2019	13,662	2,423	(2,036)	317	14,366	60	14,426
Total comprehensive income							
Earnings	—	—	1,492	—	1,492	—	1,492
Other comprehensive income							
Exchange loss on translation of foreign operations	—	—	—	(213)	(213)		(213)
Remeasurements of defined benefit liability, net of tax (Note 22)	—	—	—	(6)	(6)	—	(6)
Total comprehensive income	—	—	1,492	(219)	1,273	—	1,273
Transactions with shareholders of the Company							
Common shares issued, net of issue costs (Note 16)	1,710	—	—	—	1,710	—	1,710
Preferred shares issued, net of issue costs (Note 16)	—	533	—	—	533	—	533
Share-based payment transactions (Note 16)	167	—	—	—	167	—	167
Dividends declared – common (Note 16)	—	—	(1,213)	—	(1,213)	—	(1,213)
Dividends declared – preferred (Note 16)	—	—	(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	(1,883)	98	16,710	60	16,770
December 31, 2017	13,447	2,424	(2,083)	(7)	13,781	60	13,841
Total comprehensive income							
Earnings	—	—	1,278	—	1,278	—	1,278
Other comprehensive income							
Exchange gain on translation of foreign operations	—	—	—	330	330	—	330
Remeasurements of defined benefit liability, net of tax (Note 22)	—	—	—	(6)	(6)	—	(6)
Total comprehensive income	—	—	1,278	324	1,602	—	1,602
Transactions with shareholders of the Company							
Preferred shares issue costs (Note 16)	—	(1)	—	—	(1)	—	(1)
Debenture conversions (Note 16)	140	—	—	—	140	—	140
Share-based payment transactions (Note 16)	75	—	—	—	75	—	75
Dividends declared – common (Note 16)	—	—	(1,131)	—	(1,131)	—	(1,131)
Dividends declared – preferred (Note 16)	—	—	(122)	—	(122)	—	(122)
Total transactions with shareholders of the Company	215	(1)	(1,253)	—	(1,039)	—	(1,039)
December 31, 2018	13,662	2,423	(2,058)	317	14,344	60	14,404

[1] Pembina has applied IFRS 16 *Leases* at January 1, 2019 using the modified retrospective approach and has not restated comparative information. See Note 3.

See accompanying notes to the consolidated financial statements

CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended December 31 *($ millions)*	**2019**	2018[1]
Cash provided by (used in)		
Operating activities		
Earnings	**1,492**	1,278
Adjustments for:		
Share of profit from equity accounted investees (Note 10)	**(370)**	(411)
Distributions from equity accounted investees (Note 10)	**575**	622
Depreciation and amortization (Note 8 & 9)	**511**	417
Impairment of investment in equity accounted investees (Note 10)	**300**	—
Unrealized loss (gain) on commodity-related derivative financial instruments	**13**	(73)
Net finance costs (Note 19)	**294**	279
Net interest paid (Note 19)	**(269)**	(259)
Income tax expense (Note 11)	**36**	464
Taxes paid	**(141)**	(26)
Share-based compensation expense (Note 23)	**66**	63
Share-based compensation payment	**(50)**	(32)
Loss on asset disposal	**(1)**	19
Net change in contract liabilities	**(30)**	11
Other	**—**	(13)
Change in non-cash operating working capital	**106**	(83)
Cash flow from operating activities	**2,532**	2,256
Financing activities		
Bank borrowings and issuance of debt	**2,153**	1,366
Repayment of loans and borrowings	**(1,866)**	(1,998)
Repayment of lease liability	**(68)**	—
Issuance of medium term notes (Note 14)	**2,318**	700
Issue costs and financing fees	**(14)**	(8)
Exercise of stock options	**151**	61
Dividends paid	**(1,323)**	(1,247)
Cash flow provided by (used in) financing activities	**1,351**	(1,126)
Investing activities		
Capital expenditures	**(1,645)**	(1,226)
Contributions to equity accounted investees (Note 10)	**(206)**	(58)
Acquisitions (Note 6)	**(2,009)**	—
Interest paid during construction (Note 19)	**(42)**	(35)
Recovery of assets or proceeds from sale	**7**	5
Advances to related parties	**(63)**	(84)
Changes in non-cash investing working capital and other	**48**	87
Cash flow used in investing activities	**(3,910)**	(1,311)
Change in cash and cash equivalents	**(27)**	(181)
Effect of movement in exchange rates on cash held	**(1)**	17
Cash and cash equivalents, beginning of period	**157**	321
Cash and cash equivalents, end of period	**129**	157

(1) Pembina has applied IFRS 16 *Leases* at January 1, 2019 using the modified retrospective approach and has not restated comparative information. See Note 3.

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, 2019.

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; is growing an export terminals business; and is currently constructing a petrochemical facility to convert propane into polypropylene. 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 February 27, 2020.

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.

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 there are sufficient internal or external factors that would indicate that an asset, investment, or cash generating unit ("CGU") is impaired. 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 to sell 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.

(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

Except for the changes described below, accounting policies as disclosed in Note 4 of the Consolidated Financial Statements have been applied to all periods consistently.

IFRS 16 *Leases ("IFRS 16")*

Pembina adopted IFRS 16 effective January 1, 2019. IFRS 16 introduced a new lease definition that increases the focus on control of the underlying asset. In addition, IFRS 16 introduced a single, on balance sheet accounting model for lessees that has resulted in Pembina recording right-of-use assets representing its right to use the underlying assets and lease liabilities representing its obligation to make lease payments. Lessor accounting has remained unchanged, except for changes in the classification of subleases.

IFRS 16 has been applied using the modified retrospective approach, under which the cumulative effect of initial application was recognized in equity at January 1, 2019 as further disclosed below. Accordingly, the comparative financial information has not been restated and continues to be reported under International Accounting Standard ("IAS") 17 *Leases* and International Financial Reporting Interpretations Committee Interpretation 4 *Determining whether an arrangement contains a lease* ("IFRIC 4"). The details of Pembina's accounting policies under IAS 17 and IFRIC 4, for the comparative period, are disclosed separately below.

On transition to IFRS 16, Pembina elected to apply the practical expedient to grandfather the assessment of whether a contract entered into before the date of initial application was, or contained, a lease under IFRIC 4, rather than reassess based on the new definition of a lease under IFRS 16. Contracts previously identified as leases were recognized and measured in accordance with IFRS 16.

a. Accounting Policies Applicable from January 1, 2019

The details of significant accounting policies under IFRS 16 and the nature of the changes to previous accounting policies under IAS 17 are outlined below.

i. Leases

For all contracts entered into or amended on or after January 1, 2019, Pembina applies the definition of a lease under IFRS 16 to determine if a contract is, or contains, a lease. 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.

ii. 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 include terminals, rail, buildings, storage tanks and land and other assets.

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.

iii. 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. Under IAS 17, Pembina also classified lessor subleases as operating or finance leases based on an overall assessment of whether the lease transferred substantially all of the risks and rewards incidental to ownership of the underlying asset, considering certain indicators such as whether the lease was for the major part of the economic life of the asset.

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 amounts receivable, 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.

Lease payments from operating leases are recognized as income on either a straight-line basis or a systematic basis representative of the pattern in which benefit from the use of the underlying asset is received.

b. Accounting Policies Applicable Prior to January 1, 2019

The details of significant accounting policies under IAS 17 and IFRIC 4, under which comparative balances continue to be reported, are outlined below.

At inception of an arrangement, Pembina determines whether such an arrangement is or contains a lease. A specific asset is the subject of a lease if fulfilment of the arrangement is dependent on the use of that specified asset. An arrangement conveys the right to use the asset if the arrangement conveys to a lessee the right to control the use of the underlying asset.

At inception or upon reassessment of the arrangement, Pembina separates payments and other consideration required by such an arrangement into those for the lease and those for other elements on the basis of their relative fair values.

Leases which Pembina assumes substantially all the risks and rewards of ownership are classified as finance leases. The leased asset is initially recognized at an amount equal to the lower of its fair value and the present value of the minimum lease payments. Subsequent to initial recognition, the asset is accounted for in accordance with the accounting policy applicable to that asset.

Minimum lease payments made under finance leases are apportioned between the finance cost and the reduction of the outstanding liability. The finance cost is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

Other leases are operating leases and are not recognized in Pembina's consolidated statement of financial position.

Payments made under lessee operating leases are recognized in earnings on a straight-line basis over the term of the lease. Lease incentives received are deferred and recognized over the term of the lease.

Payments received under lessor operating leases are recognized in earnings in accordance with the benefit received by the customer.

c. Transition

i. Lessee

At transition, lease liabilities for contracts previously identified as operating leases under IAS 17 were measured at the present value of the remaining lease payments, discounted at Pembina's incremental borrowing rate as at January 1, 2019. For all leases, right-of-use assets were measured at an amount equal to the lease liability.

Pembina applied the following practical expedients on transition:

- Pembina applied a single discount rate to a portfolio of leases with similar characteristics rather than multiple discount rates to match the term of each lease;
- Pembina has relied on onerous lease contract assessments previously performed under IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* as an alternative to an impairment review on right-of-use assets, resulting in an adjustment of the right-of-use asset balance by the amount of the onerous lease contract provision outstanding immediately before the date of initial application; and
- Pembina elected not to recognize right-of-use assets and corresponding lease liabilities for leases with terms of less than 12 months remaining.

There has been no change to the accounting for contracts previously identified as finance leases under IAS 17. The carrying amount of the right-of-use asset and lease liability on transition were determined to be equal to the carrying amount of the lease asset and lease liability under IAS 17.

ii. Lessor

Sub-lease contracts previously classified as operating leases are recognized as finance leases under IFRS 16.

d. Financial Statement Impacts

On transition to IFRS 16, Pembina recognized significant right-of-use assets and lease liabilities related to rail, buildings and land. Further disclosures related to leases are provided in Note 13 to the Consolidated Financial Statements.

i. Consolidated Statement of Financial Position

The impacts of adoption of IFRS 16 as at January 1, 2019 are as follows :

($ millions)	As at December 31, 2018	Adjustments	**Opening Value January 1, 2019**
Assets			
Current assets			
Trade receivables and other[1]	604	1	**605**
Non-current assets			
Property, plant and equipment[2]	14,730	(18)	**14,712**
Right-of-use assets[3]	—	427	**427**
Advances to related parties and other assets[1][4]	144	33	**177**
Liabilities and Equity			
Current liabilities			
Trade payables and other[4]	870	(7)	**863**
Loans and borrowings[5]	480	(8)	**472**
Lease liabilities	—	64	**64**
Non-current liabilities			
Loans and borrowings[5]	7,057	(11)	**7,046**
Lease liabilities	—	416	**416**
Deferred tax liabilities	2,774	8	**2,782**
Other liabilities[4]	239	(41)	**198**
Equity			
Attributable to shareholders	14,344	22	**14,366**

(1) Includes lessor finance lease receivables.
(2) Finance lease assets previously recorded in property, plant and equipment were reclassified to right-of-use assets.
(3) Right-of-use assets are recorded at a value equal to the associated lease liability of $480 million, less $33 million for sublease arrangements, less onerous lease liability balance at December 31, 2018 of $20 million.
(4) Operating lease payments were previously recognized on a straight-line basis, with the difference between cash payments and expense (income) recorded to a deferred lease asset or deferred lease liability. These deferrals were derecognized on adoption of IFRS 16. In addition, $20 million of onerous lease liabilities were offset against right-of-use assets.
(5) Finance leases previously recorded in loans and borrowings were reclassified to lease liabilities.

ii. Reconciliation of Lease Liability

($ millions)	
Lease commitments, disclosed at December 31, 2018	796
Leases not yet commenced	(33)
Non-lease components	(217)
Renewal options reasonably certain to be exercised	53
Total undiscounted lease payments	599
Discounting impact[1]	(119)
Lease liabilities recognized as at January 1, 2019	480

(1) Pembina discounted lease payments using the incremental credit-risk adjusted borrowing rate applicable to the contract. The weighted-average rate applied on transition for all lease liabilities was 4.01 percent.

4. 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.

Pembina elects on a transaction-by-transaction basis whether to measure non-controlling interest at its fair value, or at its proportionate share of the recognized amount of the identifiable net assets, at the acquisition date.

