

# PEMBINA PIPELINE CORPORATION

# **ANNUAL INFORMATION FORM**

For the Year Ended December 31, 2021

February 24, 2022

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#### **GLOSSARY OF TERMS**

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

"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;

"2020 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 December 30, 2020 allowing Pembina to offer and issue, from time to time: (i) Class A Preferred Shares, (ii) bonds, debentures, notes or other evidence of indebtedness of any kind, nature or description of the Corporation, and (iii) any combination of the foregoing (together with the foregoing, collectively, the "2020 Securities") of up to an aggregate initial offering price of \$2,000,000,000 (or the equivalent thereof in one or more foreign currencies or composite currencies, including U.S. dollars) during the 25 month period that the 2020 Base Shelf Prospectus is valid, which 2020 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;

"2020 Meeting" has the meaning ascribed thereto under "Corporate Structure - Amended By-laws";

"2021 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 November 29, 2021 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) debt securities; (v) subscription receipts of Pembina; and (vi) units comprising any combination of the foregoing (together with the foregoing, collectively, the "2021 Securities") of up to \$5,000,000,000 aggregate initial offering price of 2021 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 2021 Base Shelf Prospectus is valid, which 2021 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;

"2021 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 November 29, 2021 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 2021 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;

"AEGS" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Pipeline Division – Transmission Assets";

"AEP" means Alberta Environment and Parks, a ministry of the Government of Alberta;

- "AER" means Alberta Energy Regulator;
- "Alberta Carbon Grid" has the meaning ascribed thereto under "General Developments of Pembina Developments in 2021";
- "Alliance Canada" means Alliance Pipeline Limited Partnership;
- "Alliance Pipeline" has the meaning ascribed thereto under "Description of Pembina's Business and Operations Pipelines Division Transmission Assets";
- "Alliance U.S." means Alliance Pipeline L.P.;
- "Anti-Corruption Laws" means Canada's *Criminal Code* and *Corruption of Foreign Public Officials Act*, the United States *Foreign Corrupt Practices Act*, various state laws in the United States that criminalize bribery and corruption of United States Government Officials, the *U.K. Bribery Act*, 2010, the principles described in the Organisation for Economic Co-operation and Development's *Convention on Combating Bribery of Foreign Public Officials in International Business Transactions* and its Commentaries, and any local anti-bribery or anti-corruption laws applicable to Pembina;
- "AUC" means the Alberta Utilities Commission;
- "Aux Sable" has the meaning ascribed thereto under "Description of Pembina's Business and Operations Marketing & New Ventures Division Marketing Activities";
- "Aux Sable Canada" has the meaning ascribed thereto under "Description of Pembina's Business and Operations Marketing & New Ventures Division Marketing Activities";
- "Aux Sable U.S." has the meaning ascribed thereto under "Description of Pembina's Business and Operations Marketing & New Ventures Division Marketing Activities";
- "Base Line Terminal" has the meaning ascribed thereto under "Description of Pembina's Business and Operations Pipelines Division Oil Sands and Heavy Oil Assets";
- "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" has the meaning ascribed thereto under "Description of Pembina's Business and Operations Pipelines Division Conventional Assets";
- "BRFN" means Blueberry River First Nation. See "Risk Factors General Risk Factors Indigenous Land Claims and Consultation Obligations";
- "Burstall" has the meaning ascribed thereto under "Description of Pembina's Business and Operations Facilities Division Gas Services";
- "Canadian Diluent Hub" or "CDH" has the meaning ascribed thereto under "Description of Pembina's Business and Operations Pipelines Division Conventional Assets";
- "CEAA" has the meaning ascribed thereto under "Risk Factors Risks Inherent in Pembina's Business Regulation and Legislation";
- "CEDA Plans" has the meaning ascribed thereto under "Other Information Relating to Pembina's Business Social, Community and Indigenous Engagement Community Relations";
- "Cedar LNG" means Pembina's partnership with the Haisla First Nation to develop the Cedar LNG Project;

"Cedar LNG Project" has the meaning ascribed thereto under "General Developments of Pembina – Developments in 2021";

"CER" means the Canada Energy Regulator;

"CER Act" has the meaning ascribed thereto under "Other Information Relating to Pembina's Business – Regulatory Financial Program and Industry Regulation – CER";

"Channahon Facility" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Marketing & New Ventures – Marketing Activities";

"Cheecham Lateral" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Pipelines Division – Oil Sands and Heavy Oil Assets";

"Chevron" means Chevron Canada Limited;

"Chinook Pathways" has the meaning ascribed thereto under "General Developments of Pembina – Developments in 2021";

"CKPC" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Marketing & New Ventures – New Ventures";

"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 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 24 Class A Preferred Shares, the Series 25 Class A Preferred Shares, the Series 26 Class A Preferred Shares and the Series 2021-A Class A Preferred Shares;

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

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

"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;

"COVID-19" means the novel coronavirus, the global outbreak of which was declared a pandemic by the World Health Organization in March 2020;

"Crown" has the meaning ascribed thereto under "Risk Factors – General Risk Factors – Indigenous Land Claims and Consultation Obligations";

"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 – Facilities Division – Gas Services";

"Cutbank Gas Plant" means Pembina's shallow cut sweet gas processing facility located near Grande Prairie, Alberta;

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

"DBRS" means DBRS Morningstar;

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

"Directive 088" has the meaning ascribed thereto under "Risk Factors – Risks Inherent in Pembina's Business – Environmental Costs and Liabilities";

"Drayton Valley Pipeline" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Pipelines Division – Conventional Assets";

"DRIPA" has the meaning ascribed thereto under "Risk Factors – General Risk Factors – Indigenous Land Claims and Consultation Obligations";

"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 Field Hub" means Pembina's 30 MMcf/d gas, 10 mbpd condensate and 5 mbpd water handling and condensate stabilization facility located near Fox Creek, Alberta;

"Duvernay I" means Pembina's 92 percent interest in the Duvernay I 100 MMcf/d shallow cut gas processing facility located near Fox Creek, Alberta;

"Duvernay II" means Pembina's 92 percent interest in the Duvernay II 100 MMcf/d shallow cut gas processing facility located near Fox Creek, Alberta;

"Duvernay III" means Pembina's 92 percent interest in the Duvernay III 100 MMcf/d shallow cut gas processing facility located near Fox Creek, Alberta;

"Duvernay Sour Gas Treating Facilities" means Pembina's sour gas sweetening system, amine regeneration and acid incineration facility located near Fox Creek, Alberta;

"EA Act" has the meaning ascribed thereto under "Risk Factors – General Risk Factors – Indigenous Land Claims and Consultation Obligations";

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

"ECCC" means Environment and Climate Change Canada, a department of the Government of Canada;

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

"Edmonton South Rail Terminal" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Pipelines Division – Oil Sands and Heavy Oil Assets";

"Edmonton South Terminal" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Pipelines Division – Oil Sands and Heavy Oil Assets";

"Edmonton Terminals" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Pipelines Division – Oil Sands and Heavy Oil Assets";

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

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

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

"Empress Pipeline" is an approximately 25 km pipeline of buried HVP ethane pipeline and associated riser facilities that connect the Alberta ethane market serviced by the AEGS to the Burstall ethane cavern storage facilities in Southern Saskatchewan;

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

"equity accounted investees" means Pembina's working interest in Alliance Pipeline, Aux Sable, Ruby Pipeline, CKPC, Veresen Midstream, Grand Valley I Limited Partnership, Fort Corp and Cedar LNG;

"ESG" means environmental, social and governance, the three central factors in measuring the sustainability and societal impact of a company:

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

"Federal Methane Regulations" has the meaning ascribed thereto under "Risk Factors – Risks Inherent in Pembina's Business – Environmental Costs and Liabilities";

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

"Financial Statements" means Pembina's audited consolidated financial statements for the period ended December 31, 2021;

"Five Year Government of Canada Yield" has the meaning ascribed thereto under "Description of the Capital Structure of Pembina – Subordinated Notes, Series 1 – Interest and Maturity";

"Form 40-F" means Pembina's annual report on Form 40-F for the fiscal year ended December 31, 2021 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;

"frac spread ratio" has the meaning ascribed thereto under "Risk Factors – Risks Inherent in Pembina's Business – Commodity Price Risk";

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

"GAAP" means Canadian generally accepted accounting principles, which are within the framework of IFRS;

"GGPPA" has the meaning ascribed thereto under "Other Information Relating to Pembina's Business – Regulatory Financial Program and Industry Regulation – ECCC";

"GHG" means greenhouse gas;

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

"Government Officials" (foreign or domestic) include: Government ministers and their staff; members of legislative bodies or other elected officials; judges and ambassadors; officials or employees of government departments and agencies, regardless of rank or position; any employee of any branch of government at any level: federal, state, or local; customs, immigration, tax, and police personnel; an officer or employee of any state-owned or state-controlled company, including Crown corporations; persons employed by a board, commission, or other body or authority that is established to perform a duty or function on behalf of a foreign state; Indigenous government officials; political parties, party officials, and candidates for political office; and employees of public international organizations, such as the United Nations or World Bank;

"Grand Valley" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Marketing & New Ventures Division – Transmission Assets";

"HOP" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Marketing & New Ventures Division – Marketing Activities";

"Horizon Pipeline" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Pipelines Division – Oil Sands and Heavy Oil Assets";

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

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

"HVP" means high vapour pressure;

"Hythe Developments" has the meaning ascribed thereto under "General Developments of Pembina – Developments in 2021":

"Hythe Gas Plant" means Veresen Midstream's sweet and sour gas processing facility located near Grande Prairie, Alberta;

"IAAC" means the Impact Assessment Agency of Canada;

"IAA" has the meaning ascribed thereto under "Risk Factors – Risks Inherent in Pembina's Business – Regulation and Legislation";

"ICA" means the Interstate Commerce Act of 1887 (United States);

"IFRS" means the International Financial Reporting Standards, as issued by the International Accounting Standards Board;

"Imperial" means Imperial Oil Limited;

"Inter Pipeline" means Inter Pipeline Ltd.;

"IRP" has the meaning ascribed thereto under "Other Information Relating to Pembina's Business - Safety Program";

"Jet Fuel Pipeline" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Pipelines Division – Transmission Assets";

"Jordan Cove" means the previously proposed development, construction and operation of an LNG production and export facility and related infrastructure on the west coast of the U.S. Pembina notified the FERC of its decision to not proceed with the project on December 1, 2021;

"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 near Grande Prairie, Alberta;

"Kakwa River Deep Cut Plant" means Pembina's raw to deep cut sour gas processing facility located near Grande Prairie, Alberta;

"Kakwa River Shallow Cut Plant" means Pembina's shallow cut sweet gas processing facility located near Grande Prairie, Alberta;

"Keyera" means Keyera Corporation;

"Kinder Acquisition" has the meaning ascribed thereto under "General Developments of Pembina – Developments in 2019";

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

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

"KUFPEC" means Kuwait Foreign Petroleum Exploration Company;

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

"**LGS**" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Pipelines Division – Conventional Assets":

"LPG" means liquified petroleum gas;

"MD&A" means the management's discussion and analysis of the financial and operating results of Pembina dated February 24, 2022 for the year ended December 31, 2021, 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 Medium Term Notes, Series 3A;

"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 3A" 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";

"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, collectively, the \$500 million and \$100 million aggregate principal amount of medium term notes of Pembina issued August 11, 2016 and May 28, 2020, respectively. 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, collectively, the \$400 million and \$250 million aggregate principal amount of medium term notes of Pembina issued March 26, 2018 and January 10, 2020, respectively. See "Description of the Capital Structure of Pembina Medium Term Notes";
- "Medium Term Notes, Series 11" means, collectively, the \$300 million and \$500 million aggregate principal amount of medium term notes of Pembina issued March 26, 2018 and January 10, 2020, respectively. See "Description of the Capital Structure of Pembina Medium Term Notes";
- "Medium Term Notes, Series 12" means, collectively, the \$400 million and \$250 million aggregate principal amount of medium term notes of Pembina issued April 3, 2019 and January 10, 2020, respectively. 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";
- "Medium Term Notes, Series 16" means the \$400 million aggregate principal amount of medium term notes of Pembina issued May 28, 2020. See "Description of the Capital Structure of Pembina Medium Term Notes";
- "Medium Term Notes, Series 17" means the \$500 million aggregate principal amount of medium term notes of Pembina issued on December 10, 2021. See "Description of the Capital Structure of Pembina Medium Term Notes";
- "Medium Term Notes, Series 18" means the \$500 million aggregate principal amount of medium term notes of Pembina issued on December 10, 2021. See "Description of the Capital Structure of Pembina Medium Term Notes";
- "Mitsue Pipeline" has the meaning ascribed thereto under "Description of Pembina's Business and Operations Pipelines Division Oil Sands and Heavy Oil Assets";
- "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 near Grande Prairie, Alberta;
- "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 approximately 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;

"NCIB" has the meaning ascribed thereto under "General Developments of Pembina - Developments in 2021";

"NEBC Montney Infrastructure" includes an area production connection to Pembina's Birch terminal as well as upgrades to the terminal including additional storage and pump stations and minor site modifications to support additional volumes on the NEBC Pipeline and Pembina's downstream pipelines;

"NEBC Pipeline" has the meaning ascribed thereto under "Description of Pembina's Business and Operations — Pipelines Division — Conventional Assets";

"New Federal Climate Plan" has the meaning ascribed thereto under "Risk Factors – Risks Inherent in Pembina's Business – Environmental Costs and Liabilities";

"NGA" means the Natural Gas Act of 1938 (United States);

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

"Nipisi Pipeline" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Pipelines Division – Oil Sands and Heavy Oil Assets";

"North 40 Terminal" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Pipelines Division – Oil Sands and Heavy Oil Assets";

"Northern Pipeline" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Pipelines Division – Conventional Assets";

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

"NYSE" means the New York Stock Exchange;

"**OMS**" has the meaning ascribed thereto under "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 and as further amended effective February 26, 2020;

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

"Palermo Conditioning Plant" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Marketing & New Ventures Division – Marketing Activities";

"Parallel" has the meaning ascribed thereto under "Directors and Officers - Directors of Pembina";

"PDH" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Marketing & New Ventures Division – New Ventures";

"PDH/PP Facility" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Marketing & New Ventures Division – New Ventures";

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

"Peace Pipeline" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Pipelines Division – Conventional Assets";

"Pembina Medium Term Notes" means, collectively, 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, the Medium Term Notes, Series 15, the Medium Term Notes, Series 16, the Medium Term Notes, Series 17 and the Medium Term Notes, Series 18;

"PG&E" has the meaning ascribed thereto under "Directors and Officers – Executive Officers of Pembina";

"Phase VII Expansion" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Pipelines Division – Conventional Assets";

"Phase VIII Expansion" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Pipelines Division – Conventional Assets";

"Phase IX Expansion" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Pipelines Division – Conventional Assets";

"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 "Description of the Capital Structure of Pembina - Common Shares";

"PMM" has the meaning ascribed thereto under "Other Information Relating to Pembina's Business – Operations and Maintenance":

"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;

"PP" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Marketing & New Ventures Division – New Ventures";