Non-controlling interests represent equity interests in subsidiaries owned by outside parties. The share of net assets of subsidiaries attributable to non-controlling interests is presented as a separate component of equity. Their share of net income and other comprehensive income is also recognized in this separate component of equity. Changes in Pembina's ownership interest in subsidiaries that do not result in a loss of control are accounted for as equity transactions. Adjustments to non-controlling interests are based on a proportionate amount of the net assets of the subsidiary. No adjustments are made to goodwill and no gain or loss is recognized in earnings.

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.

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 investments in equity accounted investees are recognized when received.

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 intersegment transactions, 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 in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction.

Gains and losses arising from translation of foreign subsidiaries or investments in equity accounted investees with a functional currency other than Pembina's Canadian dollar reporting currency are reflected in other comprehensive income. Asset and liability accounts are translated at the period-end exchange rates while revenues, expenses, gains and losses are translated at the exchange rates in effect at the time of the transaction.

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, 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 including finance lease obligations 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

Pembina holds derivative financial instruments to manage its interest rate, commodity, power costs and foreign exchange risk exposures. Embedded derivatives are separated from the host contract and accounted for separately if the economic characteristics and risks of the host contract and the embedded derivative meet the definition of a derivative, and the combined instrument is not measured at fair value through earnings. Derivatives are recognized initially at fair value with attributable transaction costs recognized in earnings as incurred. Subsequent to initial recognition, derivatives are measured at fair value and changes in non-commodity-related derivatives are recognized immediately in earnings as part of net finance costs and changes in commodity-related derivatives are recognized immediately in earnings.

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

g. Leases

Accounting policies related to leases are disclosed in Note 3 Changes in Accounting Policies.

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.

In determining the impairment loss allowance for trade receivables, Pembina uses historical trends of the probability of default, timing of recoveries and the amount of loss incurred, adjusted for management's judgment as to whether current economic and credit conditions are such that the actual losses are likely to be greater or less than suggested by historical trends.

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

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. In assessing the recoverable amount, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset, CGU or group of CGUs. 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 so that the level at which impairment testing is performed reflects the lowest level at which goodwill is monitored for internal 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.

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. Contributions to a defined contribution plan due more than 12 months after the end of the period in which the employees render the service are discounted to their present value.

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 curtailment or settlement of a defined benefit plan when the curtailment or settlement occurs. The gain or loss on curtailment 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 benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. Provisions are remeasured at each reporting date based on the best estimate of the settlement amount. 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 in the relevant asset category.

Decommissioning obligations are measured at the present value, based on a 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 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 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 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 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 the 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, there will be a change to the timing of revenue recognition. 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 in revenue.

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

l. Finance Income and Finance Costs

Finance income comprises interest income on funds deposited and invested, finance lease receivables, 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, impairment losses recognized on financial assets (other than trade and other receivables) and foreign exchange losses.

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

m. Income Tax

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

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

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

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

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

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

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realized simultaneously.

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

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

n. Earnings Per Common Share

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

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

o. Segment Reporting

An operating segment is a component of Pembina that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with any of the Company's other components. All operating segments' operating results are reviewed regularly by Pembina's 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.

p. New Standards and Interpretations Not Yet Adopted

A number of new standards are effective for annual periods beginning after January 1, 2020 and earlier application is permitted; however, Pembina has not early adopted the new or amended standards in preparing Pembina's consolidated financial statements.

The following amended standards and interpretations are not expected to have a significant impact on Pembina's consolidated financial statements, on adoption January 1, 2020.

- Amendments to References to Conceptual Framework in IFRS Standards.
- Definition of a Business (Amendments to IFRS 3).
- Definition of Material (Amendments to IAS 1 and IAS 8).

5. 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. 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.

ii) 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.

The fair value of other intangible assets is based on the discounted cash flows expected to be derived from the use and eventual sale of the assets.

iii) 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.

iv) Non-Derivative Financial Assets and Liabilities

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

v) 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.

vi) Share-Based Compensation Transactions

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

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

6. ACQUISITION

On December 16, 2019, Pembina acquired all 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 comprised of $2.0 billion in cash and $2.3 billion of share consideration including, 35.7 million common shares of Pembina at $47.87 per share, 12 million series 23 preferred shares at $24.43 per share and 10 million series 25 preferred shares at $24.33 per share. The common shares were valued using Pembina's market price on the Toronto Stock Exchange immediately prior to the acquisition closing on December 16, 2019 and the preferred shares were valued using Kinder Morgan Canada's equivalent preferred share value on the same date. In accordance with the plan of arrangement, Kinder Morgan Canada was amalgamated with Pembina and the outstanding Kinder Morgan Canada preferred shares were exchanged for Pembina preferred shares with the same terms and conditions. Kinder Morgan Canada owns a significant crude oil storage and terminalling business located in the core of the Edmonton area crude oil complex, the Canadian portion of the Cochin Pipeline system and a 125-acre bulk marine terminal facility in the Port of Vancouver, Canada. Following the acquisition Pembina owns the entire Cochin Pipeline, which is a cross-border pipeline system that connects Pembina's Channahon, Bakken and Edmonton area assets and is connected to markets in Mont Belvieu, Conway and Edmonton.

The acquisition was accounted for as a business combination using the acquisition method where the acquired tangible and intangible assets and assumed liabilities were recorded at their estimated fair values at the date of acquisition, with the exception of right-of-use assets, deferred tax liabilities, and lease liabilities, which are measured in accordance with Pembina's accounting policies.

The purchase price equation, subject to finalization, is based on assessed fair values and is as follows:

($ millions)	December 16, 2019
Purchase Price Consideration	
Common shares	1,710
Cash (net of cash acquired)	2,009
Preferred shares	536
	4,255
Current assets	68
Property, plant and equipment	2,660
Intangible assets	1,254
Right-of-use assets	348
Goodwill	809
Other assets	9
Current liabilities	(124)
Deferred tax liabilities	(281)
Decommissioning provision	(74)
Lease liability	(348)
Other liabilities	(66)
	4,255

Pembina engaged an independent valuator to assist with determining the fair value of certain tangible and intangible assets within the purchase price equation. Tangible assets of $2.7 billion were valued primarily using a cost approach. Intangible assets of $1.3 billion are entirely attributable to the acquisition date fair value of customer relationships, which was determined using a discounted cash flow model based on significant assumptions including forecasted revenue growth rates, contract renewal rates, and the discount rate.

The primary drivers that generated goodwill were synergies and business opportunities from the integration of Pembina and Kinder Morgan Canada. A portion of goodwill in the amount of $180 million is expected to be deductible from taxable income

for tax purposes. Pembina recognized $12 million in acquisition-related expenses in 2019. All acquisition-related expenses were expensed as incurred and included in other expenses in the Consolidated Statement of Earnings and Comprehensive Income.

Revenue generated by the acquisition for the period from the acquisition date of December 16, 2019 to December 31, 2019 was $27 million. Net earnings for the same period were $11 million. If the acquisition had occurred on January 1, 2019, management estimates that consolidated revenue would have increased an additional $579 million and consolidated net earnings for the year would have increased an additional $65 million. In determining these amounts, management assumed that the fair value adjustments that arose on the date of acquisition would have been the same if the acquisition had occurred on January 1, 2019.

Given the acquisition closed on December 16, 2019, the purchase price allocation is not final as Pembina is continuing 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, including: identification and classification of leases, contingencies, decommissioning provisions and other potential provisions.

7. TRADE RECEIVABLES AND OTHER

As at December 31 *($ millions)*	**2019**	2018
Trade receivables from customers	**575**	501
Other receivables	**92**	88
Prepayments	**25**	16
Impairment loss allowance	**—**	(1)
Total trade receivables and other	**692**	604

8. PROPERTY, PLANT AND EQUIPMENT

($ millions)	Land and Land Rights	Pipelines	Facilities and Equipment	Cavern Storage and Other	Assets Under Construction	Total
Cost						
Balance at December 31, 2017	329	6,650	6,715	1,223	659	15,576
Additions and transfers	12	531	469	231	291	1,534
Change in decommissioning provision	—	(10)	5	19	—	14
Disposals and other	(1)	(7)	(30)	5	(11)	(44)
Balance at December 31, 2018	340	7,164	7,159	1,478	939	17,080
Reclassification on adoption of IFRS 16 (Note 3)	—	—	—	(44)	—	(44)
Additions and transfers	32	215	691	203	534	1,675
Acquisition (Note 6)	86	1,434	798	314	28	2,660
Change in decommissioning provision	—	10	143	5	—	158
Foreign exchange adjustments	(2)	(17)	(4)	—	(11)	(34)
Disposals and other	—	(3)	(31)	(12)	3	(43)
Balance at December 31, 2019	**456**	**8,803**	**8,756**	**1,944**	**1,493**	**21,452**
Depreciation						
Balance at December 31, 2017	9	1,096	721	204	—	2,030
Depreciation	3	142	164	55	—	364
Disposals and other	—	(17)	(18)	(9)	—	(44)
Balance at December 31, 2018	12	1,221	867	250	—	2,350
Reclassification on adoption of IFRS 16 (Note 3)	—	—	—	(26)	—	(26)
Depreciation	4	155	174	59	—	392
Disposals and other	—	(13)	(26)	—	—	(39)
Balance at December 31, 2019	**16**	**1,363**	**1,015**	**283**	—	**2,677**
Carrying amounts						
Balance at December 31, 2018	328	5,943	6,292	1,228	939	14,730
Balance at December 31, 2019	**440**	**7,440**	**7,741**	**1,661**	**1,493**	**18,775**

Property, Plant and Equipment Under Construction

Costs of assets under construction at December 31, 2019 totaled $1.5 billion (2018: $939 million) including capitalized borrowing costs.

For the year ended December 31, 2019, included in additions and transfers are capitalized borrowing costs related to the construction of new pipelines or facilities amounting to $42 million (2018: $35 million), with capitalization rates ranging from 3.91 percent to 4.05 percent (2018: 3.86 percent to 4.01 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.

9. INTANGIBLE ASSETS AND GOODWILL

($ millions)	Goodwill	Intangible Assets: Purchase and Sale Contracts and Other	Intangible Assets: Customer Relationships	Intangible Assets: Purchase Option	Intangible Assets: Total	Total Goodwill & Intangible Assets
Cost						
Balance at December 31, 2017	3,871	216	638	277	1,131	5,002
Additions and other	7	11	1	—	12	19
Transfers	—	—	—	(277)	(277)	(277)
Balance at December 31, 2018	3,878	227	639	—	866	4,744
Additions and other	—	13	—	—	13	13
Acquisition (Note 6)	809	—	1,254	—	1,254	2,063
Foreign exchange adjustments	(3)	—	(12)	—	(12)	(15)
Balance at December 31, 2019	**4,684**	**240**	**1,881**	**—**	**2,121**	**6,805**
Amortization						
Balance at December 31, 2017	—	145	143	—	288	288
Amortization	—	19	28	—	47	47
Balance at December 31, 2018	—	164	171	—	335	335
Amortization	—	10	31	—	41	41
Balance at December 31, 2019	**—**	**174**	**202**	**—**	**376**	**376**
Carrying amounts						
Balance at December 31, 2018	3,878	63	468	—	531	4,409
Balance at December 31, 2019	**4,684**	**66**	**1,679**	**—**	**1,745**	**6,429**

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

The purchase option attributable to Facilities of $277 million to assume an additional interest in the Younger Facilities was reclassified to property, plant and equipment on exercise of the option effective April 1, 2018.

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

As at December 31 *($ millions)*	2019 Goodwill	2019 Intangible Assets	2019 Total	2018 Goodwill	2018 Intangible Assets	2018 Total
Pipelines	**2,703**	**1,505**	**4,208**	1,897	278	2,175
Facilities	**541**	**97**	**638**	541	102	643
Marketing & New Ventures	**1,440**	**112**	**1,552**	1,440	131	1,571
Corporate	—	**31**	**31**	—	20	20
	4,684	**1,745**	**6,429**	3,878	531	4,409

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 was performed as at September 30, 2019 other than goodwill acquired in the Acquisition (Note 6) on December 16, 2019 which was supported by the acquisition valuation.

The recoverable amount was determined using the fair value less costs of disposal approach by discounting each operating segment's expected future cash flows. 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 contract renewal volumes and rates, which are based on market expectations. In addition, revenue and cost of product projections for Marketing & New Ventures incorporate assumptions regarding volumes and commodity 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 (2018: 75 years) using a constant medium-term inflation rate, except where contracted, long-term cash flows indicate that no inflation should be applied or a specific reduction in cash flows was more appropriate.

- Pre-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:

	Operating Segments		
2019 *(Percent)*	Pipelines	Facilities	Marketing & New Ventures
Pre-tax discount rate	6.80	6.48	10.57
Adjusted inflation rate	1.16	1.62	1.80
Incremental increase in discount rate that would result in carrying value equal to recoverable amount			
Increase in pre-tax discount rate	4.14	4.85	7.65

The level of the fair value hierarchy within which the fair value measurement is categorized in accordance with IFRS 13 *Fair Value Measurement* is Level 3 with inputs which are unobservable inputs for the associated assets within each operating segment.

10. INVESTMENTS IN EQUITY ACCOUNTED INVESTEES

	Ownership Interest at December 31		Share of Profit (Loss) from Equity Investments 12 Months Ended December 31		Investment in Equity Accounted Investees at December 31	
($ millions)	**2019**	2018	**2019**	2018	**2019**	2018
Alliance	**50%**	50%	**149**	160	**2,620**	2,799
Aux Sable	**42.7% - 50%**	42.7% - 50%	**51**	102	**426**	480
Ruby[1]	**-**	-	**120**	118	**1,273**	1,648
Veresen Midstream	**45%**	45.3%	**48**	26	**1,348**	1,324
CKPC	**50%**	50%	**(1)**	—	**171**	—
Other	**50% - 75%**	50% - 75%	**3**	5	**116**	117
			370	411	**5,954**	6,368

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

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 (2018: $98 million) Goodwill, $2.9 billion (2018: $3.0 billion) in property, plant and equipment and intangibles and $42 million in long-term debt (2018: $52 million).

Pembina has US$2.3 billion in Investments in Equity Accounted Investees that is held by entities whose functional currency is the US dollar. The resulting foreign exchange loss for the year ended December 31, 2019 of $169 million (2018: $295 million gain) has been included in Other Comprehensive Income.

Ruby Impairment

In December 2019, Pembina recognized an impairment charge of $300 million ($220 million net of tax) on its convertible preferred interest in Ruby. The impairment charge was the result of an assessment triggered by upcoming contract expirations in a business environment in the Rockies Basin that remains challenged. The recoverable amount of Ruby was was estimated to be $1.3 billion, calculated using a value in use approach by discounting expected cash flows resulting from Pembina's convertible preferred share interest. Key assumptions that influenced the calculation of the recoverable amount include incremental future contracts (including volumes associated with the Jordan Cove LNG Project being approved and placed in to service), renewals and volumes, future financing within the investment, Pembina's ability to utilize available tax deductions, and the discount rate. Pembina applied a discount rate of 8 percent in calculating the recoverable amount, which was determined using comparable preferred share yields adjusted for the specific risk profile of the investment. If the discount rate used to calculate the impairment was higher by 50 basis points, it would have resulted in an increase to the impairment charge of $80 million ($60 million net of tax). If the discount rate used to calculate the impairment was lower by 50 basis points, it would have resulted in a decrease to the impairment charge of $90 million ($65 million net of tax).

Distributions

Distributions received from equity investments for the year ended December 31, 2019 were $575 million (2018: $622 million) and 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

Contributions made to investments in equity accounted investees for the year ended December 31, 2019 were $206 million (2018: $58 million) and are included in investing activities in the Consolidated Statement of Cash Flows. Contributions were largely related to funding CKPC and expansions at Veresen Midstream.

Summarized Financial Information

Summarized combined financial information of equity accounted investees (presented at 100 percent) is as follows:

For the years ended December 31 *($ millions)*	**2019**	2018
Net Income and Comprehensive Income		
Revenue	**3,114**	3,605
Cost of sales	**(1,178)**	(1,566)
General and administrative expense	**(204)**	(171)
Depreciation and amortization	**(486)**	(511)
Finance costs and other	**(286)**	(308)
Net Income and Comprehensive Income	**960**	1,049
Net income and Comprehensive Income attributable to Pembina	**370**	411

As at December 31 *($ millions)*	**2019**	2018
Balance Sheet		
Current assets	**797**	838
Non-current assets	**11,379**	11,667
Current liabilities	**802**	908
Non-current liabilities	**4,985**	5,262

Financing Activities

On March 28, 2019, Ruby Pipeline, L.L.C., in which Pembina owns a 50 percent preferred interest, amended the maturity date of its 364-day term loan to March 26, 2020. The term loan will continue to amortize at US$16 million per quarter (US$8 million per quarter net to Pembina), beginning March 2019, until a final bullet payment of US$78 million (US$39 million net to Pembina) is payable March 26, 2020, unless otherwise extended.

On September 26, 2019, Veresen Midstream, successfully amended and extended its senior secured credit facilities, which were originally scheduled to mature on April 20, 2022, to April 20, 2024. Under the terms of the amendment and extension reached with a syndicate of lenders, Veresen Midstream increased its borrowing capacity to $225 million under the revolving credit facility and to $2.6 billion of availability under the term facility. Amortization payments of the term facility are deferred twenty-four months, recommencing again on September 30, 2021.

On December 10, 2019, Alliance Pipeline Limited Partnership amended and extended its revolving credit facility. The maturity date was extended to December 12, 2022, and the supplemental commitments provision was exercised, increasing total borrowing capacity by $100 million to $300 million.

Subsequent to year-end, on February 27, 2020, Canada Kuwait Petrochemical Limited Partnership closed a syndicated senior secured credit agreement consisting of a US$1.7 billion amortizing term facility, and a US$150 million revolving facility, which have been guaranteed equally by the owners through the completion of construction on a several basis. The final maturity date of the term facility and revolving facility is February 27, 2027.

11. INCOME TAXES

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

($ millions)	Balance at December 31, 2018	Recognized in Earnings	Recognized in Other Comprehensive Income	Acquisition	Equity	Other	Balance at December 31, 2019
Deferred income tax assets							
Derivative financial instruments	(18)	5	—	—	—	—	(13)
Employee benefits	9	(1)	1	—	—	—	9
Share-based payments	26	(2)	—	—	—	—	24
Provisions	156	29	—	20	—	—	205
Benefit of loss carryforwards	153	256	—	13	—	(22)	400
Other deductible temporary differences	68	(39)	—	2	(3)	—	28
Deferred income tax liabilities							
Property, plant and equipment	1,660	301	—	136	—	8	2,105
Intangible assets	118	(14)	—	180	—	—	284
Investments in equity accounted investees	1,262	(155)	—	—	—	—	1,107
Taxable limited partnership income deferral	122	(46)	—	—	—	—	76
Other taxable temporary differences	6	(12)	—	—	—	(7)	(13)
Total deferred tax liabilities	**2,774**	**(174)**	(1)	**281**	**3**	**23**	**2,906**

($ millions)	Balance at December 31, 2017	Recognized in Earnings	Recognized in Other Comprehensive Income	Acquisition	Equity	Other	Balance at December 31, 2018
Deferred income tax assets							
Derivative financial instruments	11	(29)	—	—	—	—	(18)
Employee benefits	7	—	2	—	—	—	9
Share-based payments	21	5	—	—	—	—	26
Provisions	153	3	—	—	—	—	156
Benefit of loss carryforwards	180	(33)	—	(7)	—	13	153
Other deductible temporary differences	56	16	—	—	(4)	—	68
Deferred income tax liabilities							
Property, plant and equipment	1,361	299	—	—	—	—	1,660
Intangible assets	198	(80)	—	—	—	—	118
Investments in equity accounted investees	1,173	89	—	—	—	—	1,262
Taxable limited partnership income deferral	56	66	—	—	—	—	122
Other taxable temporary differences	16	(18)	—	—	—	8	6
Total deferred tax liabilities	**2,376**	**394**	**(2)**	**7**	**4**	**(5)**	**2,774**

Pembina's consolidated statutory tax rate for the year ended December 31, 2019 was 26.7 percent (2018: 27.0 percent).

Reconciliation of Effective Tax Rate

For the years ended December 31 *($ millions, except as noted)*	**2019**	2018
Earnings before income tax	**1,528**	1,742
Statutory tax rate	**26.7%**	27.0%
Income tax at statutory rate	**408**	470
Tax rate changes and foreign rate differential	**(359)**	(16)
Changes in estimate and other	**(16)**	9
Permanent items	**3**	1
Income tax expense	**36**	464

In the second quarter of 2019, the enactment of Bill 3 Job Creation Tax Cut Act ("Alberta Corporate Tax Amendment") reduced the corporate income tax rate from 12 percent to eight percent over a four-year period which resulted in a deferred income tax recovery of $305 million.

Income Tax Expense

For the years ended December 31 *($ millions)*	**2019**	2018
Current tax expense	**210**	70
Deferred tax expense		
Origination and reversal of temporary differences	**393**	368
Tax rate changes on deferred tax balances	**(345)**	(1)
(Increase) decrease in tax loss carry forward	**(222)**	27
Total deferred tax (recovery) expense	**(174)**	394
Total income tax expense	**36**	464

Deferred Tax Items Recovered Directly in Equity

For the years ended December 31 *($ millions)*	**2019**	2018
Share issue costs	**(3)**	(4)
Other comprehensive income (loss)	**1**	2
Deferred tax items recovered directly in equity	**(2)**	(2)

Pembina has temporary differences associated with its investments in subsidiaries. At December 31, 2019, Pembina has not recorded a deferred tax asset or liability for these temporary differences (2018: 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, 2019, Pembina had US$1.1 billion (2018: US$221 million) of U.S. tax losses that will expire after 2030 and $67 million (2018: $349 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.

12. TRADE PAYABLES AND OTHER

As at December 31 *($ millions)*	**2019**	2018
Trade payables	**717**	519
Other payables & accrued liabilities	**296**	284
Total trade payables and other	**1,013**	803

13. LEASES

Lessee Leases

Pembina enters into arrangements to secure access to assets necessary for operating the business. Leased (right-of-use) assets include terminals, rail, buildings, land and other assets. Total cash outflows related to leases were $83 million for the 12 months ended December 31, 2019.

Right-of-Use Assets

($ millions)	Terminals	Rail	Buildings	Land & Other	Total
Balance at January 1, 2019 (Note 3)	—	221	127	79	427
Additions	—	54	1	58	113
Acquisition (Note 6)	317	—	7	24	348
Amortization	—	(37)	(17)	(12)	(66)
Balance at December 31, 2019	**317**	**238**	**118**	**149**	**822**

Included in additions is $45 million related to the remeasurement of the decommissioning provision for the restoration of leased land assets to the condition required by the terms of the underlying lease subsequent to the Kinder Acquisition.

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 caverns. The carrying value of property, plant and equipment under operating leases at December 31, 2019 is $664 million (2018: $679 million). Assets under finance leases include office sub-leases.

Pembina is continuing to obtain and verify information required to determine the identification and classification of lessor leases acquired on December 16, 2019 as part of the Kinder Acquisition. Lessor lease identification could materially impact the classification of acquired assets in the final purchase price allocation, the classification and carrying value of acquired assets at the reporting date, and the following disclosures. Based on information available at the reporting date, Pembina estimates the total undiscounted lessor operating lease payments related to assets acquired as part of the Kinder Acquisition to be approximately $175 million and the carrying value of property, plant and equipment under operating leases at December 31, 2019 to be $58 million.

Maturity of Lease Receivables

As at December 31, 2019		
($ millions)	**Operating Leases (1)**	**Finance Leases**
Less than one year	90	6
One to two years	89	7
Two to three years	89	6
Three to four years	89	4
Four to five years	89	4
More than five years	910	12
Total undiscounted lease payments	1,356	39
Unearned finance income		(4)
Finance lease receivable		35

(1) Excludes the total undiscounted lessor operating lease payments of $175 million related to assets acquired as part of the Kinder Acquisition as noted above.

Finance lease receivables are included in advances to related parties and other assets on the Consolidated Statement of Financial Position.