"Prairie Rose Pipeline" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Marketing & New Ventures Division – Marketing Activities";

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

"Prince Rupert Terminal Expansion" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – 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";

"Redwater Complex" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Facilities Division – NGL Services";

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

"Revolving Credit Facility" has the meaning ascribed thereto under "Description of the Capital Structure - Credit Facilities";

"RFS I" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Facilities Division – NGL Services";

"RFS II" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Facilities Division – NGL Services";

"RFS III" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Facilities Division – NGL Services";

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

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

"Ruby Pipeline" has the meaning ascribed thereto under "Description of Pembina's Business and Operations — Pipelines Division — Transmission Assets";

"SACC" has the meaning ascribed thereto under "Risk Factors – Risk Inherent to Pembina's Business – Regulation and Legislation";

"S&P" means S&P Global Ratings, 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 220 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 – Facilities Division – Gas Services";

"Saturn Gas Plant" means Veresen Midstream's sweet gas processing facility located near Dawson Creek, British Columbia;

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

"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 – Facilities Division – Gas Services";

"Senior Note Indenture" means the indenture dated March 29, 2011 between Pembina and Computershare Trust Company of Canada, as further supplemented by the second supplemental note indenture dated October 24, 2014, and as further supplemented by the third supplemental indenture dated April 4, 2018 providing for the issuance of the Pembina Medium Term Notes. Certain subsidiaries of Pembina are also party to the Senior Note Indenture as former guarantors thereunder;

"Septimus Pipeline" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Marketing & New Ventures Division – Marketing Activities";

"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 and redeemed on March 1, 2021. 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 and redeemed on June 1, 2021. 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 2021-A Class A Preferred Shares" means the cumulative redeemable fixed-to-fixed rate Class A Preferred Shares, Series 2021-A. See "Description of the Capital Structure of Pembina – Class A Preferred Shares";

"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 "Other Information Relating to Pembina's Business – Security Management Program";

"Steeprock Gas Plant" means Veresen Midstream's sour gas processing facility located near Grande Prairie, Alberta;

"Sturgeon Refinery" means the crude oil upgrader, built and operated by North West Redwater Partnership in Sturgeon County, Alberta;

"Subordinated Note Indenture" means the indenture dated January 25, 2021 between Pembina and Computershare Trust Company of Canada;

"Subordinated Notes, Series 1" has the meaning ascribed thereto under "General Developments of Pembina – Developments in 2021";

"Sunrise Gas Plant" means Veresen Midstream's sweet gas processing facility located near Dawson Creek, British Columbia;

"Swan Hills Pipeline" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Pipelines Division - Oil Sands and Heavy Oil Assets";

"Syncrude Pipeline" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Pipelines Division – Oil Sands and Heavy Oil Assets";

"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 – Pipelines Division – Conventional Assets – 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 HVP hydrocarbon products from Taylor, British Columbia to Boundary Lake, Alberta;

"throughput" means volume of product delivered through a pipeline or terminal;

"TIER" has the meaning ascribed thereto under "Risk Factors – Risks Inherent in Pembina's Business – Environmental Costs and Liabilities";

"Tower Gas Plant" means Veresen Midstream's sweet gas processing facility located near Dawson Creek, British Columbia;

"TSX" means the Toronto Stock Exchange;

"UNDRIP" has the meaning ascribed thereto under "Risk Factors – General Risk Factors – Indigenous Land Claims and Consultation Obligations";

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

"Vancouver Wharves" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Facilities Division – NGL Services";

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

"Veresen" means Veresen Inc.;

"Veresen Acquisition" means the acquisition of Veresen, pursuant to which Pembina acquired all of the issued and outstanding common shares of Veresen and Veresen Preferred Shares, by way of a plan of arrangement under the ABCA, in accordance with the terms and conditions of an arrangement agreement dated May 1, 2017 between Pembina and Veresen;

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

"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 Senior 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 Medium Term Notes, Series 3A;

"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;

"Wapiti Condensate Lateral" means a 12-inch, approximately 30 km pipeline which connects condensate volumes from a third-party owned facility in the Pipestone Montney region into the Peace Pipeline;

"WCSB" means the Western Canadian Sedimentary Basin;

"Western Pipeline" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – Pipelines Division – Conventional Pipelines";

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

"Younger" has the meaning ascribed thereto under "Description of Pembina's Business and Operations – 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 23, 2022, the daily exchange rate reported by the Bank of Canada, was C\$1.00 equals US\$0.7863.

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, 2021.

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:

MW

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 kilometres km  $CO_2^e$ carbon dioxide equivalent

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	<u>To</u>	Multiply by			
bbls	cubic metres	0.159			
cubic metres	bbls	6.293			
miles	kilometres	1.609			
kilometres	miles	0.621			

## **NON-GAAP FINANCIAL 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 Pembina has disclosed certain financial measures and ratios within this Annual Information Form, that are not specified, defined or determined in accordance with GAAP and which are not disclosed in Pembina's Financial Statements. Non-GAAP financial measures depict historical or expected future financial performance, financial position or cash flow of a company, (a) with respect to their composition, exclude amounts that are included in, or include amounts that are excluded from, the composition of the most directly comparable financial measure disclosed in the primary financial statements of the company, (b) are not disclosed in the financial statements of the company and (c) are not a ratio, fraction, percentage or similar representation. Non-GAAP ratios are financial measures disclosed by a company that is in the form of a ratio, fraction, percentage or similar representation that has a non-GAAP financial measure as one or more of its components, and that are not disclosed in the financial statements of the company. These non-GAAP financial measures and ratios, together with measures and ratios specified, defined and determined in accordance with GAAP, are used by management to evaluate the performance of Pembina and its businesses and to provide additional useful information respecting Pembina's financial performance to investors and analysts.

In this Annual Information Form, Pembina has disclosed the following non-GAAP financial measures and non-GAAP ratios: net revenue, adjusted earnings before interest, taxes, depreciation and amortization (adjusted EBITDA) and adjusted EBITDA per common share. These non-GAAP financial measures and non-GAAP ratios do not have any standardized meaning under IFRS and may not be comparable to similar financial measures disclosed by other issuers. These measures and ratios should not, therefore, be considered in isolation or as a substitute for, or superior to, measures and ratios of financial performance specified, defined or determined in accordance with IFRS, including revenue, earnings (loss) before income tax and earnings per share.

Except as otherwise described herein, these non-GAAP financial measures are calculated on a consistent basis from period to period. Specific reconciling items may only be relevant in certain periods.

"Net revenue" is a non-GAAP financial measure which is defined as total revenue less cost of goods sold including product purchases. The most directly comparable financial measure to net revenue that is specified, defined and determined in accordance with GAAP and disclosed in Pembina's Financial Statements is revenue.

"Adjusted earnings before interest, taxes, depreciation and amortization" ("adjusted EBITDA") is a non-GAAP financial measure and is calculated as earnings 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. Adjusted EBITDA also includes adjustments to earnings for losses (gains) on disposal of assets, transaction costs incurred in respect of acquisitions, dispositions and restructuring, 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 most directly comparable financial measure to adjusted EBITDA that is specified, defined and determined in accordance with GAAP and disclosed in Pembina's financial statements is earnings before income tax.

"Adjusted EBITDA per common share" is a non-GAAP ratio which are calculated by dividing adjusted EBITDA by the weighted average number of common shares outstanding.

Additional information relating to each non-GAAP financial measure and non-GAAP ratio disclosed in this Annual Information Form, including disclosure of the composition of each non-GAAP financial measure and non-GAAP ratio, an explanation of how each non-GAAP financial measure and non-GAAP ratio provides useful information to investors and the additional purposes, if any, for which management uses each non-GAAP financial measure and non-GAAP ratio, an explanation of the reason for any change in the label or composition of each non-GAAP financial measure and non-GAAP ratio from what was previously disclosed and a quantitative reconciliation of each non-GAAP financial measure to the most directly comparable financial measure that is specified, defined and determined in accordance with GAAP, is contained in the "Non-GAAP & Other Financial Measures" section of the MD&A, which section is incorporated by reference in this Annual Information Form. The MD&A is available on SEDAR at www.sedar.com, EDGAR at www.sec.gov and Pembina's website at www.pembina.com.

#### 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, including expected 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;
- the ongoing impacts of the COVID-19 pandemic on Pembina and Pembina's response thereto;
- treatment under existing and proposed governmental regulatory regimes, including taxes, environmental, project assessment and GHG regulations and related abandonment and reclamation obligations, and Indigenous, 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
  acceptable rates, future contractual obligations, future financing options, future renewal of its credit facilities,
  availability of capital to fund growth plans, investments operating obligations and dividends and the use of proceeds
  from financings;
- future demand for Pembina's infrastructure and services;
- statement regarding Pembina's investment relating to managing its environmental liability and the benefits thereof;
- 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;
- 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 and ESG-related practices and targets;
- 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, carbon prices, tax rates and exchange rates;
- the ability of Pembina to maintain current credit ratings;
- the availability and cost of capital to fund future capital requirements relating to existing assets, projects and the repayment or refinancing of existing debt as it becomes due;
- 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, current operations or the repayment or refinancing of existing debt as it becomes due;
- 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 Indigenous and landowner consultation requirements;
- the impact of competitive entities and pricing;
- 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 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, 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;
- risks related to the current and potential impacts of the COVID-19 pandemic;
- constraints on, or the unavailability of, adequate infrastructure;
- the political environment in North America and elsewhere, and public opinion;
- ability to access various sources of debt and equity capital;
- · changes in credit ratings;
- counterparty credit risk;
- 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 <sup>(1)</sup>	Jurisdiction of Incorporation/ Formation/ Organization	Ownership
Pembina Empress NGL Partnership	Alberta	100%
Pembina Gas Services Limited Partnership	Alberta	100%
Pembina Holding Canada L.P.	Alberta	100%
Pembina Infrastructure and Logistics L.P.	Alberta	100%
Pembina Midstream Limited Partnership	Alberta	100%
Pembina Oil Sands Pipeline L.P.	Alberta	100%
Pembina Pipeline	Alberta	100%
Pembina Cochin LLC	Delaware U.S.	100%

<sup>(1)</sup> 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 Morgan Canada 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.

On January 22, 2021, Pembina filed articles of amendment under the ABCA to create the Series 2021-A Class A Preferred Shares in connection with the issuance of the Subordinated Notes, Series 1. On January 25, 2021, prior to the issuance of such Series 2021-A Preferred Shares, Pembina filed articles of amendment amending and restating the terms of the Series 2021-A Class A Preferred Shares.

See "Description of the Capital Structure of Pembina".

# **Amended By-laws**

On May 8, 2020, at the annual and special meeting of Shareholders (the "2020 Meeting"), Shareholders confirmed Pembina's amended and restated By-law No. 1 to, among other things: (i) permit only one officer or director, rather than two officers or directors, to execute certain documents on behalf of the Company, and (ii) provide that the Chair of the Board of Directors does not receive a second or casting vote when there is a voting deadlock at a meeting of the Board of Directors, bringing Pembina's by-laws in line with its peers and best corporate governance practices. At the 2020 Meeting, Shareholders also confirmed By-law No. 2, a by-law relating to the advance notice for the nomination of directors, which provides a framework for nominating directors for election to the Board of Directors.

#### **GENERAL DEVELOPMENTS OF PEMBINA**

During the three-year period ending on December 31, 2021 and 2022 year-to-date, Pembina continued to execute its business plan and advance its growth strategy as discussed below.

# **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 the Phase VIII Expansion. Complete sanctioning of the Phase VIII Expansion was 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 had an estimated capital cost of approximately \$500 million and is supported by 10-year contracts with take-or-pay provisions. The Phase VIII Expansion was anticipated to be placed into service in stages starting in 2020 through the first half of 2022, subject to regulatory and environmental approvals.
- Pembina and PIC announced the positive final investment decision on the previously announced \$4.5 billion, 550,000 tonne per annum integrated PDH/PP Facility, through their equally-owned joint venture entity, CKPC. Pembina's net investment was expected to be \$2.5 billion. This project was 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.
- 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 continued to amortize at US\$16 million per quarter (US\$8 million net to Pembina), beginning March 30, 2019, until a final bullet payment of US\$78 million (US\$39 million net to Pembina) was payable on the amended maturity date.
- Mar 29 Pembina placed its 45 MW co-generation facility at the Redwater Complex 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 then active medium term note 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 and KUFPEC to construct the Duvernay Sour Treatment Facilities which 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 Treatment Facilities are expected to have a 20-year contractual life and will be back-stopped by fixed-return arrangements. The Duvernay Sour Treatment Facilities had 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 \$1 billion non-revolving term loan facility that was entered into on March 9, 2018, 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".
- 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 \$2.6 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, 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 had 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 was 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 cogeneration facility at Empress, with an expected in-service date in mid-2022, subject to regulatory and environmental approval.

Additionally, Pembina announced its ESG performance highlights for 2018, highlighting that Pembina: (i) continued to operate safely and reliably with zero reported significant failures; (ii) achieved a notable decrease in the frequency of motor vehicle incidents, after having implemented a variety of driving improvement initiatives; (iii) invested over \$11 million within communities in which it operates; and (iv) recorded more than 5,500 hours volunteered among its employees.

Finally, Pembina announced: (i) the Company's Carbon Stand, as evidence of its commitment to reducing GHG emission intensity in each of Pembina's businesses, and (ii) the Company's Inclusion & Diversity Stand, demonstrating the Company's commitment to diversity, equal opportunity and ensuring that employees have the ability to thrive in an inclusive environment.

- 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 five percent increase in its monthly Common Share dividend rate from \$0.20 per Common Share to \$0.21 per Common Share.

# **Developments in 2020**

- Jan 7 Pembina announced the execution of a lump sum engineering, procurement and construction contract (the "PDH EPC") related to the construction of the CKPC PDH facility within its integrated PDH and PP upgrading facility. In connection with the execution of the PDH EPC, CKPC fixed approximately 60 percent 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 of each series, 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 under its Revolving Credit Facility, 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".
- Feb 3 CKPC entered into a reimbursable engineering and procurement services contract with TR Canada E&C Inc. for the PP upgrading facility.
- 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, Pembina and PIC, through the completion of construction on a several basis. The final maturity date of the term facility and revolving facility is February 27, 2027.
- The NEBC Montney Infrastructure was placed into service. The NEBC Montney Infrastructure is supported by long-term fee-for-service and cost-of-service arrangements. In conjunction with the NEBC Montney Infrastructure, a customer also entered into long-term, firm service agreements containing take-or-pay commitments on downstream pipelines.
- In response to the COVID-19 pandemic and the significant decline in global energy prices, Pembina announced a \$900 million to \$1.1 billion reduction in its 2020 capital spending plans, an approximately 40 to 50 percent reduction from the Company's previously announced capital budget of \$2.3 billion. In connection therewith, Pembina also announced that the following previously disclosed expansion projects would be deferred: (i) the Phase VII Expansion, the Phase VIII Expansion and the Phase IX Expansion, representing \$1.55 billion of total capital; (ii) Empress Co-generation Facility, representing \$120 million of total capital; (iii) Prince Rupert Terminal Expansion, representing \$175 million of capital; and (iv) Pembina's investment in the PDH/PP Facility, representing \$2.7 billion of capital, net to Pembina. Additional discretionary capital spending was also removed from Pembina's 2020 capital budget.
- Mar 19 Pembina announced that it received a certificate of approval from FERC for Jordan Cove.
- Mar The Wapiti Condensate Lateral and Duvernay Sour Gas Treating Facilities were placed into service.
- Apr 6 Pembina announced that it entered into an \$800 million unsecured revolving credit facility with certain existing key lenders. The credit facility is available to Pembina for general corporate purposes, providing the Company with additional liquidity and flexibility as required and has an initial term of two years. The terms and conditions of such revolving credit facility, including financial covenants, are substantially similar to Pembina's Revolving Credit Facility.
- May 7 Pembina announced that it entered into an unsecured US\$250 million non-revolving term loan with a global bank, providing further additional liquidity and flexibility in Pembina's capital structure. The USD non-revolving term loan has an initial term of five years. The terms and conditions of such non-revolving term loan, including financial covenants, are substantially similar to Pembina's existing Revolving Credit Facility.
- May 8 Mr. Bob Michaleski and Mr. Jeff Smith retired from the Board after not standing for re-election. Mr. Robert G. Gwin joined the Board of Directors after Shareholders approved his appointment to the Board of Directors at the 2020 Meeting and subsequent to the 2020 Meeting, Ms. Cynthia Carroll was appointed to the Board of Directors by the Board.
- May 28 Pembina issued and sold \$100 million aggregate principal amount through a re-opening of its Medium Term Notes, Series 7 and \$400 million aggregate principal amount of Medium Term Notes, Series 16 pursuant to its 2019 MTN Prospectus dated August 30, 2019, as supplemented by related pricing supplements dated May 26, 2020. Pembina used the net proceeds from the sale of the Medium Term Notes, Series 7 and Series 16, to repay indebtedness under its Revolving Credit Facility, 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".
- June The Phase VI Expansion was placed into service.

- Oct The fractionation and terminalling facilities at Empress were placed into service.
- Dec 3 Pembina released its 2020 Sustainability Report, which outlines the Company's approach, recent performance and future initiatives for ESG factors that are material to Pembina's stakeholders and business. See "Other Information Relating to Pembina's Business Environmental Matters and Environmental Stewardship".
- Dec 14 Pembina provided its financial guidance for 2021, including capital expenditures in the aggregate amount of \$785 million.

Pembina announced plans to re-activate the Phase VII Expansion under a revised scope. The capital cost estimate for the Phase VII Expansion was revised lower, by approximately \$175 million to \$775 million. The inservice date of the Phase VII Expansion was revised to the first half of 2023. As a result of revisions to the scope of the Phase VII Expansion, its estimated capacity was reduced from 240 mbpd to 160 mbpd.

Pembina also announced that it was proceeding with the restart of the Empress Co-generation Facility at its natural gas liquids and processing and terminalling facilities in Empress, Alberta. The capital cost estimate for the Empress Co-generation Facility is expected to be \$120 million. The expected in-service date for the Empress Co-generation Facility is the first quarter of 2023, subject to regulatory and environmental approvals.

Additionally, Pembina announced that it was suspending the execution of the PDH/PP Facility indefinitely due to the significant risks arising from the COVID-19 pandemic, most notably with respect to costs under the PDH EDC which is under force majeure condition. As a result of such uncertainty, Pembina announced that it expected to recognize a material impairment on the project in the fourth quarter of 2020. There are no amounts drawn on the CKPC credit facility.

Further, Pembina announced that it expected to recognize a material impairment on its 50 percent convertible, cumulative preferred interest in the Ruby Pipeline as a result of: (i) firm contract expiries and related prevailing interruptible tariff rates, (ii) Rockies basin fundamentals, and (iii) ongoing uncertainty on the timing of the approvals surrounding Jordan Cove.

Dec 30 Pembina filed its 2020 Base Shelf Prospectus.

## **Developments in 2021**

- Jan 19 The FERC denied a petition on Jordan Cove for a declaratory order that the Oregon Department of Environmental Quality waived its authority to issue a water quality certification pursuant to Section 401 of the Clean Water Act for failure to act within the statutorily-mandated period.
- Pembina issued and sold \$600 million aggregate principal amount of 4.80 percent Fixed-to-Fixed Rate Subordinated Notes, Series 1 due January 25, 2081 (the "Subordinated Notes, Series 1") pursuant to its 2020 Base Shelf Prospectus, as supplemented by a prospectus supplement dated January 12, 2021. In connection with the issuance of the Subordinated Notes, Series 1, Pembina also issued 600,000 Series 2021-A Class A Preferred Shares (the "Series 2021-A Class A Preferred Shares") to be held in trust by Computershare Trust Company of Canada to satisfy Pembina's obligations under the Subordinated Note Indenture for the Subordinated Notes, Series 1. Pembina expects to use the net proceeds from the sale of the Subordinated Notes, Series 1 to redeem or repurchase Pembina's Series 11 Class A Preferred Shares and its Series 13 Class A Preferred Shares, to repay outstanding indebtedness, as well as for general corporate purposes. See "Description of the Capital Structure of Pembina Subordinated Notes" and "Description of the Capital Structure of Pembina Subordinated Notes" and "Description of the Capital Structure of Pembina Subordinated Notes" and "Description of the Capital Structure of Pembina Subordinated Notes" and "Description of the Capital Structure of Pembina Subordinated Notes" and "Description of the Capital Structure of Pembina Subordinated Notes" and "Description of the Capital Structure of Pembina Subordinated Notes" and "Description of the Capital Structure of Pembina Subordinated Notes" and "Description of the Capital Structure of Pembina Subordinated Notes" and "Description of the Capital Structure of Pembina Subordinated Notes" and "Description of the Capital Structure of Pembina Subordinated Notes" and "Description of the Capital Structure of Pembina Subordinated Notes" and "Description of the Capital Structure of Pembina Subordinated Notes" and "Description of the Capital Structure of Pembina Subordinated Notes" and "Description of the Capital Structure of Pembina Subordina
- Feb 8 The United States Secretary of Commerce for Oceans and Atmosphere upheld the Oregon Department of Land Conservation and Development's objection to the Jordan Cove certification of consistency under the Coastal Zone Management Act, denying Pembina's appeal on the matter.
- Pembina announced the acceptance by the TSX of Pembina's notice to commence a normal course issuer bid (the "NCIB") to purchase up to five percent of its outstanding Common Shares. The NCIB commenced on March 2, 2021 and expires on the earlier of March 1, 2022 and the date on which Pembina has acquired the maximum number of Common Shares allowable under the NCIB or the date on which Pembina otherwise decides not to make any further repurchases under the NCIB.
- Mar 1 Pembina redeemed all of its 6.8 million issued and outstanding Series 11 Class A Preferred Shares for a redemption price equal to \$25.00 per Series 11 Class A Preferred Share, less any tax required to be deducted or withheld by Pembina. The total redemption price to Pembina was \$170 million. The Series 11 Class A Preferred Shares were subsequently cancelled by Pembina.
- Mar 19 Pembina's Prince Rupert Terminal entered service.
- Mar 15 Pembina and its 45 percent owned joint venture, Veresen Midstream, safely completed the start-up of an expansion of 125 MMcf/d (56 MMcf/d net to Pembina) of sour gas processing at Veresen Midstream's existing Hythe Gas Plant, approximately 60 km of 12-inch sour gas pipeline, a compressor station and various Pembina-owned laterals (the "Hythe Developments").
- Mar 25 Pembina cancelled its \$800 million revolving credit facility that was entered into on April 6, 2020 to provide additional liquidity and flexibility in Pembina's capital structure and to ensure access to adequate financial resources in response to the market conditions caused by the COVID-19 pandemic.
- Mar 31 Two of Pembina's executive officers, Paul Murphy, Senior Vice President & Corporate Services Officer, and Jason Wiun, Senior Vice President & Chief Operating Officer, Pipelines, retired.
- Apr 1 As a result of the retirements of Messrs. Murphy and Wiun, Janet Loduca was promoted to Senior Vice President, External Affairs and Chief Legal and Sustainability Officer and Harry Andersen was appointed Senior Vice President & Chief Operating Officer, Pipelines.
- Apr 28 DBRS upgraded its rating to 'BBB (high)' in respect of Pembina's Medium Term Notes, 'BBB (low)' to the Series 1 Subordinated Notes and 'Pfd-3 (high)' to each issued series of Pembina's Class A Preferred Shares, other than the Series 2021-A Class A Preferred Shares, which are deliverable to the holders of the Series 1 Subordinated Notes following the occurrence of certain bankruptcy or insolvency events in respect of Pembina.
- Apr 30 Pembina extended its Revolving Credit Facility and unsecured operating facility thereunder to June 1, 2026 and May 31 2022, respectively.
- May 6 Pembina announced that it entered into a one-year agreement with a subsidiary of Mitsui & Co. for the purchase of substantially all of the post-commissioning cargos shipped from Pembina's Prince Rupert Terminal.

Further, Pembina announced that it signed a long-term, 100 MW power purchase agreement with a subsidiary of TransAlta Corporation, that supports development of the 130 MW Garden Plain Wind Project in Alberta, with an expected start-up in the second half of 2022. The power purchase agreement provides cost-competitive renewable energy and is expected to generate approximately 135,000 tonnes of  $CO_2^e$  offsets annually, or an estimated total of 1.8 million tonnes of  $CO_2^e$  emissions offsets.

June 1 Pembina and Inter Pipeline announced that they entered into an arrangement agreement pursuant to which Pembina would acquire all of the issued and outstanding shares of Inter Pipeline by way of a plan of arrangement under the ABCA for consideration of 0.5 of a Common Share for each Inter Pipeline common share.

In addition, Pembina redeemed all of its 10.0 million issued and outstanding Series 13 Class A Preferred Shares for a redemption price equal to \$25.00 per Series 13 Class A Preferred Share, less any tax required to be deducted or withheld by Pembina. The total redemption price to Pembina was \$250 million. The Series 13 Class A Preferred Shares were subsequently cancelled by Pembina.

Pembina also placed the expansion of the Vancouver Wharves terminal into service, adding 200,000 barrels of additional refined product storage and enhancements to the railcar unloading capabilities.

- June 8 Pembina announced that it had entered into a partnership agreement with the Haisla Nation whereby Pembina became the Haisla Nation's partner in the development of the proposed Cedar LNG Project, an approximately \$1.5 billion (net to Pembina) floating LNG facility in Kitimat, British Columbia, Canada, within the traditional territory of the Haisla Nation (the "Cedar LNG Project").
- June 14 Pembina announced that it was chosen by Western Indigenous Pipeline Group to be the industry partner in the formation of Chinook Pathways Partnership ("Chinook Pathways"), an Indigenous-led partnership working to organize a number of First Nation communities to pursue ownership of the Trans Mountain Pipeline following completion of the construction of the Trans Mountain Expansion.

Pembina also announced plans to reactivate the Phase IX Expansion, which will add capacity in the northwest Alberta-to-Gordondale, Alberta corridor to accommodate increased activity in the northeast British Columbia Montney play. The project has a revised estimated cost of approximately \$120 million, which reflects the addition of a Wapiti-to-Kakwa corridor pump station offset by cost savings identified though value engineering. The Phase IX Expansion has an expected in-service date in the second half of 2022.

- June 17 Pembina and TC Energy Corporation announced their plan to jointly develop a carbon transportation and sequestration system (the "Alberta Carbon Grid") which, when fully constructed, is expected to be capable of transporting more than 20 million tonnes of CO<sub>2</sub> annually. Designed to be an open-access system, the Alberta Carbon Grid is intended to serve as a key component of Alberta's emerging carbon capture utilization and storage industry.
- July 26 Pembina announced that it terminated the arrangement agreement with Inter Pipeline providing for the proposed acquisition by Pembina of Inter Pipeline. In connection with the termination, Inter Pipeline paid Pembina the \$350 million termination fee provided for in the agreement.
- Oct 20 Pembina announced its commitment to reduce the Company's GHG emissions intensity by 30 percent by 2030, relative to baseline 2019 emissions.
- Nov 19 Pembina announced that Michael Dilger stepped down as President and Chief Executive Officer of Pembina.

  As a result, the Board of Directors named Scott Burrows as interim President and Chief Executive Officer and appointed Cameron Goldade interim Chief Financial Officer.
- Nov 29 Pembina filed its 2021 Base Shelf Prospectus and 2021 MTN Prospectus.
- Dec 1 Pembina notified FERC of its decision to not proceed with the proposed Jordan Cove project and requested that the FERC vacate the authorizations issued for the project.
- Dec 8 Pembina provided its financial guidance for 2021, including capital expenditures in the aggregate amount of \$655 million.

Pembina also announced the capital cost estimate for the Phase VII Expansion was revised lower, by approximately \$110 million to \$665 million and that the in-service date for the Phase VII Expansion was now anticipated to be mid-2022.

Pembina also announced additional ESG targets relating to employee equity, diversity and inclusion, with a focus on advancing representation of women and other underrepresented groups at all levels of the organization. See "Other Information Relating to Pembina's Business — Employees".

Dec 10 Pembina issued and sold \$500 million aggregate principal amount of Medium Term Notes, Series 17 and \$500 million aggregate principal amount of Medium Term Notes, Series 18 pursuant to its 2021 MTN Prospectus, as supplemented by related pricing supplements dated December 8, 2021. Pembina used the net proceeds from the sale of the Medium Term Notes, Series 17 and Series 18 to repay short-term indebtedness under its Revolving Credit Facility as well as for other general corporate purposes. See "Description of the Capital Structure of Pembina – Medium Term Notes".

# Developments to date in 2022

- Pembina and an affiliate of TC Energy Corporation submitted a proposal to jointly develop the Alberta Carbon Grid, in response to the Government of Alberta's request for a full project proposal, detailing Pembina and TC Energy Corporation's interest in developing and operating a carbon sequestration hub to serve emissions sources in the Alberta industrial heartland region.
- Feb 8 Cedar LNG's application for an Environmental Assessment Certificate was submitted to the BCEAO, moving the project into the 180-day application review phase. Cedar LNG also entered into an agreement for the frontend engineering and design (FEED) of the Cedar LNG Project's proposed floating liquefaction, storage and offloading unit.
- Feb 23 Pembina announced that Scott Burrows was appointed as President and Chief Executive Officer of Pembina. Mr. Burrows was also appointed to the Board of Directors.

Pembina also announced that Harry Andersen, formerly Senior Vice President & Chief Operating Officer, Pipelines departed the Company to pursue other opportunities. As a result, the Board of Directors appointed Jaret Sprott as Senior Vice President & Chief Operating Officer, Pipelines and Facilities.

Further, Pembina announced that Eva Bishop would be joining Pembina as Senior Vice President, Corporate Services, with her appointment effective upon her relocation from London, United Kingdom to Calgary, Alberta in April.

#### **DESCRIPTION OF PEMBINA'S BUSINESS AND OPERATIONS**

# **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 inclusive work culture; and
- Communities welcome us and recognize the net positive impact of our social and environmental commitment.