14. 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

				Carrying Value	
($ millions)	**Authorized at December 31, 2019**	**Nominal interest Rate**	**Year of Maturity**	**December 31, 2019**	December 31, 2018
Senior unsecured credit facilities[1][4]	3,020	3.25[2]	Various[1]	**2,097**	1,305
Senior unsecured notes – series A	73	5.57	2020	**74**	76
Senior unsecured notes – series C	200	5.58	2021	**199**	199
Senior unsecured notes – series D	—	5.91	2019	**—**	267
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	**446**	446
Senior unsecured medium-term notes series 4	600	4.81	2044	**596**	596
Senior unsecured medium-term notes series 5	450	3.54	2025	**449**	448
Senior unsecured medium-term notes series 6	500	4.24	2027	**498**	498
Senior unsecured medium-term notes series 7	500	3.71	2026	**498**	498
Senior unsecured medium-term notes series 8	650	2.99	2024	**646**	646
Senior unsecured medium-term notes series 9	550	4.74	2047	**542**	541
Senior unsecured medium-term notes series 10	400	4.02	2028	**398**	398
Senior unsecured medium-term notes series 11	300	4.75	2048	**298**	298
Senior unsecured medium-term notes series 12	400	3.62	2029	**398**	—
Senior unsecured medium-term notes series 13	700	4.54	2049	**714**	—
Senior unsecured medium-term notes series 14	600	2.56	2023	**598**	—
Senior unsecured medium-term notes series 15	600	3.31	2030	**597**	—
Senior unsecured medium-term notes 3A	50	5.05	2022	**52**	50
Senior unsecured medium-term notes 4A	—	3.06	2019	**—**	205
Senior unsecured medium-term notes 5A	350	3.43	2021	**353**	353
Finance lease liabilities and other[3]	—			**—**	14
Total interest bearing liabilities				**10,152**	7,537
Less current portion				**(74)**	(480)
Total non-current				**10,078**	7,057

(1) Pembina's unsecured credit facilities include a $2.5 billion revolving facility that matures May 2024, a $500 million non-revolving term loan that matures August 2022 and a $20 million operating facility that matures May 2020, 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, 2019. Borrowings under the credit facilities bear interest at prime, Bankers' Acceptance, or LIBOR rates, plus applicable margins.
(3) On adoption of IFRS 16 on January 1, 2019, finance leases previously reported in loans and borrowings were reclassified to lease liabilities. See Note 3.
(4) At December 31, 2019, US$454 million was drawn on the $2.5 billion revolving credit facility (2018: $ nil).

On April 3, 2019, Pembina closed an offering of $800 million of senior unsecured medium-term notes. The offering was conducted in two tranches, consisting of $400 million in senior unsecured medium-term notes, series 12, having a fixed coupon of 3.62 percent per annum, paid semi-annually, and maturing on April 3, 2029 and $400 million in senior unsecured medium-term notes, series 13, having a fixed coupon of 4.54 percent per annum, paid semi-annually, and maturing on April 3, 2049.

On May 31, 2019, Pembina completed an extension on its unsecured $2.5 billion revolving credit facility, which now matures on May 31, 2024.

On June 13, 2019, Pembina's $200 million senior unsecured medium term note 4A matured and was fully repaid.

On September 12, 2019, Pembina closed an offering of $1.5 billion of senior unsecured medium-term notes. The offering was conducted in three tranches, consisting of $600 million in senior unsecured medium-term notes, series 14, having a fixed coupon of 2.56 percent per annum, paid semi-annually, and maturing on June 1, 2023; $600 million in senior unsecured medium-term notes, series 15, having a fixed coupon of 3.31 percent per annum, paid semi-annually, and maturing on February 1, 2030; and $300 million issued through a re-opening of Pembina's senior unsecured medium-term notes, series 13, having a fixed coupon of 4.54 percent per annum, paid semi-annually, and maturing on April 3, 2049.

On September 19, 2019, Pembina fully-repaid its unsecured $1.0 billion non-revolving term loan.

On November 18, 2019, Pembina's $267 million senior unsecured note, series D, matured and was fully repaid.

On December 16, 2019, Pembina closed a $500 non-revolving term loan with certain existing lenders. The term loan has an initial term of three years and is pre-payable at Pembina's option. The other terms and conditions of the term loan, including financial covenants, are substantially similar to Pembina's $2.5 billion revolving credit facility.

Subsequent to year-end, 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, paid 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, paid 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, paid semi-annually and maturing on April 3, 2029.

All facilities are governed by specific debt covenants which Pembina was in compliance with at December 31, 2019 (2018: in compliance).

For more information about Pembina's exposure to interest rate, foreign currency and liquidity risk, see Note 24 *Financial Instruments*.

15. DECOMMISSIONING PROVISION

($ millions)	**2019**	2018
Balance at January 1	**573**	551
Unwinding of discount rate	**14**	12
Change in rates	**191**	—
Acquisition (Note 6)	**74**	—
Additions	**28**	18
Change in cost estimates and other	**(13)**	(8)
Total	**867**	573
Less current portion (included in accrued liabilities)	**(3)**	(4)
Balance at December 31	**864**	569

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.

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.

At December 31, 2018, Pembina used a 1.8 percent inflation rate per annum and a risk-free nominal rate of 2.3 percent to calculate the present value of the decommissioning provision.

In the third quarter of 2019, due to forces influencing global capital markets, long-term risk free nominal rates in Canada declined below target inflation rates, implying a negative real rate of return. Pembina determined that applying these rates to current cost estimates would not provide an accurate measurement of the decommissioning liability as observable stand-alone risk free real rates of return continue to be positive. To provide a more accurate measurement of the liability, Pembina applied a risk-free real return rate of 0.3 percent to estimate the present value of the decommissioning provision at September 30, 2019, resulting in a change in estimate. The risk-free real return rate represents an observable, market based risk-free rate of return after adjusting for inflation.

In the fourth quarter of 2019, Pembina continued to apply a risk free real return rate of 0.3 percent to estimate the present value of the decommissioning provision at December 31, 2019. The change in rates of $191 million includes $135 million resulting from the recalculation of the Kinder Acquisition decommissioning provision using the real risk free rate of 0.3 percent compared to the risk adjusted rate at the acquisition date in the purchase price equation.

16. SHARE CAPITAL

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

Common Share Capital

($ millions, except as noted)	**Number of Common Shares** *(millions)*	**Common Share Capital**
Balance at December 31, 2017	503	13,447
Debenture conversions	3	140
Share-based payment transactions	2	75
Balance at December 31, 2018	508	13,662
Issued on Acquisition, net of issue costs (Note 6)	36	1,710
Share-based payment transactions	4	167
Balance at December 31, 2019	**548**	**15,539**

Preferred Share Capital

($ millions, except as noted)	**Number of Preferred Shares** *(millions)*	**Preferred Share Capital**
Balance at December 31, 2017	100	2,424
Part VI.1 tax	—	(1)
Balance at December 31, 2018	100	2,423
Class A, Series 23 Preferred shares issued on Acquisition, net of issue costs (Note 6)	12	293
Class A, Series 25 Preferred shares issued on Acquisition, net of issue costs (Note 6)	10	243
Part VI.1 tax	—	(3)
Balance at December 31, 2019	**122**	**2,956**

On December 1, 2018, none of the 10 million Cumulative Redeemable Rate Reset Class A Preferred Series 1 shares outstanding were converted into Cumulative Redeemable Floating Rate Class A Preferred Series 2 shares.

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 February, May, August and November in each year, if, as and when declared by the Board of Directors.

Dividends

The following dividends were declared by Pembina:

For the years ended December 31 *($ millions)*	**2019**	2018
Common shares		
Common shares $2.36 per qualifying share (2018: $2.24)	**1,213**	1,131
Preferred shares		
$1.23 per Series 1 preferred share (2018: $1.06)	**12**	11
$1.13 per Series 3 preferred share (2018: $1.18)	**7**	7
$1.19 per Series 5 preferred share (2018: $1.25)	**12**	12
$1.12 per Series 7 preferred share (2018: $1.13)	**11**	11
$1.19 per Series 9 preferred share (2018: $1.19)	**11**	11
$1.44 per Series 11 preferred share (2018: $1.44)	**10**	10
$1.44 per Series 13 preferred share (2018: $1.44)	**14**	14
$1.12 per Series 15 preferred share (2018: $1.12)	**9**	9
$1.22 per Series 17 preferred share (2018: $1.25)	**7**	8
$1.25 per Series 19 preferred share (2018: $1.25)	**10**	10
$1.23 per Series 21 preferred share (2018: $1.20)	**20**	19
$0.16 per Series 23 preferred share (2018: nil)	**2**	—
$0.16 per Series 25 preferred share (2018: nil)	**1**	—
	126	122

On May 2, 2019, Pembina's Board of Directors approved a five percent increase to its monthly common share dividend rate (from $0.19 per common share to $0.20 per common share), commencing with the dividend paid on June 14, 2019.

On December 16, 2019, upon closing of the Kinder Acquisition, Pembina's Board of Directors approved a $0.01 per common share increase to its monthly common share dividend rate (from $0.20 per common share to $0.21 per common share), commencing with the dividend paid on February 14, 2020.

On January 9, 2020, Pembina announced that its Board of Directors had declared a dividend of $0.21 per qualifying common share ($2.52 annually) in the total amount of $115 million, payable on February 14, 2020 to shareholders of record on January 24, 2019. Pembina's Board of Directors also declared quarterly dividends for Pembina's preferred shares as outlined in the following table:

Series	Record Date	Payable Date	Per Share Amount	Dividend Amount *($ millions)*
Series 1	February 3, 2020	March 2, 2020	$0.306625	3
Series 3	February 3, 2020	March 2, 2020	$0.279875	2
Series 5	February 3, 2020	March 2, 2020	$0.285813	3
Series 7	February 3, 2020	March 2, 2020	$0.273750	3
Series 9	February 3, 2020	March 2, 2020	$0.296875	3
Series 11	February 3, 2020	March 2, 2020	$0.359375	2
Series 13	February 3, 2020	March 2, 2020	$0.359375	4
Series 15	March 16, 2020	March 31, 2020	$0.279000	2
Series 17	March 16, 2020	March 31, 2020	$0.301313	2
Series 19	March 16, 2020	March 31, 2020	$0.312500	3
Series 21	February 3, 2020	March 2, 2020	$0.306250	5
Series 23	January 31, 2020	February 18, 2020	$0.328125	4
Series 25	January 31, 2020	February 18, 2020	$0.325000	3

On February 5, 2020, Pembina announced that its Board of Directors had declared a dividend of $0.21 per common share ($2.52 annually) in the total amount of $115 million, payable on March 13, 2020 to shareholders of record on February 25, 2020.

17. PERSONNEL EXPENSES

For the years ended December 31 *($ millions)*	2019	2018
Salaries and wages	**304**	254
Share-based compensation expense (Note 23)	**66**	63
Short-term incentive plan	**64**	59
Pension plan expense	**25**	23
Health, savings plan and other benefits	**30**	21
	489	420

18. 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

	2019				2018			
For the years ended December 31 *($ millions)*	**Pipelines**	**Facilities**	**Marketing & New Ventures**	**Total**	Pipelines	Facilities	Marketing & New Ventures	Total
Take-or-pay[1]	**1,200**	**625**	**—**	**1,825**	979	582	—	1,561
Fee-for-service[1]	**387**	**117**	**—**	**504**	424	103	—	527
Product sales[2][3]	**—**	**5**	**4,804**	**4,809**	—	10	5,175	5,185
Revenue from contracts with customers	**1,587**	**747**	**4,804**	**7,138**	1,403	695	5,175	7,273
Lease and other revenue[4]	**63**	**29**	**—**	**92**	61	17	—	78
Total external revenue	**1,650**	**776**	**4,804**	**7,230**	1,464	712	5,175	7,351

(1) Revenue recognized over time.
(2) Revenue recognized at a point in time.
(3) Revenue reported for 2018 periods have been recast to reflect updated presentation for 2019, where product sales are reported in Marketing & New Ventures.
(4) Includes fixed operating lease income of $ 92 million (2018: $78) for the 12 months ended December 31, 2019 .

b. Contract Balances

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

For the years ended December 31 *($ millions)*	2019			2018		
	Take-or-Pay	**Other Contract Liabilities**	**Total Contract Liabilities**	Take-or-Pay	Other Contract Liabilities	Total Contract Liabilities
Opening balance	**9**	**159**	**168**	8	149	157
Additions (net in the period)	**4**	**35**	**39**	5	33	38
Acquisition (Note 6)	**—**	**77**	**77**	—	—	—
Revenue recognized from contract liabilities[1]	**(5)**	**(48)**	**(53)**	(4)	(23)	(27)
Closing balance	**8**	**223**	**231**	9	159	168
Less current portion[2]	**(8)**	**(31)**	**(39)**	(9)	(28)	(37)
Ending balance	**—**	**192**	**192**	—	131	131

(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, 2019, the balance includes $8 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 which payment 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 $9.3 billion (2018: $10.3 billion). Over the next five years, this remaining performance obligation will be recognized annually ranging from $1.1 billion (2018: $1.1 billion) declining to $983 million (2018: $964 million). Subsequently, up to 2039 (2018: 2039), Pembina will recognize from $977 million (2018: $1.0 billion) to $13 million (2018: $8 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.