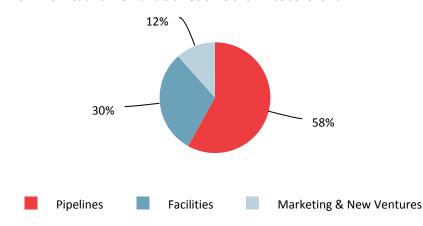
#### **Overview of Pembina's Business**

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 gas and 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 Pipeline Corporation is a leading energy transportation and midstream service provider that has served North America's energy industry for more than 65 years. Pembina owns an integrated network of hydrocarbon liquids and natural gas pipelines, gas gathering and processing facilities, oil and natural gas liquids infrastructure and logistics services, and a growing export terminals business. Through our integrated value chain, we seek to provide safe and reliable infrastructure solutions which connect producers and consumers of energy across the world, support a more sustainable future and benefit our customers, investors, employees and communities. For more information, please visit pembina.com.

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.

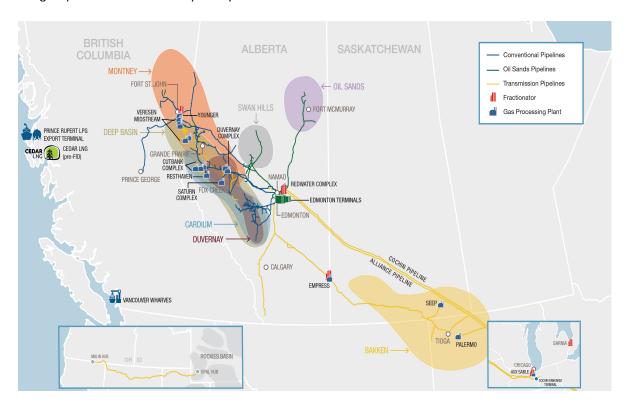
The adjusted EBITDA<sup>(1)</sup> in 2021 from each of Pembina's three divisions<sup>(2)</sup> was as follows:



<sup>(1)</sup> See "Non-GAAP Financial Measures".

<sup>(2)</sup> Excluding corporate segment and inter-segment eliminations.

The following map illustrates Pembina's primary assets:



The following table sets forth certain financial highlights for 2021 and 2020.

Financial Highlights (in \$ millions unless otherwise noted)

	Pipelines Facil		ities	Marketing & New Ventures		Corporate & Inter-segment Eliminations		Total		
(\$ millions)	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
Volumes <sup>(1)</sup>	2,586	2,623	870	877	_	_		_	3,456	3,500
Revenue	2,279	2,251	1,363	1,231	5,577	2,956	(592)	(485)	8,627	5,953
Cost of goods sold, including product purchases	_	_	6	11	5,017	2,815	(334)	(317)	4,689	2,509
Net revenue <sup>(2)</sup>	2,279	2,251	1,357	1,220	560	141	(258)	(168)	3,938	3,444
Earnings (loss) before income tax	(70)	(992)	160	143	224	(684)	(181)	(114)	133	(1,647)
Earnings (loss)									1,242	(316)
Earnings (loss) per common share – basic (dollars)									2.00	(0.86)
Earnings (loss) per common share – diluted (dollars)									1.99	(0.86)
Adjusted EBITDA <sup>(2)</sup>	2,102	2,208	1,097	1,012	420	193	(186)	(132)	3,433	3,281
Adjusted EBITDA per common share – basic (dollars) <sup>(2)</sup>			•			•		•	6.24	5.97

Volumes for Pipelines and Facilities are revenue volumes, defined as physical volumes plus volumes recognized from take-or-pay commitments. Volumes for Marketing & New Ventures are marketed NGL volumes. Volumes are stated in mboe/d, with natural gas volumes converted to mboe/d from MMcf/d at a 6:1 ratio. Marketed NGL volumes are excluded from volumes to avoid double counting.

Further discussion of financial and operational results and new developments for Pembina's business segments for the years ended December 31, 2021 and 2020 is contained in the section "Segment Results" in the MD&A, which section is incorporated by reference herein.

<sup>(2)</sup> See the "Non–GAAP Financial Measures" section.

# **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<sup>(1)</sup>, above ground storage of 11 mmbls<sup>(1)</sup> and rail terminalling capacity of approximately 105 mboe/d<sup>(1)</sup> within its conventional, oil sands and heavy oil, and transmission assets. The conventional assets include strategically located pipelines and terminalling hubs that gather and transport light and medium crude oils, condensate and natural gas liquids from western Alberta and northeast British Columbia to the Edmonton, Alberta area for further processing or transportation on downstream pipelines. The oil sands and heavy oil assets transport heavy and synthetic crude oil produced within Alberta to the Edmonton, Alberta 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.

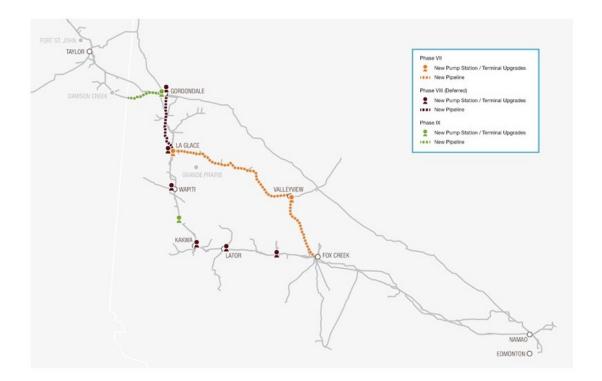
(1) Net capacity; excludes projects under development.

## **Conventional Assets**

Pembina's primary conventional assets include the following:

- The Peace Pipeline system ("Peace Pipeline"), which includes approximately 3,750 km of pipelines, including gathering laterals, that transport ethane mix ( $C_2+$ ), propane mix ( $C_3+$ ), crude oil and condensate from northwestern Alberta to Edmonton, Alberta and to Fort Saskatchewan, Alberta.
- The Northern Pipeline system ("Northern Pipeline"), 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 Pipeline and Northern Pipeline systems. These expansions are discussed below.



- The Phase VII Expansion ("Phase VII Expansion"), which includes a 20-inch, approximately 220 km pipeline in the La Glace-Valleyview-Fox Creek corridor, and two new pump stations or terminal upgrades, between La Glace and Edmonton, Alberta. The Phase VII Expansion will add approximately 160 mbpd of incremental capacity upstream of Fox Creek, accessing capacity available on the mainlines downstream of Fox Creek. The Phase VII Expansion is anticipated to be in service in mid-2022.
- The Phase IX Expansion ("Phase IX Expansion"), which includes new 6-inch and 16-inch pipelines debottlenecking the corridor north of Gordondale, Alberta as well as upgrades at one pump station. This expansion will see existing pipelines, which are currently batching, converted to single product lines. The Phase IX Expansion also includes a pump station, in the Wapiti-to-Kakwa corridor, that is partially complete and was previously part of the Phase VII Expansion project scope. This pump station will help accommodate increased and sustained demand for NGL service also due to increased activity in the Montney. The Phase IX Expansion is anticipated to be placed into service in the second half of 2022.
- As previously announced, in response to the COVID-19 pandemic, the resulting economic slowdown, and decreased demand for crude oil, condensate and NGL, Pembina made the decision in March 2020 to defer some of its previously announced expansion projects, including the Phase VIII Expansion ("Phase VIII Expansion"), 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. Initial contracts supporting the project remain intact and customers continue to signal plans which will necessitate the incremental capacity. Prior to deferral, Phase VIII had an associated capital cost of approximately \$500 million. Value engineering work is ongoing and Pembina continues to evaluate this project in discussions with its producing customers. Due to uncertainty around development timing in northeast British Columbia stemming from ongoing discussions between the British Columbia government and First Nations communities, a reactivation decision is expected in the first half of 2022.
- Once the Phase VIII and Phase IX expansions are complete, Pembina will have largely completed its objective to
  achieve segregated liquids transportation service for ethane-plus, propane-plus, crude and condensate across
  multiple pipeline systems between Gordondale, Alberta and the Edmonton, Alberta area. As well, Pembina
  continues to have the ability to add approximately 200,000 bpd of capacity to its market delivery pipelines from
  Fox Creek, Alberta to Namao, Alberta through the relatively low-cost addition of pump stations on these
  mainlines, bringing the total capacity of the Peace Pipeline and Northern Pipeline to 1.3 mmbpd.
- The Drayton Valley Pipeline system ("Drayton Valley Pipeline"), 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, Alberta.
- The NEBC Pipeline system ("NEBC Pipeline"), which includes approximately 395 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 ("Western Pipeline"), which includes approximately 400 km of pipelines that transport crude oil from Taylor, British Columbia to Prince George, British Columbia.
- The Liquids Gathering Pipeline system ("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 ("Brazeau Pipeline"), 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 ("Canadian Diluent Hub" or "CDH"), which includes approximately 500 mbbls of above ground storage and 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 with access to
  crude oil and condensate supply transported on Pembina's operated pipelines and products from various third-party
  operated pipelines.

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

There are approximately 70 shippers, including independent producers as well as multinational oil and gas companies 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 near Edmonton, Alberta; the Strathcona refinery in the Edmonton area; Pembina's CDH near Fort Saskatchewan, Alberta; connected oil sands diluent pipelines; 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 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:

<u>Firm contracts:</u> 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").

<u>Cost-of-service contracts:</u> Pembina's conventional pipelines in British Columbia are primarily 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. Under cost-of-service contracts, Pembina is obligated to hold a 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 contracts 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, take-or-pay contracts. As of December 31, 2021, the weighted average remaining term on Peace Pipeline and Northern Pipeline firm contracts was approximately seven years.

Services provided on other conventional 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 fully 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 location based-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 system ("Syncrude Pipeline"), which includes approximately 450 km of pipelines, which have 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 system ("Horizon Pipeline"), which includes approximately 525 km of pipelines, which have a
  capacity of 335 mbpd. Pembina transports synthetic crude oil for the Horizon Project to delivery points near Edmonton,
  Alberta.
- The Cheecham Lateral system ("Cheecham Lateral"), which includes approximately 50 km of pipelines, which have 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 Pipeline system ("Nipisi Pipeline"), which includes approximately 375 km of pipelines, which have a capacity of 111 mbpd and historically has transported blended heavy oil from Utikuma, Alberta to Edmonton, Alberta. The Mitsue Pipeline system ("Mitsue Pipeline"), which includes approximately 250 km of pipelines, which have a capacity of 22 mbpd and historically have transported condensate from Whitecourt, Alberta to Utikuma, Alberta. As a result of contract expirations, as discussed below, Pembina incurred impairments on the Nipisi Pipeline and Mitsue Pipeline systems in the fourth quarter of 2021.
- The Swan Hills Pipeline ("Swan Hills Pipeline"), which includes an approximately 425 km pipeline, which has a 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.
- 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 to Pembina) of storage and a crude-by-rail capacity of 210 mbpd (105 mbpd net to Pembina). 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 and are discussed below:
  - The Edmonton South Terminal ("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 under a long-term arrangement and are subleased to third parties.
  - The North 40 Terminal ("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 ("Base Line Terminal") is a joint venture asset owned by Pembina (50 percent) and Keyera (50 percent) and is operated by Pembina. It is a merchant crude oil 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 to Pembina).
- The Edmonton South Rail Terminal ("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 210 mbpd (105 mbpd net) and is unit train capable. The facility is served by both the Canadian National Railway and Canadian Pacific Railway networks. As a result of contract expirations in 2025, Pembina incurred an impairment on the Edmonton South Rail Terminal in the fourth quarter of 2021.

The Edmonton Terminals assets provide excellent inbound and outbound connectivity, both in terms of the facilities to which they 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 their proximity and connectivity to 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 pipeline 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 Swan Hills Pipeline is utilized by various shippers who transport mainly on an interruptible basis.

The Nipisi Pipeline and the Mitsue Pipeline were contracted under 10-year fee-for-service agreements, with substantial take-or-pay components. These contracts expired in 2021. Pembina will continue to pursue opportunities to re-contract these assets.

The Edmonton Terminals service customers consisting of a diverse mix of production, refining, marketing and integrated companies. The Edmonton Terminals are primarily 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, including through potential incremental merchant storage capacity opportunities at Pembina's terminals. 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 repurposed 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 the limited availability of land for development in the area around the Edmonton Terminals 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 terminals 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 system ("Vantage Pipeline") includes a 786 km, 69 mbpd pipeline and gathering laterals that link ethane supply from the Bakken resource play in North Dakota to the petrochemical market in Alberta. Volumes originate from two gas plants 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 along 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 between 2024 and 2035.

#### Alberta Ethane Gathering System

The Alberta Ethane Gathering System ("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 20-year take-or-pay agreements expiring in 2038.

#### Alliance Pipeline

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

The Alliance Pipeline 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 and currently delivers an average of 1.6 bcf/d of rich gas. It connects to Aux Sable's Channahon Facility in Channahon, Illinois, which extracts NGL from the natural gas transported before delivery to downstream pipelines.

An open season completed at the end of September 2021, for capacity in the 2021/2022 gas year, resulted in the Alliance Pipeline being essentially fully contracted for the 2021/2022 gas year, beginning November 1, 2021. An additional open season was completed November 18, 2021 for longer-term capacity, including the 2022/2023 gas year, which begins November 1, 2022. As a result of that open season and contract renewal efforts, 76 percent of the capacity set to expire October 31, 2022 was successfully contracted on terms with an average contract length of nearly four years, beginning November 1, 2022.

The Canadian portion of the Alliance Pipeline consists of a 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.

The U.S. portion of the Alliance Pipeline consists of 1,556 km 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.

As at December 31, 2021, Alliance Canada had 22 long-term firm shippers and Alliance U.S. had 19 long-term firm shippers. Firm transportation contracts are take-or-pay and shippers are obligated to pay demand charges on contracted capacity in Canada and reservation charges on contracted capacity in the U.S. In addition, Alliance Canada sells seasonal firm and interruptible transportation service on a price-biddable basis. Long-term firm receipt and full path shippers in Canada are also able to nominate priority interruptible transportation service for up to 25 percent of their contracted capacity, if available, at premiums to their long-term firm tolls.

The Alliance Pipeline faces competition for pipeline transportation services 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 system ("Cochin Pipeline") consists of a 12-inch diameter pipeline totaling 2,452 km, which spans from Kankakee County, Illinois to Fort Saskatchewan, Alberta. The Cochin Pipeline, transports light condensate primarily to be used as diluent to facilitate bitumen transportation. The Cochin Pipeline traverses two provinces in Canada and four states in the U.S. and is capable of transporting approximately 110 mbpd of light condensate.

The Cochin Pipeline has two primary customers who, among them, have total contractual take-or-pay commitments of 85 mbpd. These contractual commitments expire in 2024 with renewal rights until 2034.

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

# **Ruby Pipeline**

The Ruby Pipeline system ("**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 Ruby Pipeline Holding Company L.L.C. ("**Ruby**") 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 a total of 1.25 Bcf/d of long-term firm capacity, at rates consistent with current contracts on the Ruby Pipeline.