19. NET FINANCE COSTS

For the years ended December 31 *($ millions)*	**2019**	2018
Interest expense on financial liabilities measured at amortized cost:		
Loans and borrowings	**291**	268
Convertible debentures	**—**	6
Leases	**17**	—
Unwinding of discount rate	**13**	12
Finance lease income	**(1)**	—
Loss in fair value of non-commodity-related derivative financial instruments	**(4)**	(4)
Foreign exchange gains and other	**(22)**	(3)
Net finance costs	**294**	279

Net interest paid of $311 million (2018: $294 million) includes interest paid during construction and capitalized of $ 42 million (2018: $35 million).

20. OPERATING SEGMENTS

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

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

The Facilities segment includes processing and fractionation facilities and related infrastructure 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. Intersegment transactions are recorded at market value and eliminated under corporate and intersegment eliminations.

For the year ended December 31, 2019 *($ millions)*	Pipelines	Facilities	Marketing & New Ventures	Corporate & Inter-Division Eliminations	Total
Revenue from external customers	1,650	776	4,804	—	7,230
Inter-division revenue	137	345	—	(482)	—
Total revenue[1][2]	1,787	1,121	4,804	(482)	7,230
Operating expenses	436	344	—	(178)	602
Cost of goods sold, including product purchases	—	4	4,417	(311)	4,110
Realized gain on commodity-related derivative financial instruments	—	—	(33)	—	(33)
Share of profit from equity accounted investees	270	50	50	—	370
Depreciation and amortization included in operations	245	168	51	11	475
Unrealized loss on commodity-related derivative financial instruments	—	—	13	—	13
Gross profit	1,376	655	406	(4)	2,433
Depreciation included in general and administrative	—	—	—	36	36
Other general and administrative	30	14	35	181	260
Other expense	3	—	3	9	15
Impairment of investment in equity accounted investees	300	—	—	—	300
Reportable segment results from operating activities	1,043	641	368	(230)	1,822
Net finance costs (income)	9	23	(8)	270	294
Reportable segment earnings (loss) before tax	1,034	618	376	(500)	1,528
Capital expenditures	892	569	157	27	1,645
Contributions to equity accounted investees	13	73	177	—	263

For the year ended December 31, 2018 *($ millions)*	Pipelines	Facilities[3]	Marketing & New Ventures[3]	Corporate & Inter-Division Eliminations	Total
Revenue from external customers	1,464	712	5,175	—	7,351
Inter-division revenue	124	302	—	(426)	—
Total revenue[1][2]	1,588	1,014	5,175	(426)	7,351
Operating expenses	396	313	—	(158)	551
Cost of goods sold, including product purchases	—	8	4,789	(282)	4,515
Realized loss on commodity-related derivative financial instruments	—	—	51	—	51
Share of profit from equity accounted investees	279	30	102	—	411
Depreciation and amortization included in operations	216	149	26	—	391
Unrealized gain on commodity-related derivative financial instruments	—	—	(73)	—	(73)
Gross profit	1,255	574	484	14	2,327
Depreciation included in general and administrative	—	—	—	26	26
Other general and administrative	26	17	41	169	253
Other expense	—	5	12	10	27
Reportable segment results from operating activities	1,229	552	431	(191)	2,021
Net finance costs	9	6	16	248	279
Reportable segment earnings (loss) before tax	1,220	546	415	(439)	1,742
Capital expenditures	711	348	134	33	1,226
Contributions to equity accounted investees	—	56	2	—	58

(1) Total revenue includes $215 million (2018: $265 million) associated with U.S. revenues.
(2) During both periods, one customer accounted for 10 percent or more of total revenues, with $718 million (2018: $792 million) reported throughout all segments.
(3) Revenue and cost of goods sold reported for all 2018 periods have been recast to reflect updated presentation for 2019, where the majority of cost of goods sold and corresponding revenues are reported in Marketing & New Ventures.

Geographical Information

Non-Current Assets

For the years ended December 31		
($ millions)	**2019**	2018
Canada	**26,596**	20,936
United States	**5,569**	4,715
Total non-current assets[1]	**32,165**	25,651

(1) Excludes deferred income tax assets.

21. EARNINGS PER COMMON SHARE

Basic Earnings Per Common Share

The calculation of basic earnings per common share at December 31, 2019 was based on the earnings attributable to common shareholders of $1.4 billion (2018: $1.2 billion) and a weighted average number of common shares outstanding of 512 million (2018: 505 million).

Diluted Earnings Per common Share

The calculation of diluted earnings per common share at December 31, 2019 was based on earnings attributable to common shareholders of $1.4 billion (2018: $1.2 billion), and weighted average number of common shares outstanding after adjustment for the effects of all dilutive potential common shares of 514 million (2018: 509 million).

Earnings Attributable to Common Shareholders

For the years ended December 31		
($ millions)	**2019**	2018
Earnings	**1,492**	1,278
Dividends on preferred shares	**(123)**	(122)
Cumulative dividends on preferred shares, not yet declared	**(8)**	(3)
Basic earnings attributable to common shareholders	**1,361**	1,153
Effect of after-tax interest on debentures to earnings	**—**	4
Diluted earnings attributable to common shareholders	**1,361**	1,157

Weighted Average Number of Common Shares

(In millions of shares, except as noted)	**2019**	2018
Issued common shares at January 1	**508**	503
Effect of shares issued on Acquisition	**1**	—
Effect of shares issued on exercise of options	**3**	1
Effect of conversion of convertible debentures	**—**	1
Basic weighted average number of common shares at December 31	**512**	505
Dilutive effect of debentures converted	**—**	2
Dilutive effect of share options on issue	**2**	2
Diluted weighted average number of common shares at December 31	**514**	509
Basic earnings per common share (dollars)	**2.66**	2.28
Diluted earnings per common share (dollars)	**2.65**	2.28

The average market value of Pembina's shares for purposes of calculating the dilutive effect of share options was based on quoted market prices for the period during which the options were outstanding.

22. PENSION PLAN

As at December 31 *($ millions)*	**2019**	2018
Registered defined benefit net obligation	**19**	19
Supplemental defined benefit net obligation	**16**	12
Net employee benefit obligations	**35**	31

Pembina maintains defined contribution plans and non-contributory defined benefit pension plans covering its employees. On April 1, 2018, Pembina exercised its option to assume an additional interest in the Younger extraction and fractionation facilities ("Younger Facilities"). Accordingly, Pembina also assumed the Bargaining Unit Pension Plan for Employees at the Younger Plant ("Younger Plan") with the net obligation of $6 million. Pembina contributes five to 10 percent of an employee's earnings to the defined contribution plan until the employee's age plus years of service equals 50, at which time they become eligible for the defined benefit plans. Pembina recognized $11 million in expense for the defined contribution plan during the year (2018: $8 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 valuation was at December 31, 2018. The defined benefit plans expose Pembina to actuarial risks such as longevity risk, interest rate risk, and market (investment) risk.

Defined Benefit Obligations

	2019		2018	
As at December 31 *($ millions)*	**Registered Plans**	**Supplemental Plan**	Registered Plan	Supplemental Plan
Present value of unfunded obligations	—	**16**	—	12
Present value of funded obligations	**250**	—	212	—
Total present value of obligations	**250**	**16**	212	12
Fair value of plan assets	**231**	—	193	—
Recognized liability for defined benefit obligations	**(19)**	**(16)**	(19)	(12)

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 totalled $20 million for the year ended December 31, 2019 (2018: $19 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, 2019 (2018: nil).

Registered Defined Benefit Pension Plan Assets Comprise

As at December 31 *(Percent)*	**2019**	2018
Equity securities	**62**	61
Debt	**38**	39
	100	100

Movement in the Present Value of the Defined Benefit Pension Obligation

	2019		2018	
($ millions)	**Registered Plans**	**Supplemental Plan**	Registered Plan	Supplemental Plan
Defined benefits obligations at January 1	**212**	**12**	192	11
Benefits paid by the plan	**(12)**	**—**	(12)	—
Current service costs	**15**	**1**	14	1
Interest expense	**8**	**—**	7	—
Transfer from Younger	**—**	**—**	16	—
Actuarial losses (gains) in other comprehensive income	**27**	**3**	(5)	—
Defined benefit obligations at December 31	**250**	**16**	212	12

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

($ millions)	**2019**	2018
Fair value of plan assets at January 1	**193**	182
Contributions paid into the plan	**20**	19
Benefits paid by the plan	**(12)**	(12)
Return on plan assets	**22**	(13)
Transfer from Younger	**—**	10
Interest income	**8**	7
Fair value of registered plan assets at December 31	**231**	193

Expense Recognition in Earnings

For the years ended December 31 *($ millions)*	**2019**	2018
Registered Plan		
Current service costs	**15**	14
Interest on obligation	**8**	8
Expected return on plan assets	**(8)**	(7)
	15	15

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

For the years ended December 31 *($ millions)*	**2019**	2018
Registered Plan		
Operating expenses	**7**	8
General and administrative expense	**8**	7
	15	15

Expense recognized for the Supplemental Plan was less than $2 million for each of the years ended December 31, 2019 and 2018.

Actuarial Gains and Losses Recognized in Other Comprehensive Income

	2019			2018		
($ millions)	**Registered Plans**	**Supplemental Plan**	**Total**	Registered Plan	Supplemental Plan	Total
Balance at January 1	**(28)**	**(1)**	**(29)**	(22)	(1)	(23)
Remeasurements:			—			
Financial assumptions	**(21)**	**(1)**	**(22)**	3	—	3
Experience adjustments	**—**	**—**	**—**	—	—	—
Return on plan assets excluding interest income	**16**	**—**	**16**	(9)	—	(9)
Recognized loss during the period after tax	**(5)**	**(1)**	**(6)**	(6)	—	(6)
Balance at December 31	**(33)**	**(2)**	**(35)**	(28)	(1)	(29)

Principal actuarial assumptions used:

As at December 31		
(weighted average percent)	**2019**	2018
Discount rate	**3.1%**	3.8%
Future pension earning increases	**4.0%**	4.0%

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

As at December 31		
(years)	**2019**	2018
Longevity at age 65 for current pensioners		
Males	**21.8**	21.7
Females	**24.2**	24.1
Longevity at age 65 for current member aged 45		
Males	**22.8**	22.8
Females	**25.1**	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. An increase or decrease of the estimated discount rate of 3.1 percent by 100 basis points at December 31, 2019 is considered reasonably possible in the next financial year but would not have a material impact on the obligation.

Pembina expects to contribute $21 million to the defined benefit plans in 2020.

23. SHARE-BASED PAYMENTS

At December 31, 2019, 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)

In 2005, Pembina established 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, non-officers and directors. 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.

In 2015, Pembina also established a deferred share units ("DSU") plan. Under the DSU plan, directors are required to take at least 50 percent of total director compensation as DSUs. 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 DSUs, 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. As of January 1, 2018 directors no longer receive meeting fees, but their base retainer and committee retainer has been increased.