Approximately 24 percent of the capacity of the Ruby Pipeline (approximately 375 MMcf/d, gross) is contracted under long-term, firm contracts that expire in 2026. Approximately 635 MMcf/d of firm contracts expired in July 2021.

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.

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

## Jet Fuel Pipeline

The Jet Fuel Pipeline ("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 with ultimate capacity of approximately 20 mbbls/d and includes operational storage tanks at the Vancouver International Airport. On April 30, 2021, the Jet Fuel Pipeline was shutdown in order to address certain integrity issues. The work required to address these integrity issues is in progress in accordance with a return to service plan agreed with the applicable regulatory agencies. It is anticipated that the Jet Fuel Pipeline will be returned to service with a reduced capacity during the first half of 2022.

#### Grand Valley

Grand Valley ("Grand Valley") includes a 75 percent jointly controlled interest in Grand Valley 1 Limited Partnership wind farm.

## **Facilities Division**

#### Overview<sup>1</sup>

The Facilities Division includes infrastructure that provides Pembina's customers with natural gas, condensate and NGL services. Pembina's natural gas gathering and processing assets are strategically positioned in active, liquids-rich areas of the WCSB and Williston Basin and are integrated with the Company's other businesses. Pembina provides sweet and sour gas gathering, compression, condensate stabilization, and both shallow cut and deep cut gas processing services with a total capacity of approximately 6.1 bcf/d for its customers. Condensate and NGL extracted at virtually all Canadian-based facilities have access to transportation on Pembina's pipelines. In addition, all NGL transported along the Alliance Pipeline are extracted through the Pembina operated Channahon Facility at the terminus. The Facilities Division includes approximately 354 mbpd of NGL fractionation capacity, 21 mmbbls of cavern storage capacity and associated pipeline and rail terminalling facilities and 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 import/export terminal in Vancouver, British Columbia.

(1) References to capacity in this paragraph are to net capacity, which includes Aux Sable capacity. The financial and operational results for Aux Sable are included in the Marketing & New Ventures Division; excludes projects under development.

#### **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 (618 MMcf/d net to Pembina) 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 440 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 (234 MMcf/d net to Pembina) 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, Alberta, currently includes three shallow cut sweet gas processing plants (Duvernay I, Duvernay II and Duvernay III), the Duvernay Sour Treating Facilities and the Duvernay Field Hub. In total, the Duvernay Complex has 360 MMcf/d (330 MMcf/d net to Pembina) shallow cut sweet gas processing plants, 330 MMcf/d of inlet gas handling capability, 60 mbpd of raw inlet condensate stabilization facilities, 15 mbpd of water handling facilities, 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 incineration. Supporting infrastructure includes a 12 km sales gas pipeline and 35 km of gas gathering and fuel gas pipelines.
- The Younger NGL Extraction Facility ("Younger") is a 640 MMcf/d (460 MMcf/d net to Pembina) extraction facility and approximately 10 mbpd, net to Pembina, 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"), is comprised of 1.9 bcf/d, net to Pembina, of extraction capacity and 67 mpbd, net to Pembina, of ethane-plus fractionation across various joint-venture assets and is located at Empress, Alberta. At Empress, NGL mix is extracted from natural gas at straddle plants and all of the extracted NGL is fractionated and

ethane and condensate are sold into western Canadian markets. The remaining propane and butane, at Pembina's option is either distributed for sale into western Canadian and mid-western U.S. markets or Pembina recombines the propane and butane and transports the mix to Sarnia, Ontario for further re-fractionation, distribution and sale into markets in eastern Canada and eastern U.S.

Pembina is currently undertaking construction of the Empress Co-generation Facility (the "Empress Co-generation Facility"), which will use natural gas to generate up to 45 megawatts of electrical power, thereby reducing overall operating costs by providing electricity and heat to the existing Empress NGL Extraction Facility. All the power will be consumed on site, thereby supplying up to 90 percent of the site's electrical requirements. Further, this project will contribute to annual GHG emission reductions at the Empress NGL Extraction Facility through the utilization of the co-generation waste heat and the low-emission power generated. Pembina anticipates a reduction of approximately 90,000 tonnes of carbon dioxide equivalent per year based on the current energy demand of the Empress NGL Extraction Facility. The project is expected to be placed into service in the fourth quarter of 2022.

- Pembina owns a 45 percent interest in Veresen Midstream ("Veresen Midstream"), a limited partnership. Veresen Midstream 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 1.7 bcf/d (783 MMcf/d net to Pembina), including the Saturn Gas Plant, Sunrise Gas Plant and Tower Gas Plant (collectively, the "Dawson Assets") and the Hythe Gas Plant and Steeprock Gas Plant. Veresen Midstream's assets also include approximately 1,290 km of gas gathering lines and three liquids hubs.
- Burstall Ethane Storage ("Burstall"), is comprised of an ethane storage facility, with capacity of 1.1 mmbbls, located near Burstall, Saskatchewan.

Pembina's gas services business has approximately 35 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.'s T-North system in British Columbia, NOVA Gas Transmission Ltd.'s pipeline system and the Alliance Pipeline system. The NGL are delivered to Pembina's Peace Pipeline 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, 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, take-or-pay 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 I and the associated Duvernay Field Hub connecting the Tony Creek and Fox Creek areas in Alberta are subject to agreements with large and diversified investment grade oil and gas producers and are supported by a combination of fee-for-service, fixed return and take-or-pay arrangements. The contracts expire in 2024 and 2032.

Duvernay II, Duvernay III and Duvernay Sour Gas Treating Facilities are under a 20-year infrastructure development and service agreement with Chevron and KUFPEC, which includes an area of dedication in the liquids-rich 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 and KUFPEC sanctioning development and regulatory approvals, the infrastructure developed over the term of the agreement has the potential to represent a multi-billion-dollar investment by Pembina. The Duvernay II, Duvernay III and Duvernay Sour Gas Treating Facilities are supported by 20-year contracts with a combination of fee-for-service, fixed-return and take-or-pay arrangements. The contracts expire between 2039 and 2040.

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. The start-up of the Hythe Gas Plant expansion was safely completed in the second quarter of 2021 and is fully supported by 10 and 15-year contracts with predominately take-or-pay arrangements.

Gas producers continued to focus their exploration and development of rich gas areas during 2021. 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 oil 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.

Pembina's gas services business is subject to competition from other gas processors, producer owned infrastructure and to a lesser degree, the Alliance Pipeline which is a high heat content gas egress option. These alternative options are either in the general vicinity of Pembina's facilities, or have gathering systems that extend, or could potentially extend, into areas served by these facilities. Going forward, the demand for additional processing infrastructure will be determined primarily by the rate at which the WCSB gas production grows. Pembina's competitive advantage stems from its integrated value chain, which allows gathering and processing facilities to become part of a well-head to market infrastructure solution, benefiting from seamless operational and commercial alignment.

#### **NGL Services**

Pembina's primary NGL services assets include the following:

- The fractionation and storage facilities ("Redwater Complex"), which includes: two 73 mbpd ethane-plus fractionators (being "RFS II" and "RFS II", respectively); a 55 mbpd propane-plus fractionator ("RFS III"); and 12.1 mmbbls of cavern storage located in Redwater, Alberta. The Redwater Complex purchases NGL mix from various natural gas and NGL producers and fractionates it into finished products for further distribution and sale. The Redwater Complex also processes NGL supply volumes from Pembina's Younger NGL extraction facility. Also located at the Redwater Complex are Pembina's truck and rail terminals with unit train capability, which service Pembina's proprietary and customer needs for importing and exporting NGL products.
- The East NGL System ("East NGL System"), which includes:
  - Up to 20 mbpd of fractionation capacity and 1.2 mmbbls of cavern storage in Sarnia, Ontario;
  - Storage and terminalling assets/capacity at Kerrobert, Saskatchewan, Superior, Wisconsin, and Lynchburg, Virginia; and
  - 6 mmbbls of hydrocarbon storage, truck and rail loading facilities at Corunna, Ontario.
- The Prince Rupert Terminal (the "Prince Rupert Terminal"), a propane export terminal 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 pressurized storage spheres, and ultimately to 'handysize'

vessels destined for international markets. The Prince Rupert Terminal was placed into service at the end of the first quarter of 2021 and has a capacity of approximately 20 mbpd.

As previously announced, in response to the COVID-19 pandemic, the resulting economic slowdown and decreased demand for crude oil, condensate and NGL, Pembina made the decision in March 2020 to defer some of its previously announced expansion projects, including the Prince Rupert Terminal Expansion ("Prince Rupert Terminal Expansion") which will increase the export capacity of the terminal. The expansion and its scope remain under evaluation. Engineering of the expansion is well advanced and in conjunction with market dynamics that include customer demand, shipping costs, and North American and international pricing, Pembina expects to make a decision in the first quarter of 2022 whether to proceed with the expansion.

- The Vancouver Wharves ("Vancouver Wharves"), located in North Vancouver, B.C, is a 125-acre bulk marine terminal facility that in 2021 transferred over 4 million tons of bulk cargo and 4.7 mmbbl of liquids predominantly to offshore export markets. The Vancouver Wharves are operated under 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, 450,000 barrels of distillate storage capacity, four berths, facilities that can house up to 325 rail cars and connectivity to three Class 1 rail companies.
- A 50 percent interest in Fort Corp, which has 27,500 metric tonnes of ethylene storage and 33,400 metric tonnes of ethane-plus NGL mix 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 Complex, Pembina provides NGL fractionation, storage and terminalling (loading and off-loading) services. NGL fractionation services at the Redwater Complex are provided under single or multi-year, predominately take-or-pay contracts. Pembina also provides third party terminalling services at Redwater for the Sturgeon Refinery, which is operated by the Northwest Redwater Limited Partnership under a long-term fixed-return agreement.

Through its East NGL System, Pembina provides NGL fractionation, storage and terminalling (loading and off-loading) services at Superior and Sarnia primarily on an interruptible, fee-for-service basis to Pembina's Marketing & New Ventures Division. Pembina also provides storage and terminalling services at Corunna on both fee-for-service and fixed-return agreements, on an annual and multi-year basis, to third party customers and Pembina's Marketing & New Ventures Division.

Prince Rupert Terminal provides export of propane produced in Western Canada for delivery into international propane markets. The terminal primarily provides service on a fee-for-service basis to Pembina's Marketing & New Ventures Division and their customers.

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

Pembina's NGL services business is subject to competition from other fractionators, truck terminals, storage facilities, and export terminals, which are either in the general vicinity of Pembina's facilities or have gathering systems that extend, or could potentially extend, into areas served by Pembina's facilities. Going forward, the demand for additional infrastructure will be determined primarily by the rate at which the WCSB hydrocarbon production grows. 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 Vancouver Wharves' grain business. For mineral concentrates, 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 pursues this goal through the creation of new markets, and further enhances 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, crude oil and electricity), 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.

The value potential associated with Pembina's marketing business is dependent upon, among other things, Pembina's ability 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.

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 prices of products that are marketed by Pembina are subject to volatility as a result of these factors and other considerations including seasonal demand changes, weather conditions, general economic conditions, changes in crude oil, NGL, natural gas and electricity 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, natural gas and electricity, are downstream markets for those products, or are interested in ancillary services related to those products. Pembina's marketing business leverages the Company's integrated 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**

Pembina's ownership interest in Aux Sable ("**Aux Sable**"), which includes Aux Sable Canada and Aux Sable U.S, is included in the Marketing & New Ventures Division, since the majority of cash flow from this asset is derived from commodity sales. Pembina is the operator of the Aux Sable assets.

Aux Sable U.S. ("Aux Sable U.S.") is comprised of Aux Sable Liquids Products Inc., Aux Sable Liquid Products LP ("Aux Sable US LP") and Aux Sable Midstream LLC. Collectively Aux Sable U.S. is owned by Pembina (42.7 percent), indirectly by Enbridge Inc. (42.7 percent) and indirectly by Williams Partners (14.6 percent). The primary assets of Aux Sable U.S. include:

• The Channahon Facility ("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 2.1 bcf/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.

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 producers located in Western Canada and North Dakota 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 Palermo Conditioning Plant ("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.
- The Prairie Rose Pipeline ("Prairie Rose Pipeline"), a 120 MMcf/d pipeline connecting the Palermo Conditioning Plant to the Alliance Pipeline.
- Under transportation agreements with natural gas shippers on the Alliance Pipeline, Aux Sable LP has the right to extract
  NGL from all of the natural gas transported for the durations of the applicable agreements. Aux Sable has signed NGL
  value-sharing agreements with certain gas producers in Alberta, British Columbia and North Dakota.

Aux Sable US LP entered into an exclusive NGL sale agreement with an NGL marketer on December 31, 2005, pursuant to which Aux Sable LP sells a portion of its NGL production from the Channahon Facility to such counterparty. In return, Aux Sable US 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 for subsequent 10-year terms.

Aux Sable Canada ("Aux Sable Canada") is comprised of Aux Sable Canada LP and Aux Sable Canada Ltd. Aux Sable Canada is owned by Pembina (50 percent) and indirectly by Enbridge Inc. (50 percent). 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 Septimus Pipeline ("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.'s Channahon Facility. The Septimus Pipeline is 100 percent owned by Aux Sable Canada and operated by a third-party and has a capacity of approximately 350 MMcf/d.

#### **New Ventures**

Pembina's Marketing & New Ventures Division includes development of new large-scale, or value chain extending projects, and currently include the projects listed below.

# PDH/PP Facility

Pembina and its partner, Petrochemical Industries Company K.S.C. ("PIC"), continue to evaluate the integrated propane dehydration ("PDH") plant and polypropylene ("PP") upgrading facility (together, the "PDH/PP Facility") through their joint venture, Canada Kuwait Petrochemical Limited Partnership ("CKPC").

As a result of the significant risks arising from the ongoing COVID-19 pandemic, CKPC suspended the execution of the project indefinitely.

# Cedar LNG

In June 2021, Pembina and the Haisla Nation announced that they entered into a partnership agreement for the development of the proposed Cedar LNG Project, a floating LNG export facility in Kitimat, British Columbia. The Cedar LNG Project is expected to have a liquefaction capacity of approximately three million tonnes per annum of LNG and has secured a long-term transportation agreement on the Coastal GasLink Pipeline for 400 million cubic feet per day of firm capacity. The estimated gross project cost of the Cedar LNG Project is approximately \$3.0 billion.

The Cedar LNG Project has secured its LNG export license from the CER and is undergoing environmental assessments by the provincial and federal governments. Cedar LNG's application for an Environmental Assessment Certificate was submitted to the BCEAO in February 2022, moving the project into the 180-day application review phase. This key project milestone comes following detailed studies, engineering and meaningful engagement with Indigenous and local communities.

In February 2022, Cedar LNG also entered into an agreement for the front-end engineering and design (FEED) of the Cedar LNG Project's proposed floating liquefaction, storage and offloading unit.

A final investment decision in respect of the Cedar LNG Project is expected to be made in 2023. Subject to additional factors, including regulatory and environmental approvals, the expected in-service date for the Cedar LNG Project is planned for 2027.