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

The terms and conditions relating to the grants of the share option program and the long-term share unit award incentive plans are listed in the tables below:

Grant Date Share Options Granted to Employees *(thousands of options, except as noted)*	**Number of Options**	**Contractual Life of Options**
March 6, 2018	1,993	7
May 14, 2018	310	7
July 10, 2018	424	7
August 15, 2018	961	7
October 10, 2018	94	7
November 13, 2018	939	7
December 31, 2018	34	7
March 5, 2019	2,409	7
April 8, 2019	367	7
July 9, 2019	249	7
August 14, 2019	1,162	7
October 8, 2019	97	7
November 12, 2019	1,145	7

One-third vest on the first anniversary of the grant date, one-third vest on the second anniversary of the grant date and one-third vest on the third anniversary of the grant date.

Long-Term Share Unit Award Incentive Plan (1)

Grant date RSUs, PSUs and DSUs to Officers, Non-Officers(2) and Directors *(thousands of units, except as noted)*	**PSUs (3)**	**RSUs (3)**	**DSUs**	**Total**
January 1, 2018	404	395	44	843
January 1, 2019	475	460	36	971

(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:

(thousands of options, except as noted)	**Number of Options**	**Weighted Average Exercise Price (dollars)**
Outstanding at December 31, 2017	15,677	$40.94
Granted	4,755	$43.86
Exercised	(1,729)	$35.34
Forfeited	(523)	$41.56
Expired	(252)	$49.20
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

As of December 31, 2019, the following options are outstanding:

(thousands of options, except as noted) Exercise Price *(dollars)*	Number Outstanding at December 31, 2019	Options Exercisable	Weighted Average Remaining Life
$29.60 – $41.38	3,466	3,426	3.1
$41.39 – $43.21	3,524	1,618	4.7
$43.22 – $46.00	3,491	2,170	4.2
$46.01 – $48.59	4,350	279	6.2
$48.60 – $52.01	3,753	2,057	3.9
Total	18,584	9,550	4.5

Options are exercised regularly throughout the year. Therefore, the weighted average share price during the year of $48.87 (2018: $44.97) 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)*	**2019**	2018
Weighted average		
Fair value at grant date	**4.12**	3.86
Expected volatility *(percent)*	**18.7**	20.3
Expected option life *(years)*	**3.67**	3.67
Expected annual dividends per option	**2.36**	2.24
Expected forfeitures *(percent)*	**6.6**	6.7
Risk-free interest rate (based on government bonds) *(percent)*	**1.6**	2.1

Disclosure of Long-Term Share Unit Award Incentive Plan

The long-term share unit award incentive plans was valued using the volume weighted average price for 20 days ending December 31, 2019 of $47.52 (2018: $42.89). Actual payment may differ from amount valued based on market price and company performance.

Employee Expenses

For the years ended December 31 *($ millions)*	**2019**	2018
Share option plan, equity settled	**16**	14
Long-term share unit award incentive plan	**50**	49
Share-based compensation expense	**66**	63
Total carrying amount of liabilities for cash settled arrangements	**95**	96
Total intrinsic value of liability for vested benefits	**57**	57

24. FINANCIAL INSTRUMENTS

Financial Risk Management

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 and derivative financial instruments 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 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, 2019 letters of credit totaling $90 million (2018: $122 million) were held primarily in respect of customer trade receivables.

Pembina typically has collected its trade receivables in full and at December 31, 2019, 95 percent were current (2018: 99 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 trade and other receivables was as follows:

Past Due	2019	2018
31-60 days past due	1	2
Greater than 61 days	7	—
	8	2

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.

Advances to related parties held at amortized cost consists 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. Management considers the risk of default relating to the advances to be low due to their priority ranking against other interests.

For 2019, Pembina recognized no impairment loss allowance (2018: $1 million). Pembina recognized less than $1 million in impairment losses on financial assets during 2019 (2018: $1 million).

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.

			Outstanding Balances Due by Period			
December 31, 2019 *($ millions)*	Carrying Amount	Expected Cash Flows	Less Than 1 Year	1 - 3 Years	3 - 5 Years	More Than 5 Years
Trade payables and accrued liabilities	1,013	1,013	1,013	—	—	—
Loans and borrowings	10,152	14,565	477	2,379	3,337	8,372
Dividends payable	110	110	110	—	—	—
Derivative financial liabilities	9	9	9	—	—	—
Lease liabilities	819	1,152	130	237	179	606

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 trade financial instruments for speculative purposes.

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. 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.

c. Interest Rate Risk

Interest bearing financial liabilities include Pembina's debt and lease liabilities. Pembina has a floating interest rate debt which subjects Pembina to interest rate risk.

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

As at December 31 *($ millions)*	**2019**	2018
Carrying amounts of financial liability		
Fixed rate instruments (1)	**8,874**	6,232
Variable rate instruments(2)	**2,097**	1,305
	10,971	7,537

(1) Includes lease liabilities following the adoption of IFRS 16, see "Changes in Accounting Policies"
(2) At December 31, 2019, Pembina held no positions in financial derivative contracts to fix interest rates (December 31, 2018: nil).

Cash Flow Sensitivity Analysis for Variable Rate Instruments

A change of 100 basis points in interest rates at the reporting date would have (increased) decreased earnings by the amounts shown below. This analysis assumes that all other variables remain constant.

As at December 31 *($ millions)*	**2019**	2018
	± 100 bp	± 100 bp
Earnings sensitivity (net)	**±9**	±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)*	**2019**				2018			
	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	**48**	**—**	**48**	**—**	54	—	54	—
Advances to related parties(2)	**—**	**—**	**—**	**—**	58	—	—	58
	48	**—**	**48**	**—**	112	—	54	58
Financial liabilities carried at fair value								
Derivative financial instruments	**9**	**—**	**9**	**—**	6	—	6	—
Financial liabilities carried at amortized cost								
Loans and borrowings(3)	**10,152**	**—**	**10,729**	**—**	7,537	—	7,588	—

(1) The basis for determining fair value is disclosed in note 5.
(2) Advances to related parties carried at fair value consisted of funds advanced by Pembina to a jointly controlled entity with an equity conversion option that was exercised during the first quarter of 2019. US$43 million of advances were converted to shares during the first quarter of 2019 and are included in the Investments in Equity Accounted Investees balance in the condensed consolidated interim statements of financial position at December 31, 2019.
(3) Carrying value of current and non-current balances.

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)*	**2019**	2018
Derivatives	**2.0 - 2.5**	2.2 - 2.3
Loans and borrowings	**2.3 - 4.0**	2.6 - 5.6

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

Fair Value Hierarchy

The fair value of financial instruments carried at fair value is classified according to the following hierarchy based on the amount of observable inputs used to value the instruments.

Level 1: Unadjusted quoted prices are available in active markets for identical assets or liabilities as the reporting date. Pembina does not use Level 1 inputs for any of its fair value measurements.

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 2 valuations are based on inputs, including 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. The majority of Pembina's significant financial instruments carried at fair value are valued using Level 2 inputs.

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.

Advances to related parties carried at fair value consist of funds advances by Pembina to a jointly controlled entity with an equity conversion option. Fair value is measured on a recurring basis using a valuation model that considers the present value of management's best estimate of future cash flows expected to result from the asset under development in the jointly controlled entity, discounted using a risk-adjusted discount rate.

The following table is a summary of the net derivative financial instruments, which is consistent with the gross balances:

	2019					2018				
As at December 31 *($ millions)*	**Current Asset**	**Non-Current Asset**	**Current Liability**	**Non-Current Liability**	**Total**	Current Asset	Non-Current Asset	Current Liability	Non-Current Liability	Total
Commodity, power, storage and rail financial instruments	**34**	**5**	**(6)**	**(3)**	**30**	44	—	(2)	—	42
Foreign exchange	**6**	**3**	**—**	**—**	**9**	10	—	(4)	—	6
Net derivative financial instruments	**40**	**8**	**(6)**	**(3)**	**39**	54	—	(6)	—	48

Sensitivity Analysis

The following table shows the impact on earnings if the underlying risk variables of the derivative financial instruments changed by a specified amount, with other variables held constant.

As at December 31, 2019 *($ millions)*[1]		+ Change	- Change
Frac spread related			
Natural gas	(AECO +/- $0.25 per GJ)	9	(9)
NGL (includes propane, butane and condensate)	(Belvieu/Conway +/- U.S. $0.10 per gal)	(43)	43
Foreign exchange (US$ vs. C$)	(FX rate +/- $0.10)	(46)	46
Product margin			
Crude oil	(WTI +/- $2.50 per bbl)	(2)	2
NGL (includes propane, butane and condensate)	(Belvieu/Conway +/- U.S. $0.10 per gal)	N/A	N/A

(1) As at December 31, 2019, there were no outstanding financial derivative contracts related to power and interest rates.

25. 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, unsecured notes and finance lease obligations.

Pembina is subject to certain financial covenants in its credit facility agreements and is in compliance with all financial covenants as of December 31, 2019.

Note 16 of these financial statements shows the change in share capital for the year ended December 31, 2019.

26. GROUP ENTITIES

Significant Subsidiaries

As at December 31	Ownership Interest	
(percentages)	**2019**	2018
Pembina Gas Services Limited Partnership	**100**	100
Pembina Holding Canada L.P.	**100**	100
Pembina Infrastructure and Logistics L.P.	**100**	100
Pembina Midstream Limited Partnership	**100**	100
Pembina Oil Sands Pipeline L.P.	**100**	100
Pembina Pipeline	**100**	100
Pembina Empress NGL Partnership	**100**	100
Ruby Blocker LLC	**100**	100
Pembina Cochin LLC	**100**	—

27. 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

($ millions)	**2019**	2018
For the years ended December 31:		
Services provided	**82**	42
Services received	**2**	—
Interest income	**10**	6
As at December 31:		
Advances to related parties[1]	**131**	135
Trade receivables and other	**17**	12

(1) During the year ended December 31, 2019, Pembina converted $58 million in advances to Canada Kuwait Petrochemical Corporation into equity contributions, and advanced US$31 million (2018: US$31 million) to Ruby Pipeline, L.L.C. and $17 million (2018: nil), net of repayments, to Fort Saskatchewan Ethylene Storage Limited Partnership.

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 *($ millions)*	**2019**	2018
Short-term employee benefits	**10**	10
Share-based compensation and other	**13**	13
Total compensation of key management	**23**	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, 2019 (December 31, 2018: nil).

($ millions)		Transaction Value Year Ended December 31	
Post-employment benefit plan	**Transaction**	**2019**	2018
Defined benefit plan	Funding	**20**	19

28. COMMITMENTS AND CONTINGENCIES

Commitments

Pembina had the following contractual obligations outstanding at December 31, 2019:

Contractual Obligations	Payments Due by Period				
($ millions)	**Total**	**Less than 1 Year**	**1 – 3 Years**	**3 – 5 Years**	**After 5 Years**
Leases[1]	1,152	130	237	179	606
Loans and borrowings[2]	14,565	477	2,379	3,337	8,372
Construction commitments[3]	1,766	1,128	123	33	482
Other[4]	659	109	158	93	299
Total contractual obligations	18,142	1,844	2,897	3,642	9,759

(1) Includes terminals, rail, office space, land and vehicle leases.
(2) Excluding deferred financing costs. Including interest payments on senior unsecured notes.
(3) Excluding significant projects that are awaiting regulatory approval at December 31, 2019, projects which Pembina is not committed to construct, and projects that are executed by equity accounted investees.
(4) Includes $65 million in commitments related to leases that have not yet commenced.

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 10 years and involve the purchase of NGL products from producers. Assuming product is available, Pembina has secured between 20 and 175 mbpd each year up to and including 2028. Power purchase agreements range from one to 25 years and involve the purchase of power from electrical service providers. Pembina has secured up to 67 megawatts per day each year up to and including 2043.

Commitments to Equity Accounted Investees

Pembina is contractually committed to provide CKPC with funding to construct assets that will form part of CKPC's PDH/PP Facility, subject to certain conditions being met.

Pembina has a contractual commitment to advance US $39 million to Ruby by March 26, 2020.

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

Contingencies

Pembina, its subsidiaries and its investments in equity accounted investees are subject to various legal and regulatory proceedings and actions 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. While the outcome of such actions and proceedings cannot be predicted with certainty, 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 guarantees to various third parties in the normal course of conducting business. The guarantees include financial guarantees to counterparties for product purchases and sales, transportation services, utilities, engineering and construction services. The guarantees have not had and are not expected to have a material impact on Pembina's financial position, earnings, liquidity or capital resources.

Pembina has $103 million (2018: $69 million) in letters of credit issued to facilitate commercial transactions with third parties and to support regulatory requirements.

29. SUBSEQUENT EVENTS

On January 7, 2020, Pembina and Petrochemical Industries Company K.S.C. of Kuwait, announced their equally-owned joint venture entity, Canada Kuwait Petrochemical Limited Partnership ("CKPC"), executed a lump sum engineering, procurement and construction ("EPC") contract related to the construction of the propane dehydrogenation ("PDH") facility within its integrated PDH and polypropylene ("PP") upgrading facility ("PDH/PP Facility"). Pembina's proportionate share of the capital cost of the PDH/PP Facility, including the 100 percent directly-owned supporting facilities, is estimated at $2.7 billion and going into commercial service in the second half of 2023.

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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:

COMMON SHARES PBA

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CERTIFICATION REQUIRED BY RULE 13a-14(a) OR RULE 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, M.H. Dilger, certify that:

1. I have reviewed this annual report on Form 40-F of Pembina Pipeline Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;

4. The issuer's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;

   (c) Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting;

5. The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer's board of directors (or persons performing the equivalent function):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Date: February 27, 2020

/s/ "*M.H. Dilger*"

Name: M.H. Dilger

Title: President & Chief Executive Officer

CERTIFICATION REQUIRED BY RULE 13a-14(a) OR RULE 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, J. Scott Burrows, certify that:

1. I have reviewed this annual report on Form 40-F of Pembina Pipeline Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;

4. The issuer's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;

   (c) Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting;

5. The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer's board of directors (or persons performing the equivalent function):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Date: February 27, 2020

/s/ *"J. Scott Burrows"*

Name: J. Scott Burrows

Title: Senior Vice President and Chief Financial Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Pembina Pipeline Corporation (the "Company") on Form 40-F for the year ended December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, M.H. Dilger, President & Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly represents, in all material respects, the financial condition and results of the operations of the Company.

Date: February 27, 2020

/s/ *"M.H. Dilger"*

M.H. Dilger

President & Chief Executive Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Pembina Pipeline Corporation (the "Company") on Form 40-F for the year ended December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, J. Scott Burrows, Senior Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly represents, in all material respects, the financial condition and results of the operations of the Company.

Date: February 27, 2020

/s/ *"J. Scott Burrows"*

J. Scott Burrows

Senior Vice President and Chief Financial Officer

PEMBINA PIPELINE CORPORATION

SUPPLEMENTAL FINANCIAL INFORMATION

Exhibit to December 31, 2019 Consolidated Statements of Earnings and Comprehensive Income

The following ratio is for the twelve month period then ended.

	Twelve Months Ended December 31, 2019
Earnings coverage[1]	3.9

(1) Earnings coverage is equal to profit attributable to owners of Pembina before borrowing costs and income taxes divided by borrowing costs (including capitalized costs) and dividend obligations on preferred shares.



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CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors of Pembina Pipeline Corporation:

We, KPMG LLP, consent to the use of our reports, each dated February 27, 2020, with respect to the consolidated financial statements and the effectiveness of internal control over financial reporting included in this annual report on Form 40-F.

We also consent to the incorporation by reference of such reports in the Registration Statements No. 333-219338 on Form F-3 and No. 333-233440 on Form F-10 of Pembina Pipeline Corporation.

/s/ KPMG LLP

Chartered Professional Accountants

Calgary, Canada
February 27, 2020

CODE OF ETHICS POLICY

I. PURPOSE OF THE POLICY

The reputation of Pembina is one of our most important assets. The purpose of this Policy is to establish a high standard of integrity and ethical behavior that supports Pembina's reputation and our relationships with our internal and external stakeholders.

II. SCOPE AND APPLICATION

This Policy applies to all officers, employees, consultants, contractors and directors of Pembina ("Personnel"). Our reputation is built through the conduct of our Personnel in our dealings on behalf of Pembina. We expect our reputation to be beyond reproach, and one that we can be proud of.

Definitions

In this Policy:

"**Board**" or "**Board of Directors**" means the board of directors of the Corporation from time to time;

"**Corporation**" means Pembina Pipeline Corporation;

"**HSE**" means health, safety and the environment;

"**Insider Trading Policy Administrator**" has the meaning ascribed to it in the Insider Trading and Reporting Policy;

"**Leader**" means Personnel at the supervisor level or higher;

"**Pembina**" means collectively, the Corporation and its subsidiaries;

"**Policy**" means this Code of Ethics Policy;

"**Officer**" means any of the President and/or Chief Executive Officer, the Chief Financial Officer, the Senior Vice Presidents or such other officer designated by the Board from time to time; and

"**Spokespersons**" means those individuals designated as Spokespersons in the Corporation's Disclosure Policy.

III. PRINCIPLES

Our reputation is built on the following core values and beliefs:

1. **Integrity**

   We ensure our activities are ethical and meet the expectations of our customers, investors, host communities, Personnel and other stakeholders.

2. **Stability**

   We are committed to the long term.

3. **Purposeful**

   We are purposeful in the planning and execution of our business, operations and activities.

4. **Citizenship**

   We conduct ourselves in a manner that is ethical, responsible, safe and legal.

5. **Respectful**

   We treat our diverse stakeholders in a civil and dutiful manner.

6. **Accountability**

   Our operations are performed in an open, honest and responsible manner.

IV. RESPONSIBILITIES

Pembina expects and requires its Personnel to:

- behave honestly and ethically;
- act with integrity;
- when acting on behalf of Pembina, afford those with whom you come into contact with respect and courtesy;
- maintain confidentiality, where required, to ensure the protection of corporate, personal and third-party information;
- take responsible steps to avoid any conflicts of interest, either real or perceived;
- behave in ways which uphold and reflect Pembina's values;
- never use one's power or status in an effort to gain undue benefit or advantage over others;
- treat communities and the environment in which we operate with respect; and
- always comply with the law and relevant rules and regulations.

All Personnel are expected to maintain and promote a high level of professional integrity. It is the responsibility of all Personnel to uphold Pembina's reputation and standing in the community. The Policy is designed to foster a consistent and high standard of ethical behavior by Pembina's Personnel and is our guide in our relationships with internal and external parties. All Personnel are expected to conduct themselves by, and be familiar with, the Policy.

Included below are some examples of the requirements, responsibilities, actions or prohibitions that applicable persons must abide by to comply with this Policy.

A. Conflicts of Interest

Personnel may experience situations during the course of their employment that represent a conflict of interest. A conflict of interest exists whenever individual interests interfere or conflict (or even appear to interfere or conflict) with the interests of Pembina in a way that may adversely influence Personnel's objectivity, ability to perform Pembina work effectively, or the exercise of sound, ethical business judgment. Conflicts of interest can also arise when Personnel, or a member of his or her family, or close friends or associates receive improper personal benefits as a result of his or her position at Pembina. No Personnel should improperly benefit, directly or indirectly, from corporate property or information, his or her status as Personnel of Pembina, or from any decision or action by Pembina where he or she is in a position to influence. Personnel must not compete with Pembina, but strive to further its legitimate business interests with the utmost integrity .

By way of example, a conflict of interest may arise if any Personnel:

- has a material personal interest in a transaction or agreement involving Pembina;
- accepts a loan, or a guarantee of an obligation, from Pembina;
- accepts a gift, service, payment or other benefit (other than a nominal gift) from a competitor, supplier or customer of Pembina, or any person, entity or organization with which Pembina does business or seeks or expects to do business;
- lends to, borrows from, or has a material interest in a competitor, supplier or customer of Pembina, or any entity or organization with which Pembina does business or seeks or expects to do business (other than routine investments in publicly traded companies or borrowing from financial institutions);
- knowingly competes with Pembina or diverts a business opportunity from Pembina;
- serves as an officer, director, employee, consultant or in any management capacity in an entity or organization with which Pembina does business or seeks or expects to do business (other than routine business involving immaterial amounts, in which the individual has no decision-making or other role);
- has a material interest in an entity or organization with which Pembina does business or seeks or expects to do business; or
- participates in a venture in which Pembina has expressed an interest.

Personnel are expected to use common sense and good judgment in deciding whether a potential conflict of interest may exist. All Personnel must prioritize their obligations to Pembina including allocating an appropriate amount of time to Pembina work, protecting Pembina's assets and information, and maintaining confidentiality. In the event of a potential conflict of interest, Personnel should notify the Corporation and clear any potential conflicts in writing.

Employees below the executive level who wish to serve on a board of directors for any non-profit organization independent of Pembina must obtain written approval from their Leader and an executive officer. Executive officers, and employees wishing to serve on the board of directors of a for-profit organization must obtain written approval of the President and CEO. This does not apply to independent directors of the Corporation who serve other companies' boards, this is addressed through Pembina's Governance Guidelines. It is recommended that any Personnel who wish to serve on a non-profit board discuss it with their Leader.

B. Gifts, Benefits and Entertainment

Personnel at Pembina are expected to act responsibly and with integrity when making a decision on whether to accept the offer of a gift, benefit or entertainment. Gifts should not be accepted if they could be reasonably considered extravagant, a personal enrichment or an incentive to influence a behavior or a business decision. Gifts and

entertainment should be for a proper intended purpose with a demonstrable business value and should be exchanged in accordance with the policies and procedures of both parties. Personnel must avoid the appearance and the act of improperly influencing business relationships with the organizations or individuals with whom they deal. Exchanging a gift or entertainment as a private individual, or through an intermediary such as a spouse, friend or family member is prohibited. Gifts should be modest, occasional, consistent with standard industry practice and permitted by law. In addition, Personnel must seek approval from their Leader and an executive officer prior to accepting any air travel or overnight accommodations. If you are unsure about the acceptability of any gift or entertainment you are exchanging, do not assume it is permitted. It is recommended that you discuss the situation with your leader and seek further clarification from Internal Audit or the Legal department.

Personnel shall not furnish, on behalf of Pembina, expensive gifts or provide excessive benefits to other persons.

Care must be taken when exchanging gifts and entertainment with government officials (see Working with Government Officials).

C. Working with Government Officials

Pembina and its Personnel are subject to local and international laws that prohibit corrupt practices when dealing with government officials. It is an offence to make or offer any government official, political party, or political candidate an inducement to obtain favorable business treatment or some other advantage. Indirect inducements offered to associates, agents, family members, or third parties to government officials, political parties or political candidates are also prohibited. Any violation or perceived violation of this may result in severe penalties to both Pembina and its Personnel. Personnel must act ethically, transparently and take all reasonable steps to ensure strict adherence to these laws at all times. Pembina has zero tolerance for bribery and corruption.

Additionally, federally and in many provinces, Canadian law prohibits the direct or indirect use of Pembina's funds, goods or services as contributions to political parties, campaigns or candidates of election to any level of government.

Personnel who interact with political stakeholders or government officials are expected to know and comply with all applicable laws and corporate processes governing relationships with government officials. Any questions Personnel engaging with government may have regarding this Policy or Canadian laws regarding government engagement should be directed to Pembina’s Government Relations team.

D. Honesty, Integrity and the Law

Personnel are expected to act honestly, with integrity and to comply with the law at all times. Dishonest, unethical or illegal behavior will have a negative impact on Pembina and its reputation. Compliance with both the letter and spirit of all laws, rules and regulations applicable to Pembina's business is critical to its reputation and continued success. All Personnel must respect and obey the laws of the cities, provinces, states and countries in which we operate and avoid even the appearance of impropriety. Personnel who fail to comply with this Policy and applicable laws will be subject to disciplinary measures, up to and including dismissal.

E. Health, Safety and Environment

Pembina demonstrates its accountability in the areas of health, safety and the environment by managing risk and complying with HSE laws and regulations. All Personnel are required to review and sign off on the Health, Safety and Environment Policy, and Personnel are expected to make health and safety a top priority. Pembina believes environmental responsibility, a safe and healthy workplace, and reliable operations are integral to generating benefits for our investors, stakeholders, Personnel and the communities where we operate. If the environment is exposed to damage, Pembina has procedures in place that instigate a rigorous program to repair that damage and to minimize

the impact to the environment. For further information, please consult Pembina's Health, Safety and Environment Policy.