## Alberta Carbon Grid

Pembina and TC Energy Corporation plan to jointly develop the Alberta Carbon Grid, a world-scale carbon transportation and sequestration system. When fully constructed, the Alberta Carbon Grid is expected to be capable of transporting more than 20 million tonnes of CO<sub>2</sub> annually. In addition to using new assets, existing infrastructure, and a newly developed carbon sequestration hub, the Alberta Carbon Grid is planned to connect Alberta's largest regions of industrial emissions (for example, the Fort McMurray Alberta Industrial Heartland, Edmonton-area emitters, and the Drayton Valley region) to key sequestration locations. In February 2022, in response to the Government of Alberta's request for a full project proposal, Pembina and an affiliate of TC Energy Corporation submitted a proposal to jointly develop the Alberta Carbon Grid. The Alberta Carbon Grid is expected to be partially operational as early as late 2025 and entirely in service by 2027, well in advance of Canada's enhanced 2030 emissions targets.

#### Chinook Pathways Partnership

Pembina has been chosen by the Western Indigenous Pipeline Group to be the industry partner in the formation of Chinook Pathways Partnership ("Chinook Pathways"), an Indigenous-led partnership working to organize a significant number of First Nation communities to pursue ownership of the Trans Mountain Pipeline following completion of the construction of the Trans Mountain Expansion.

#### Seasonality

Pembina's businesses are affected by seasonality in the following ways:

- 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.
- 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 ratably throughout the year. See "Risk Factors Risks Inherent in Pembina's Business Commodity Price
  Risk".

#### OTHER INFORMATION RELATING TO PEMBINA'S BUSINESS

#### **Operating Management System**

Pembina is committed to operational excellence and one of the ways in which the Company delivers this is through its 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 is designed to anticipate, prevent, manage and mitigate conditions that may adversely affect the safety and security of Pembina's employees, the public, the environment, and the Company's infrastructure assets while complying with government regulations. The Company's OMS aligns Pembina with industry best practices and standards.

As outlined below, Pembina's OMS is comprised of a number of individual programs intended to drive safety, reliability, efficiency, cost-effectiveness and the continuous improvement of the Company's operational performance. Pembina's Quality Assurance Program includes certain processes to systematically and independently verify that these individual programs are established and are working effectively.



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. Each of the OMS programs is described more fully in the sections below.

#### **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 incorporate industry best practices and are designed to meet or exceed regulatory requirements with the goal of achieving enhanced safety, reliability and longevity of the Company's 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, Pembina ensures 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, Pembina designs its 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, Pembina takes 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 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.

Pembina plans and executes scheduled turnarounds and outages at its 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 Pembina's facility integrity program, the Company can provide cost-effective, safe and reliable operation of its facilities – to the benefit of Pembina's customers and Shareholders.

#### **Emergency Management Program**

Pembina's Emergency Management Program ("EMP") enables Pembina to conduct its activities and operations in a manner consistent with Pembina's commitment to protecting the health and safety of workers and the public and safeguarding the environment affected by its activities.

The EMP aims to reduce conditions that could adversely affect the safety of workers or the public, the environment, or property during an emergency through the development of standards and processes specific to emergency management activities, including prevention, preparedness, response and recovery. Furthermore, the EMP addresses regulatory expectations, industry standards and best practices for:

- conducting hazard assessments;
- developing emergency management plans;
- facilitating emergency response exercises;
- delivering emergency management training to personnel;
- conducting community awareness activities;
- facilitating first responder engagement sessions; and
- participating in mutual aid associations or industry groups.

Pembina's EMP is made up of the following four core components:

- 1. **Prevention and Mitigation.** Defines actions taken by Pembina to identify and reduce the risks of hazards before an emergency occurs.
- Preparedness. Ensures that Pembina has the capacity to respond effectively and rapidly when people, the environment, or property will be, or are, affected by hazards. Preparedness ensures that the necessary plans and resources are in place and practiced.

- 3. **Response.** Defines the actions to be taken to minimize the impact on people, the environment or property, and the impacts to customers, with an emphasis on prevention of injury and loss of life.
- 4. **Recovery.** Ensures actions taken following an emergency restore and repair infrastructure and services to the level of pre-emergency function. Recovery programs and activities should ensure that resources (personnel and assets) are replaced/replenished/debriefed and that the response is reviewed as part of a continuous improvement process.

# **Security Management Program**

Pembina's Security Management Program ("SMP") enables Pembina to conduct its activities and operations in a manner consistent with Pembina's commitment to: protecting people, the environment, information, and assets; complying with legal and regulatory requirements; and meeting or exceeding industry standards and best practices. Pembina's SMP ensures security threats and associated risks are identified and managed with appropriate mitigation and response procedures to minimize the impact of security incidents adversely affecting Pembina's stakeholders, information, logical/physical infrastructure while ensuring compliance with applicable Company policies, security regulations and standards.

The SMP is a risk-based management system approach to managing security risk consisting of five concurrent and continuous functions—Identify, Protect, Detect, Respond, and Recover as set forth below.

- 1. **Identify.** The Identify function is foundational to understanding the business context, the resources that support critical functions, and the related security risks to Pembina to focus and prioritize its efforts, consistent with its risk management strategy and business needs.
- 2. **Protect.** The Protect function supports the ability to limit or contain the impact of a potential security event.
- 3. **Detect.** The Detect function enables timely discovery of security events.
- 4. **Respond.** The Respond function supports the ability to contain the impact of potential security events.
- 5. **Recover.** The Recover function supports timely recovery to normal operations to reduce the impact from security events.

Pembina has established an Enterprise Security Steering Committee ("ESSC") which meets quarterly. The purpose of the ESSC is to: ensure senior leadership oversight of security throughout Pembina's operations and business activities; identify and mitigate security threats and risks against Pembina's people, assets, information, systems, facilities and business interests; and full implementation and continuous improvement of Pembina's Corporate Security Plan and Enterprise Cyber Security Plan.

# **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. Supporting the Safety Program, Pembina has established Life Saving Rules and Safety Culture Expectations applicable to all personnel and Pembina activities to ensure critical safety risks are managed effectively.

To enhance performance 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. 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. The Executive Safety Committee meets quarterly with focus on setting strategy and priorities, performance targets, HSE key metrics and protocols for all Pembina Safety programs.

Pembina uses ISNetworld, a program that aggregates and discloses the safety track record of service providers, to manage contractor pre-qualifications, orientations and compliance as part of the procurement process.

#### **Environmental Matters and Environmental Stewardship**

Pembina's assets are subject to environmental regulation. The Company 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 Regulation, British Columbia Greenhouse Gas Emission Reporting Regulation, Alberta Technology, Innovation and Emission Reduction Regulation, Saskatchewan Management and Reduction of Greenhouse Gases (Reporting) Regulation, and US Environmental Protection Agency Greenhouse Gas Report, as well as other provincial and state air quality reporting requirements under asset specific conditions of approval.

Pembina has implemented an Environmental Management Program, which provides guidance on regulatory requirements and Pembina's commitment to environmental protection for all phases in the lifecycle of an asset: project planning construction, operation, decommissioning and reclamation.

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.

Pembina is committed to reducing the GHG emission intensity of its businesses. Pembina's 2020 Sustainability Report, together with Pembina's Data Update published in 2021, detail Pembina's environmental performance and commitment to continuous improvement, transparency and engagement as it continues to further integrate sustainable business practices throughout the Company. The 2020 Sustainability Report and Data Update are available at www.pembina.com.

In 2021, Pembina developed a GHG emissions intensity reduction target of reducing its GHG emissions intensity by 30 percent by 2030, relative to 2019 baseline emissions, incorporated ESG metrics into at-risk incentive compensation metrics, including into Pembina's short, medium and long term incentive plans, and developed strategies to address the transition to lower carbon energy resources. The GHG reduction target will help guide business decisions and improve overall emissions intensity performance while increasing Pembina's long-term value and ensuring Canadian energy is developed and delivered responsibly. To meet the target, Pembina will focus initially on operational opportunities, greater use of renewable and lower emission energy sources, and investments in a lower carbon economy.

# **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 the Company's infrastructure. These programs have been developed to meet or exceed the regulatory requirements for Damage Prevention and Awareness Programs in the areas Pembina operates.

Pembina is committed to establishing meaningful and open communications with those who live and work around the Company's underground infrastructure to increase the awareness of the presence of Pembina's underground infrastructure and their requirements for how to work safely in the vicinity of the Company's pipelines.

#### 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**

As part of Pembina's commitment to safe and reliable operations that ensure the protection of our people and the environment, Pembina personnel must adhere to the day to day operations and maintenance requirements as set out in the Operation and Maintenance Program. The Operation and Maintenance Program includes our maintenance expectations, operator qualification and how assets, such as pipelines, are operated.

Pembina's SAP-based preventative maintenance management tool ("PMM") was completed for all of Pembina's legacy assets in 2018. In 2021, Pembina completed the implementation of PMM on the assets acquired in connection with the Kinder Acquisition. The objective of PMM is to ensure safe, consistent and efficient asset management. PMM is a key component of Pembina's OMS and a driver of safe and efficient asset management and operation.

Pembina's Operator Qualification Programs for the United States operation of the Vantage Pipeline, West Spur Lateral, Cochin Pipeline and Aux Sable assets are in place to ensure that Pembina's operations and maintenance staff are trained and qualified to perform their duties safely and effectively. These programs are in place in accordance with the PHMSA Operator Qualification Rule.

Pembina has a Pipeline Control Management Program in place to ensure that the Company's pipeline systems are operated safely and reliably. As part of the Pipeline Control Management Program, Pembina employs modern supervisory control and data acquisition ("SCADA") 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.

## **Industry Regulation**

Pembina's pipelines are regulated by various regulatory bodies, including, but not limited to, the AER, AUC, AEP, BCUC, BCOGC, B.C. Ministry of the Environment and Climate Change Strategy, B.C. Ministry of Finance, Saskatchewan Ministry of Energy and Resources, CER, ECCC, PHMSA and the FERC.

#### AER and AUC

The AER regulates the construction, operation, discontinuation and abandonment of non-utility pipelines and associated installations in Alberta pursuant to the *Pipeline Act* (Alberta) and the *Responsible Energy Development Act* (Alberta). A licence from the AER is necessary to construct and operate a pipeline and associated installations. The AER may impose any conditions on such a licence. When making decisions on these kinds of regulatory matters, the AER must consider the social and economic effects of the proposed activities, effects on the environment, and potential impacts on landowners. Indigenous consultation, environmental, and water protection regulations are also administered or considered by the AER.

With respect to toll-regulation in Alberta, once a licence 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 evidence to demonstrate that Pembina has the financial ability to complete required asset retirement activities. In 2020, the Government of Alberta announced a new liability management framework. As a result, the AER is developing new programs that implement a holistic approach, applying to all phases of energy development rather than focusing on an asset-to-liability ratio. Implementation of the new liability

management framework is underway and is expected to be completed in 2022. Any impact of this liability management framework is currently not expected to be material.

The AER also regulates, in conjunction with AEP, airborne emissions from energy resource activities including oil and gas pipelines. The AER's authority includes regulation of methane emissions in the upstream oil and gas sector, pursuant to the *Methane Emission Reduction Regulation* and Directives 060 and 017.

#### **AEP**

Comprehensive GHG emissions regulations for industrial facilities in Alberta, including oil and gas facilities, are administered by AEP, under the *Technology Innovation and Emissions Reduction Regulation*.

#### **BCOGC**

The construction, operation and abandonment of non-utility oil and gas pipelines and associated installations and facilities in B.C. is regulated by the BCOGC pursuant to the *Oil and Gas Activities Act* (British Columbia). A permit from the BCOGC is required to construct or operate a pipeline or associated installations or facilities. The BCOGC may impose any conditions it considers necessary on such a permit. Decisions by the BCOGC must, among other things, provide for the sound development of the oil and gas sector by fostering a healthy environment, a sound economy and social well-being; and ensure safe and efficient practices. The BCOGC also has a mandate to encourage the participation of Indigenous peoples in regulatory processes affecting them.

The BCOGC administers methane emissions regulations in B.C., under the *Drilling and Production Regulation* and the *Oil and Gas Activities Act* (British Columbia), which address methane emissions in the upstream oil and gas sector.

#### **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.

## B.C. Ministry of Environment and Climate Change Strategy

The B.C. Ministry of the Environment administers regulations pertaining to ongoing monitoring and management of air contaminants and water discharge under the *Environmental Management Act*. Within Metro Vancouver, the B.C. Ministry of the Environment has delegated its authority for the issuance of permits relative to air contaminants and the ongoing monitoring and management of air contaminants within the Metro Vancouver Regional District.

# B.C. Ministry of Finance

The Consumer Tax Branch of the B.C. Ministry of Finance administers the B.C. carbon tax, under the *Carbon Tax Act* (British Columbia), which is the province's primary form of regulation of GHG emissions.

#### Saskatchewan Ministry of Energy and Resources

The Saskatchewan Ministry of Energy and Resources regulates airborne emissions from oil and gas facilities in Saskatchewan, including administering the province's methane emissions regulations under the *Oil and Gas Emissions Management Regulations*.

#### CER

Pursuant to the Canadian Energy Regulator Act (the "CER Act"), the CER administers authorizations for the export of oil and regulates interprovincial and international pipelines including: their construction and operation; traffic, tolls and tariffs; liabilities for unintended or uncontrolled releases; and the pipeline company's financial requirements. A certificate under the CER Act is required for the construction and operation of such interprovincial or international pipelines. When considering a certificate application, the CER has a broad "public interest" mandate and must facilitate and consider Indigenous participation in the regulatory process prior to making a recommendation to the Minister of Natural Resources. CER Act certificates may be subject to any conditions which are necessary or in the "public interest". Interprovincial and international

pipelines may also be subject to impact assessment under the *Impact Assessment Act* (Canada) as part of the certificate process.

Under the CER Act and regulations, companies who own and/or operate CER-regulated pipelines are divided into two groups for regulation of tolls and tariffs. 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 Cochin Pipeline are classified as Group 1. Pembina's other CER pipelines are classified 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, which is owned by Pembina Energy Services Inc., Pembina's Vantage Pipeline, which is owned by Pembina Prairie Facilities Ltd., and Pembina's Empress Pipeline, which is owned by Veresen NGL Pipeline Inc., all wholly-owned subsidiaries of Pembina, are also regulated by the CER. The four pipelines 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 CER Act and *Pipeline Financial Requirements Regulations*. The CER requires the Company to maintain these financial resources and readily accessible funds in specific types of financial instruments.

#### **ECCC**

ECCC is responsible for administering the federal GHG pricing regulations under the *Greenhouse Gas Pollution Pricing Act* (Canada) ("GGPPA") and other federal GHG emissions reduction regulations, including methane emissions regulations applicable outside British Columbia, Alberta and Saskatchewan under the *Regulations Respecting Reduction in the Release of Methane and Certain Volatile Organic Compounds (Upstream Oil and Gas Sector*). ECCC is also responsible for international agreements on airborne emissions.

## **FERC**

The FERC is an independent U.S. agency that regulates, as relevant to Pembina, interstate natural gas pipelines, and the transportation in interstate commerce of liquid hydrocarbons (crude oil, refined products, and NGL).