F. Personnel Relations

All Personnel of Pembina shall be treated with respect and dignity. Pembina is an equal opportunity employer and shall not permit its Personnel to discriminate against Personnel or potential directors, officers or employees on the basis of race, ancestry, national/ethnic/place of origin, color, religion/religious beliefs, age, sex/gender, sexual orientation, marital status, family status, disability, class of persons, source of income, or pardoned conviction, or any other characteristic protected by Canadian or provincial laws and regulations, as applicable. For further information, please consult Pembina's Respectful Workplace Policy.

Pembina will make reasonable accommodations for its Personnel in compliance with applicable laws and regulations. Pembina is committed to actions and policies to assure fair employment, including equal treatment in hiring, promoting, training, compensation, termination and corrective action and will not tolerate discrimination.

G. Public Relations

Unless Personnel are specifically authorized to represent Pembina to the media, they may not respond to media inquiries or requests for information. This includes newspapers, magazines, trade publications, radio and television as well as any other external sources requesting information about Pembina. Any media contact on any topic should be immediately referred to the designated Spokespersons identified in the Corporation's Disclosure Policy. Personnel must be careful not to disclose confidential, personal or business information through public or casual discussions with the media or others. For additional information about communication through social media refer to Pembina's Social Media Rules.

H. Outside Business Activities

Personnel may not take for themselves personally, or for their friends, family members or associates, opportunities that are discovered through the use of Pembina assets, information or position. Personnel may not participate in outside business or financial activities that compete directly with Pembina. Personnel may not use Pembina assets or information or their position with Pembina at any time, for personal gain. Personnel owe a duty to Pembina to advance its legitimate business interests when the opportunity to do so arises.

It is expected that Personnel will not participate in an outside business that supplies services or has business dealings with Pembina where there is a possibility of preferential treatment being received by virtue of the Personnel's position.

I. Fair Dealing

Personnel should deal fairly with Pembina's customers, suppliers, competitors and should not engage in any activity that could potentially result in an unfair competitive advantage through manipulation, concealment, abuse of privileged information, misrepresentation of material facts, or any other unfair-dealing practice. Pembina supports a free marketplace and the laws and business practices that preserve free and fair competition. Personnel must comply with all antitrust and competition laws and must not engage in anticompetitive behavior such as collusion and price fixing. For further information, please consult Pembina's Inter-Affiliate Restricted Information Policy.

Pembina obtains information about its competitors only through legal and ethical means. Personnel must never obtain, or enlist someone to obtain, illegally or unethically sourced information. If you are in possession of such information, report it immediately.

J. Privacy and Confidentiality

The protection of information and confidentiality is extremely important to Pembina, regardless of whether it is personal or corporate. Personnel are expected, and should expect, that personally identifiable information be treated with respect and protected from collection or disclosure without consent and Pembina complies with applicable legislation governing the protection of personal information. Moreover, we are required to preserve and protect the confidentiality of corporate initiatives and intellectual property as well as business and operational plans. Personnel should exercise care when discussing what may be considered confidential or private information with other Personnel or outside parties. For further information, please consult Pembina's Disclosure Policy, Insider Trading and Reporting Policy, Privacy Policy, and Pembina's Inter-Affiliate Restricted Information Policy.

K. Integrity of Financial Information

Stakeholders must be provided with accurate, up-to-date financial information in order to make informed decisions. Many Personnel contribute directly to various reporting processes that impact the integrity and accuracy of financial information, statements and management reports. All Personnel have a responsibility to ensure that financial records accurately reflect financial transactions. Adequate controls must be maintained to ensure the accuracy of financial reporting. The books and records of Pembina must reflect in reasonable detail its transactions in a timely, fair and accurate manner to, among other things, permit the preparation of accurate financial statements in accordance with applicable generally accepted accounting principles and maintain recorded accountability for assets and liabilities. All Personnel responsible for maintaining Pembina's financial records must maintain the accuracy of asset and liability records by comparing the records to the existing assets and liabilities at reasonable intervals, and appropriate action must be taken with respect to any differences. All business transactions in which Personnel have participated must be properly authorized, properly recorded and supported by accurate documentation in reasonable detail. Any intentional misrepresentations, regardless of size, are a clear contravention of this Policy and bring into question the integrity of the Personnel as well as Pembina itself. These situations are taken extremely seriously by Pembina, and will be promptly dealt with (see Compliance below). For further information please consult Pembina’s Authorization for Expenditure Policy, the Spending Authorization and Delegation Policy, the Capital Asset Accounting and Capitalization Policy, Materials Inventory Accounting and Financial Authorization Policy, and the Materials Management and Inventory Control Policy.

L. Business Expenses

Personnel may incur expenses as a result of activities that support Pembina’s operations, including domestic or international business travel. Pembina’s Travel, Meals and Entertainment Policy establishes expectations and best practices for business travel and meals and entertainment expenses by outlining acceptable and unacceptable use of Corporation funds.

M. Disclosure Matters

The Corporation is required to provide full, fair, accurate, timely and understandable disclosure in the reports and documents that it files with, or submits to, the United States Securities and Exchange Commission, the Alberta Securities Commission and other Canadian securities regulatory authorities, the Toronto Stock Exchange and the New York Stock Exchange, as well in other public communications made by the Corporation. Many Personnel contribute directly to the preparation of Pembina's public disclosures, or provide information as part of the process. All such Personnel must ensure that the disclosures are prepared and information is provided honestly, accurately, and in compliance with the various Pembina disclosure controls and procedures.

No information may be concealed from Pembina's external auditors, internal auditors, the Board of Directors, or the Audit Committee. It is illegal to fraudulently influence, coerce, manipulate or mislead an external auditor who is auditing Pembina's financial statements. For further information, please consult Pembina's Disclosure Policy.

N. Insider Trading / Misuse of Financial Information

All non-public information about Pembina, its partners or its customers should be considered confidential information. To use non-public information for personal financial benefit or to "tip" others who might make an investment decision on the basis of this information is not only unethical but also illegal. Information is generally considered "non-public" until the opening of markets on the second full trading day after it is disclosed to the public. This includes, but is not limited to shares or securities which the Corporation is evaluating, or is studying, as a possible acquisition or joint venture partner or with whom a major contract may be concluded. Use or disclosure of such information can result in civil or criminal penalties, for both the individuals involved and the Corporation. If you have any questions, please consult the Insider Trading Policy Administrator. For further information, please consult Pembina's Insider Trading and Reporting Policy.

O. Protection and Use of Pembina Assets and Property

All Personnel should protect, and promote the responsible use of Pembina's assets and resources and ensure their efficient use. Theft, damage, misuse, carelessness and waste have a direct impact on the Corporation's profitability. Any suspected incidents of fraud or theft should be immediately reported for investigation.

Pembina assets, such as proprietary information, funds, materials, supplies, products, computers, software, facilities and other assets owned or leased by Pembina or that are otherwise in Pembina's possession may only be used for legitimate business purposes. Pembina assets must only be used for legitimate business purposes, and may never be used for illegal purposes.

All proprietary information is the property of Pembina. Personnel must take care to protect the integrity, confidentiality and distribution of this information. Proprietary information includes any information that is not generally known to the public or would be helpful to our competitors. Examples of proprietary information are intellectual property (trademarks, patents), business and marketing plans, financial information, and Personnel information. The obligation to use proprietary information only for legitimate business purposes continues even after Personnel leave the Corporation. Confidential information, including all non-public information that might be of use to competitors or harmful to Pembina or its customers if disclosed, must not be disclosed except when disclosure is authorized or legally mandated. For further information, please consult Pembina's Privacy Policy, Acceptable Use of Information Assets Policy and Security Management Policy.

P. Workplace Environment and Relationships

Personnel are expected to conduct themselves in a professional and courteous manner with their peers and coworkers as part of the fulfillment of their work responsibilities and day-to-day relationships. Any report of violation of this standard will be investigated and may result in disciplinary action, up to and including dismissal. Conversely, filing of frivolous or false reports will also be investigated and could result in disciplinary action. For further information, please consult Pembina's Respectful Workplace Policy.

Q. Workplace Violence

The workplace must be free from violent behavior. Threatening, intimidating or aggressive behavior, as well as bullying, subjecting to ridicule or other similar behavior toward fellow Personnel or others in the workplace will not be tolerated. No weapons of any kind will be tolerated in the workplace unless such are required for property security purposes and then only after written authorization from an executive of the Corporation. For further information, please consult Pembina's Respectful Workplace Policy.

V. ADDITIONAL RESPONSIBILITIES OF LEADERSHIP

Every Leader is expected to demonstrate and promote compliance with our Policy through their day-to-day actions and decision making. Leaders are responsible for providing clear guidance to Personnel on appropriate business conduct and to enforce compliance with our Policy. Compliance includes ensuring that all Personnel who report to you complete the annual ethics training and declaration process. Leaders are expected to appropriately address all potential violations of our Policy when they are brought to their attention. Leaders may have additional specific responsibilities set out in other Pembina policies.

VI. WAIVERS AND AMENDMENTS

Any waivers of this Policy for directors or officers may be made only by the Board of Directors. Waivers in respect of employees, consultants, contractors or agents may be given by the Chief Executive Officer who shall report any waivers given to the Board of Directors at its next meeting.

Amendments to, material departures, or waivers of the provisions in this Policy that constitute a material change will be promptly publicly disclosed in accordance with applicable laws and regulations and stock exchange rules.

VII. COMPLIANCE

Personnel must comply with this Policy at all times. Any breaches of this Policy may result in disciplinary action up to and including termination of employment for cause or termination of engagement, as well as potential civil and criminal sanctions.

Reporting Questionable Practices / Breaches of the Policy

Pembina is committed to maintaining a work environment where Personnel feel free to report any irregularities they witness or become aware of with regard to any legal or regulatory matter, accounting, internal controls, auditing, or violations of this Policy, without the fear of retribution, retaliation or inaction. If Personnel observe or become aware of an actual or potential violation of this Policy or of any law, rule or regulation, whether committed by Personnel or by others associated with Pembina, it is the individual's responsibility to report the circumstances in accordance with Pembina’s Whistleblower Policy and to cooperate with any investigation by the Corporation.

This Policy is designed to provide an atmosphere of open communication for compliance issues and to ensure that an individual acting in good faith has the means to report actual or potential violations. If Personnel are unsure about the best course of action to take with respect to a particular situation, the individual is encouraged to seek guidance, using the procedures set forth in Pembina's Whistleblower Policy. Individuals who become aware of, or have any questions with respect to, any violation or potential violation of any law, rule or regulation or of this Policy, or have any concerns with respect to accounting, internal controls or auditing matters, are required to promptly report it in accordance with Pembina's Whistleblower Policy. Any reports submitted hereunder and thereunder will be promptly and thoroughly investigated and addressed in accordance with the Whistleblower Policy. It is Pembina’s responsibility to ensure that any individuals who report violations of this Policy are treated fairly and with respect.

There will be no reprisals against Personnel for good faith reporting of compliance concerns or violations. Open communication of issues and concerns without fear of retribution or retaliation is vital to the successful implementation of this Policy.

VIII. REVIEWED AND APPROVED

The Senior Vice President and Chief Legal Officer is the officer responsible for this Policy. This Policy will be reviewed annually by the Senior Vice President and Chief Legal Officer and submitted to the Officer Committee for approval, who will recommend it to the Governance, Nominating and Corporate Social Responsibility Committee for approval.

This Policy was last approved by the Officer Committee on July 16, 2018.

This Policy was last approved by the Governance, Nominating and Corporate Social Responsibility Committee on October 31, 2018.

IX. RELATED POLICIES

The following policies relate to the subject matter of this Policy:

- Health, Safety and Environment Policy
- Disclosure Policy
- Privacy Policy
- Inter-Affiliate Restricted Information Policy
- Authorization for Expenditure Policy
- Spending Authority and Delegation Policy
- Capital Asset Accounting and Capitalization Policy
- Materials Inventory Accounting and Financial Authorization Policy
- Insider Trading and Reporting Policy
- Privacy Policy
- Information Management Policy
- Acceptable Use of Information Assets Policy
- Security Management Policy
- Respectful Workplace Policy
- Whistleblower Policy

X. SUPPORTING DOCUMENTS

Rules and Conventions in support of this Policy may be created and approved by the Senior Vice President and Chief Legal Officer and the Officer Committee.