The Ruby Pipeline, and the U.S. segments of the Alliance Pipeline are interstate natural gas pipelines subject to FERC jurisdiction under the NGA. FERC jurisdiction under the NGA extends to virtually all commercial aspects of an interstate natural gas pipeline's business, including 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. A certificate of public convenience and necessity from the FERC is necessary to construct and operate an interstate natural gas pipeline. A key regulatory principle underlying the FERC's jurisdiction is non-discrimination, such that interstate natural gas pipeline companies are prohibited from granting any undue preference to any person, or unduly discriminating against or in favor of any person, with respect to rates or terms and conditions of service.

In general, the NGA requires that rates charged by interstate natural gas pipeline companies must be "just and reasonable" and are subject to FERC approval. Under the FERC's current policies, a pipeline may obtain approval to charge negotiated rates, but such pipelines must also post in applicable tariff(s) cost-based "recourse" rates that are available for sippers that do not opt to negotiate rates. 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. Rate options in respect of Ruby Pipeline are negotiated by Kinder Morgan, as operator.

The U.S. segments of the Vantage Pipeline and Cochin Pipeline are subject to the FERC's jurisdiction under the ICA. Unlike FERC's NGA jurisdiction, FERC's jurisdiction over liquids pipelines pursuant to the ICA is more limited. FERC does not have jurisdiction over the construction, extension or abandonment of pipelines transporting liquids in interstate commerce. FERC's jurisdiction over pipelines transporting crude oil, NGL or refined products in interstate commerce is generally limited to the rates, terms and conditions of service provided. Like the NGA, the ICA also requires that the rates of liquids pipelines be "just and reasonable," and a carrier may be subject to a complaint or protest from shippers challenging those rates. Liquids pipelines, however, may not negotiate rates with individual customers; instead, liquids pipelines must justify new rates and rate changes using specific FERC-prescribed methodologies, such as cost of service, the consent of an unaffiliated shipper, or

by applying the FERC's annual index adjustment. Liquids pipelines may enter into contracts with individual shippers, but such contracts typically must be made available to all similarly situated shippers. As with interstate natural gas pipeline regulation, a key regulatory principle underlying FERC's ICA jurisdiction is that of non-discrimination, such that pipelines providing transportation of oil, natural gas liquids or refined products in interstate commerce are prohibited from granting any undue preference to any person, unduly discriminating against or in favor of any person, or maintaining any unreasonable difference in rates or terms and conditions of service.

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".

## **PHMSA**

The PHMSA oversees the safe operation and maintenance of interstate oil and gas pipelines under 49 CFR Part 190 – *Pipeline Safety Enforcement and Regulatory Procedures*. The PHMSA's regulation and enforcement programs are designed to ensure that such pipelines are operated safely, reliably, and in an environmentally sound manner. These programs are inspection and investigation based and not permit based.

# **Corporate Governance**

Pembina maintains corporate governance and ethical practices, both within the corporate boardroom and throughout its operations, in line with its commitment to being a responsible corporate citizen. Pembina's corporate governance practices aim to:

- Operate in a safe, reliable and environmentally responsible way in the communities in which it operates;
- Emphasize employee engagement, inclusion and well-being in a safe, respectful, collaborative and fair work environment;
- Ensure Pembina meets its obligations to all regulatory bodies, business partners, customers, stakeholders, employees and Shareholders;
- Enhance and preserve value; and
- Protect dividends.

(See "Description of Pembina's Business and Operations - Purpose of Pembina")

As a public company listed on the TSX and the NYSE, Pembina takes into account 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'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.

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

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.

The Board of Directors overseas Pembina's corporate stewardship. The Board recognizes the importance of ESG issues and fulfills its mandated duties directly and by delegating the following ESG related responsibilities to its four standing committees.

#### Committee

## **ESG Related Responsibilities**

#### **Audit Committee**

• Maintains oversight of the integrity of Pembina's financial statements, the reporting process, and the internal audit function.

# Human Resources, Health and Compensation Committee

- Provides oversight over Pembina's approach to director compensation, employee health and wellness, employee compensation, executive performance and compensation, executive succession planning and corporate equity, diversity and inclusion.
- Focuses on sustainability by including ESG metrics in incentive plan design and compensation decisions for executives.

# Governance, Nominating and Corporate Social Responsibility Committee

- Responsible for Pembina's corporate governance practices.
- Oversees sustainability matters; including sustainable development, public awareness and consultation, issues
  management, environmental stewardship, external communications and government relations, Indigenous
  relations, community investments and human rights.
- Oversees the development of Pembina's Sustainability Report and facilitates and provides education of the Board, including education and information on ESG matters.

#### Safety, Environment and Operational Excellence Committee

 Oversees development, implementation and monitoring of risks and policies related to safety, environment, operational excellence, asset integrity management and corporate securities matters.

Further information about Pembina's corporate governance practices will be included in Pembina's management information circular for its 2022 meeting of Shareholders. In addition, 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.

### Corporate Governance Policies

Pembina's governance framework includes corporate policies that align with Pembina's strategy and purpose (see "Description of Pembina's Business and Operations — Pembina's Business Objective"), comply with the laws and regulations applicable to Pembina's business and adhere to best practices in the industry. Pembina's corporate policies reflect Pembina's core values and beliefs, which in turn influence the OMS and associated programs.

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.

# **Board Diversity Policy**

The Board recognizes that diversity among its directors supports balance and debate which, in turn, enhances decision making by the Board and foster Pembina's commitment to delivering benefits to its four key stakeholder groups — customers, investors, employees and communities — by utilizing the difference in perspective of the members of the Board. Under the policy, the Board considers candidates to the Board based on merit with regard to the benefits of diversity on the Board, and with a view to the following specific diversity targets: (i) a Board composition in which each of the female and male genders comprises at least 30 percent of the independent directors on the Board; and (ii) a Board composition in which at least 40 percent of the independent directors be individuals that are women, persons with disabilities, Indigenous peoples, or members of other racial, ethnic and/or visible minorities.

#### Health, Safety and Environment ("HSE") Policy

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, Environment and Operational Excellence 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

Pembina's reputation is one of its most important assets. The purpose of the Code of Ethics is to establish a high standard of integrity and ethical behaviour to support Pembina's reputation and its relationships with its internal and external stakeholders. All personnel are expected to comply with the Code of Ethics at all times. The Code of Ethics sets out principles for ethical conduct in the following areas: conflicts of interest; human rights; 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 the Company's assets and records; entertainment, gifts, meals, hospitality, entertainment, travel or other benefits; respectful workplace environment and relationships; and reporting responsibilities and procedures.

#### Anti-Bribery Policy

Corruption and bribery pose legal, commercial and reputational risk to Pembina and can also result in erosion of internal trust and confidence. The purpose of the Anti-Bribery Policy is to formalize and record Pembina's procedures to ensure that Pembina and its Personnel conduct business in an honest and ethical manner when dealing with Government Officials and all other parties, and comply with Anti-Corruption Laws. The Anti-Bribery Policy reflects the standards to which Pembina expects its contractors, agents and other third party representatives to adhere when acting on Pembina's behalf.

## Alcohol and Drug Policies

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.

#### Indigenous & Tribal Relations Policy

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

#### Community Relations Policy

As part of Pembina's approach to community relations, Pembina seeks to develop enduring relationships based on mutual trust with stakeholders that could potentially be affected by Pembina's current or future operations. By committing to being recognized as a leader in its relationships with communities, where Pembina is welcomed as a safe and responsible partner whose positive social impact carries significant value for all of its stakeholders, Pembina employees, consultants, contractors and directors will recognize and respond to the needs of its community, while addressing broader social issues by: understanding what communities value and what is important to them; making measurable commitments and delivering on them; minimizing potential impacts of Pembina's projects and operating by conducting early, meaningful and ongoing engagement; and identifying partnership opportunities in support of community and economic development for mutual benefit.

#### Whistleblower Policy

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 and Security Management 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.

## Social, Community and Indigenous Engagement

## **Community Relations**

Pembina is committed to building long-term relationships based on mutual trust with communities as a top priority and to further this goal, Pembina strives to understand regional issues in order to help anticipate and manage the social and economic impacts of the Company's operations on local communities.

Pembina's guiding principles on its approach to community relations are set out in Pembina's Community Relations Policy. See "Other Information Relating to Pembina's Business – Corporate Governance – Corporate Governance Policies".

Pembina has developed community engagement district area plans (the "CEDA Plans") for Pembina's operating areas. The purpose of these plans is to support both operational engagement needs, as well as commitments made as part of the Canadian Energy Pipeline Association's Integrity First Program and other regulatory programs and objectives, such as Pembina's Emergency Management Program and Damage Prevention and Public Awareness Programs. See "Other Information Relating to Pembina's Business — Damage Prevention and Public Awareness Programs" and "Other Information Relating to Pembina's Business — Emergency Management Program".

The purpose and goals of the CEDA Plans are to:

- Foster a strategic, consistent and coordinated approach to long-term stakeholder and Indigenous operational engagement;
- Provide a governance structure that outlines roles, responsibilities and accountabilities;
- Identify and map stakeholders and Indigenous peoples where Pembina operates and that may influence Pembina's business;
- · Identify potential risks and opportunities that help inform engagement strategies; and
- Increase trust and performance with local and regional stakeholders and Indigenous communities.

The feedback and input Pembina receives from communities influences where the Company installs its assets, what steps Pembina takes to minimize disruptions to the environment, what local labour and businesses the Company may use, and how Pembina can make a positive impact through Pembina's community investment program.

#### **Indigenous Relations**

Pembina recognizes that in order to achieve its business goals, the Company needs to work closely with communities across its operations, including Indigenous communities.

Pembina's guiding principles on its engagement with Indigenous communities are set out in Pembina's Indigenous & Tribal Relations Policy. See "Other Information Relating to Pembina's Business – Corporate Governance – Corporate Governance Policies".

Pembina's projects may take place on lands where Indigenous communities may have rights and title. Pembina strives to engage in meaningful consultation to understand potential impacts, seek mitigations, discuss possible benefits associated with the Company's proposed developments, and ensure better planned, executed and remediated projects. Pembina's engagement and consultation often exceed regulatory requirements and can take a variety of forms, such as personal meetings, desktop reviews, and site visits. Indigenous communities also have a unique understanding of the environment; Pembina works with Indigenous communities to understand their perspectives and, where possible, incorporates these perspectives into the Company's day-to-day business. Pembina is actively working to create awareness amongst Indigenous communities regarding environmental requirements and programs associated with its projects.

Pembina strives to contribute to the economic well-being of the Indigenous communities in which it operates by employing and training members of such communities and procuring project inputs from Indigenous suppliers.

Through the Indigenous Workforce Initiative, Pembina works with communities, organizations and government partners to actively recruit Indigenous candidates and assist them in preparing for long-term employment and career positions. Pembina coordinates training program goals and provide support towards overcoming barriers Indigenous candidates may face when entering the competitive job market. Through Pembina's Indigenous Environmental Trainee Program, Pembina provides trainees with the opportunity to learn about the pipeline construction process. Trainees work with environmental planners and inspectors to learn about a project's environmental scope and the processes and procedures undertaken to protect the environment during the construction process. Pembina benefits from this program by learning invaluable information from an Indigenous perspective, including in respect of a project area's traditional land use and activities. Pembina also provides Indigenous awareness training to its employees and contractors.

Pembina seeks to develop sustainable business relationships with Indigenous communities that deliver safety, performance, cost competitiveness and quality. By developing business relationships and increasing economic opportunities for Indigenous suppliers, Pembina's goal is to increase and sustain the capability and capacity of Indigenous suppliers and through these opportunities, provide a net positive benefit to Indigenous community members. Pembina's Standard for Local, Indigenous and Tribal Contracting ensures the inclusion of capable Indigenous suppliers in Pembina's work. As part of this standard, and through Pembina's competitive processes, suppliers are required to demonstrate (and are evaluated on) their commitment to Indigenous economic development, inclusion partnerships and strategic alliances. Further, this standard helps to support Pembina's commitment to Indigenous economic reconciliation as part of Call to Action 92 of the Truth and Reconciliation Commission of Canada: Calls to Action.

Pembina believes that the future of Canada's energy sector development is inextricably linked to meaningful partnerships and commercial relationships with Indigenous communities. In 2021, Pembina entered into two Indigenous-led partnerships on two significant projects:

- Pembina has partnered with the Haisla nation to develop the proposed Cedar LNG Project, which is expected to be
  the largest First Nations-owned infrastructure project in Canada with one of the cleanest environmental profiles in
  the world; and
- Pembina formed the Chinook Pathways partnership with Western Indigenous Pipeline Group to pursue ownership of the Trans Mountain Pipeline, following completion of the construction of the Trans Mountain Expansion project.

See "Description of Pembina's Business and Operations – Marketing and New Ventures".

Finally, Pembina is focused on giving back to communities where we live and work through Pembina's Community Investment Program, which provides funding to Indigenous and Indigenous-connected organizations with a broad impact.

#### **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, 2021, Pembina employed 2,488 personnel (2,349 employees and 139 contractors), of which 1,491 (1,418 employees and 73 contractors) were engaged in the performance of field operations and superintendence activities, and 997 (931 employees and 66 contractors) 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, 61 are unionized. Pembina's workforce (excluding contractors) is relatively stable with limited turnover. Employees are financially encouraged to remain in Pembina's employment through options to purchase Common Shares, which are available to certain employees, and long-term incentive programs and pension plans, all of which vest over time.

### Equity, Diversity and Inclusion

Pembina is committed to diversity, equal opportunity and ensuring that its employees have the ability to thrive in an inclusive environment.

Through the Equity, Diversity and Inclusion Stand, announced in 2019, Pembina aims to:

- Attract, retain and develop a diverse workforce that is creative and innovative;
- Foster a work environment where employees feel value and respected;
- Cultivate a workforce that is representative of the communities in which Pembina operates;
- Develop a culturally aware workforce that succeeds in a global market;
- Align Pembina's values with those of its customers by recognizing the importance of a diverse and inclusive work environment;
- Demonstrate that Pembina is investing in a diverse and inclusive workforce to strengthen its business and improve profits; and
- Attract and retain investors who are committed to ESG initiatives.

In connection with the Equity, Diversity and Inclusion Stand, Pembina has established an advisory group with a mandate to act as a collective voice for equity, diversity and inclusion across the organization, advocate for and model inclusive leadership and behaviour and demonstrate allyship to underrepresented groups. In December 2021, Pembina announced employee equity, diversity and inclusion targets. These targets support the work being done across the organization to advance ESG priorities, including to increase representation of women and other underrepresented groups at all levels of the organization. Pembina is committed to achieving the following targets:

- 35 percent women in the overall workforce by 2025;
- 30 percent women in executive leadership by 2022;
- 45 percent overall diversity in the workforce by 2025; and
- 40 percent overall diversity in executive leadership by 2025.

The targets are in addition to Pembina's Board diversity targets including:

- to maintain gender diversity of Board representation of at least 30 percent; and
- that at least 40 percent of the independent directors of the Board be individuals who belong to one of the four
  designated groups in the *Employment Equity Act* (Canada): Indigenous persons, people with disabilities, people who
  are visible minorities and women.

#### 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., mid-west 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 are rapidly 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 dominated 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, 2021, there were approximately 550 million Common Shares outstanding, and approximately 20 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, 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, 10 million Series 25 Class A Preferred Shares and 600,000 Series 2021-A Class A Preferred Shares were issued and outstanding as of December 31, 2021. On March 1, 2021, Pembina redeemed all of its 6.8 million issued and outstanding Series 11 Class A Preferred Share. In addition, on June 1, 2021 Pembina redeemed all of its 10.0 million issued and outstanding Series 13 Class A Preferred Shares for a redemption price equal to \$25.00 per Series 13 Class A Preferred Share. The Series 11 Class A Preferred Shares and Series 13 Class A Preferred Shares were subsequently cancelled by Pembina.

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 takeover 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 takeover 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 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.

							Per Share Base	Right to
Series	Issue Date	Issued and Outstanding	Amount (C\$)	Annual Dividend Rate	Redemption and Conversion Option Date <sup>(2)(3)</sup>	Reset Spread	Redemption/ Liquidation Value	Convert on a one for one basis <sup>(4)</sup>
1	July 26, 2013	10,000,000	\$250,000,000	\$1.22650 <sup>(1)</sup>	December 1, 2023	2.47% <sup>(3)</sup>	\$25.00	Series 2
3	October 2, 2013	6,000,000	\$150,000,000	\$1.11950 <sup>(1)</sup>	March 1, 2024	2.60% <sup>(3)</sup>	\$25.00	Series 4
5	January 16, 2014	10,000,000	\$250,000,000	\$1.14325 <sup>(1)</sup>	June 1, 2024	3.00% <sup>(3)</sup>	\$25.00	Series 6
7	September 11, 2014	10,000,000	\$250,000,000	\$1.09500 <sup>(1)</sup>	December 1, 2024	2.94% <sup>(3)</sup>	\$25.00	Series 8
9	April 10, 2015	9,000,000	\$225,000,000	\$1.07550 <sup>(1)</sup>	December 1, 2025	3.91% <sup>(3)</sup>	\$25.00	Series 10
15	October 2, 2017 <sup>(6)</sup>	8,000,000	\$200,000,000	\$1.11600 <sup>(7)</sup>	September 30, 2022	2.92% <sup>(3)</sup>	\$25.00	Series 16
17	October 2, 2017 <sup>(6)</sup>	6,000,000	\$150,000,000	\$1.20525 <sup>(7)</sup>	March 31, 2024	3.01% <sup>(3)</sup>	\$25.00	Series 18
19	October 2, 2017 <sup>(6)</sup>	8,000,000	\$200,000,000	\$1.17100 <sup>(7)</sup>	June 30, 2025	4.27% <sup>(3)</sup>	\$25.00	Series 20
21	December 7, 2017	16,000,000	\$400,000,000	\$1.22500 <sup>(1)</sup>	March 1, 2023	3.26% <sup>(8)</sup>	\$25.00	Series 22
23	December 16, 2019 <sup>(9)</sup>	12,000,000	\$300,000,000	\$1.31250 <sup>(10)</sup>	November 15, 2022	3.65% <sup>(11)</sup>	\$25.00	Series 24
25	December 16, 2019 <sup>(9)</sup>	10,000,000	\$250,000,000	\$1.30000 <sup>(10)</sup>	February 15, 2023	3.51% <sup>(12)</sup>	\$25.00	Series 26
2021-A <sup>(13)</sup>	January 25, 2021	600,000	\$600,000,000	N/A <sup>(13)</sup>	N/A <sup>(13</sup>	N/A	\$1000.00	N/A

#### Notes

<sup>(1)</sup> 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.

<sup>(2)</sup> 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.

<sup>(3)</sup> 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.

<sup>(4)</sup> 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.

<sup>(5)</sup> 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.

- (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 Morgan Canada 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 25 Class A Preferred Shares shall not be less than 5.20 percent.
- (13) The Series 2021-A Class A Preferred Shares were issued to the Computershare Trust Company of Canada, to be held in trust to satisfy Pembina's obligations under the Subordinated Note Indenture, in connection with the issuance of the Subordinated Notes, Series 1. Holders of the Series 2021-A Class A Preferred Shares shall not be entitled to receive any dividends, nor shall any dividends accumulate or accrue, on the Series 2021-A Class A Preferred Shares prior to delivery to the holders of the Subordinated Notes, Series 1 following the occurrence of certain bankruptcy or insolvency events in respect of Pembina. See "Description of the Capital Structure of Pembina Subordinated Notes, Series 1". If at any time, Pembina redeems, purchases for cancellation or repays the Subordinated Notes, Series 1 such number of Series 2021-A Class A Preferred Shares with an aggregate issue price equal to the principal amount of Subordinated Notes, Series 1 redeemed, purchased for cancellation or repaid by Pembina will be redeemed in accordance with the terms of the Series 2021-A Class A Preferred Shares.

#### **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 whollyowned 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 per Class B Preferred Share as set out in Pembina's articles 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.

There are currently no Class B Preferred Shares outstanding.

#### **Credit Facilities**

Pembina's credit facilities as at December 31, 2021 consisted of an unsecured \$2.5 billion revolving credit facility due June 2026 (the "**Revolving Credit Facility**"), which includes a \$750 million accordion feature, and an unsecured operating facility of \$20 million due May 2022 and is typically renewed on an annual basis. Pembina also has an unsecured \$500 million term loan due August 2022 and an unsecured U.S. \$250 million non-revolving term loan due May 2025. The terms and conditions of the \$500 million term loan and the U.S. \$250 million non-revolving term loan including financial covenants, are substantially similar to the Revolving Credit Facility. There are no repayments due over the term of any of Pembina's credit facilities. As at December 31, 2021, Pembina had \$0.9 billion drawn on bank debt and \$43 million in cash, leaving \$2.5 billion of cash and unutilized debt 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 (except, in the case of the Medium Term Notes, Series 16, Medium Term Notes, Series 17 and the Medium Term Notes, Series 18, not less than 10) 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 addition, certain Pembina Medium Term Notes can be redeemed at par within three or six months of the maturity date thereof. 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 Senior 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, 15, 16, 17 and 18 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 Medium Term Notes, Series 3A, 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 Medium Term Notes, Series 3A, "Canada Yield Price" means, in effect, a price equal to the price of a specific series of Medium Term Notes, Series 3A, 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 Medium Term Notes, Series 3A, "Government of Canada Yield" means, on any date, in effect, the yield to maturity on such date compounded semi-annually which a noncallable 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 Medium Term Notes, Series 3A, 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 Senior Note Indenture) and a resulting downgrade in the ratings of the Medium Term Notes, Series 3A to below an investment grade, Pembina will be required to make an offer to repurchase all or, at the option of any holder of Medium Term Notes, Series 3A, 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.

The table below outlines the aggregate principal amount outstanding, and the material provisions of, each of Pembina's issued series of Medium Term Notes as at December 31, 2021.

Series	Issue Date	Maturity Date	Principal and Outstanding Amount (C\$)	Annual Coupon Rate	Redemption Premium (per annum)
2 <sup>(1)</sup>	October 22, 2012	October 24, 2022	\$450,000,000	3.77%	0.460%
	April 30, 2013		\$200,000,000		
3 <sup>(2)</sup>	February 2, 2015 <sup>(3)</sup>	April 30, 2043	\$150,000,000	4.75%	0.585%
	June 16, 2015 <sup>(3)</sup>		\$100,000,000		
4 <sup>(4)</sup>	April 4, 2014	March 25, 2044	\$600,000,000	4.81%	0.450%
5 <sup>(5)</sup>	February 2, 2015	February 3, 2025	\$450,000,000	3.54%	0.540%
6 <sup>(6)</sup>	June 16, 2015	June 15, 2027	\$500,000,000	4.24%	0.560%
7 <sup>(7)</sup>	August 11, 2016		\$500,000,000		
	May 28, 2020 <sup>(8)</sup>	August 11, 2026	\$100,000,000	3.71%	0.655%

Series	Issue Date	Maturity Date	Principal and Outstanding Amount (C\$)	Annual Coupon Rate	Redemption Premium (per annum)
8 <sup>(9)</sup>	January 20, 2017		\$300,000,000		
	August 16, 2017 <sup>(10)</sup>	January 22, 2024	\$350,000,000	2.99%	0.385%
9 <sup>(11)</sup>	January 20, 2017		\$300,000,000		
	August 16, 2017 <sup>(12)</sup>	January 21, 2047	\$250,000,000	4.74%	0.610%
10 <sup>(13)</sup>	March 26, 2018		\$400,000,000		0.450%
	January 10, 2020 <sup>(14)</sup>	March 27, 2028	\$250,000,000	4.02%	
11 <sup>(15)</sup>	March 26, 2018		\$300,000,000	4.75%	0.605%
	January 10, 2020 <sup>(16)</sup>	March 26, 2048	\$500,000,000		
12 <sup>(17)</sup>	April 3, 2019		\$400,000,000	3.62%	0.475%
	January 10, 2020 <sup>(18)</sup>	April 3, 2029	\$250,000,000		
13 <sup>(19)</sup>	April 3, 2019		\$400,000,000	4.54%	0.640%
	September 12, 2019 <sup>(20)</sup>	April 3, 2049	\$300,000,000		
14 <sup>(21)</sup>	September 12, 2019	June 1, 2023	\$600,000,000	2.56%	0.280%
15 <sup>(22)</sup>	September 12, 2019	February 1, 2030	\$600,000,000	3.31%	0.485%
16 <sup>(23)</sup>	May 28, 2020	May 28, 2050	\$400,000,000	4.67%	0.895%
17 <sup>(24)</sup>	December 10, 2021	December 10, 2031	\$500,000,000	3.53%	0.475%
18 <sup>(25)</sup>	December 10, 2021	December 10, 2051	\$500,000,000	4.49%	0.650%
3A <sup>(26)</sup>	March 14, 2012	March 14, 2022	\$50,000,000	5.05%	0.750%

#### Notes:

- (1) Pembina may redeem the 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.
- 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.
- 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.
- 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.
- 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) On May 28, 2020, Pembina re-opened its Medium Term Notes, Series 7 for \$100 million aggregate principal.
- (9) 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.
- (10) On August 16, 2017, Pembina re-opened its Medium Term Notes, Series 8 for \$350 million aggregate principal.
- 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.
- (12) On August 16, 2017, Pembina re-opened its Medium Term Notes, Series 9 for \$250 million aggregate principal.
- (13) 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.
- (14) On January 10, 2020, Pembina re-opened its Medium Term Notes, Series 10 for \$250 million aggregate principal.
- (15) 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.
- (16) On January 10, 2020, Pembina re-opened its Medium Term Notes, Series 11 for \$500 million aggregate principal.
- (17) 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.
- (18) On January 10, 2020, Pembina re-opened its Medium Term Notes, Series 12 for \$250 million aggregate principal.
- (19) 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.

- (20) On September 12, 2019, Pembina re-opened its Medium Term Notes, Series 13 for \$300 million aggregate principal.
- 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.
- 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.
- Pembina may redeem the Medium Term Notes, Series 16, (a) at any time prior to November 28, 2049 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 28, 2049 at a price equal to par, plus, in either case, accrued but unpaid interest, if any, to but excluding the date of redemption.
- Pembina may redeem the Medium Term Notes, Series 17, (a) at any time prior to September 10, 2031 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 10, 2031 at a price equal to par, plus, in either case, accrued but unpaid interest, if any, to but excluding the date of redemption.
- Pembina may redeem the Medium Term Notes, Series 18, (a) at any time prior to June 10, 2051 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 10, 2051 at a price equal to par, plus, in either case, accrued but unpaid interest, if any, to but excluding the date of redemption.
- (26) Pembina may redeem the Medium Term Notes, Series 3A, 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.

#### **Subordinated Notes, Series 1**

#### **Interest and Maturity**

Pembina will pay interest on the Subordinated Notes, Series 1 semi-annually, in arrears, on January 25 and July 25 of each year. From January 25, 2021 to January 25, 2031, the Subordinated Notes, Series 1 will bear interest at 4.80 percent per annum. From January 25, 2031, and on every fifth anniversary of such date, the interest rate on the Subordinated Notes, Series 1 will reset for the subsequent five-year period at a rate per annum equal to the Five Year Government of Canada Yield, plus (i) for the period from January 25, 2031 to January 25, 2051, 4.167 percent; and (ii) for the period from January 25, 2051 to January 25, 2081, 4.917 percent. In respect of the Subordinated Notes, Series 1, "Five Year Government of Canada Yield" means the bid yield to maturity (assuming semi-annual compounding) of a Canadian dollar denominated non-callable Government of Canada bond with a term to maturity of five years, provided that, if such rate is not publicly available, "Five Year Government of Canada Yield" means the average of the yields determined by two registered Canadian investment dealers (each of which is a member of the Investment Industry Regulatory Organization of Canada), selected by Pembina, as being the yield to maturity (assuming semi-annual compounding) which a Canadian dollar denominated non-callable Government of Canada bond would carry if issued in Canadian dollars at 100 percent of its principal amount on such date with a term to maturity of five years.

The Subordinated Notes, Series 1 mature on January 25, 2081.

## Deferral Right

So long as no event of default under the Subordinated Note Indenture has occurred and is continuing, Pembina may elect, on any date other than an interest payment date, to defer the interest payable on the Subordinated Notes, Series 1 on one or more occasions for up to five consecutive years. There is no limit on the number of on the interest deferrals on the Subordinated Notes, Series 1 that may occur.

#### Redemption

Subject to certain conditions from October 25, 2030 to January 25, 2031 and on any interest payment date or any interest reset date, as applicable, Pembina may redeem the Subordinated Notes, Series 1, at a redemption price equal to par, plus accrued and unpaid (including deferred, as applicable) interest to the date fixed for redemption. Pembina may also redeem the Subordinated Notes, Series 1 in certain other limited circumstances.

## Automatic Delivery of the Series 2021-Preferred Shares

Following the occurrence of certain bankruptcy or insolvency events in respect of Pembina, holders of the Subordinated Notes, Series 1, will, subject to certain exceptions, be entitled to receive the Series 2021-A Class A Preferred Shares and any other assets held in trust to satisfy Pembina's obligations under the Subordinated Note Indenture for the Subordinated Notes, Series 1. Upon delivery of the Series 2021-A Class A Preferred Shares, the Subordinated Notes, Series 1 will be immediately and automatically surrendered and cancelled and all rights of any holders of the Subordinated Notes, Series 1 as debtholders of Pembina shall automatically cease.

## **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.

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 confirmed a debt rating of 'BBB (high)' to each issued senior unsecured note of Pembina and assigned a debt rating of 'BBB (low)' to the Subordinated Notes, Series 1.

The BBB rating is the fourth highest of DBRS's ten rating categories for long-term debt, which range from AAA to D. The BBB rating indicates that, in DBRS's view, the rated securities are of adequate investment grade credit quality. The capacity for the payment of financial obligations is considered acceptable; however, the issuer may be vulnerable to future events. 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.

Each issued series of Class A Preferred Shares, other than the Series 2021-A Preferred Shares, has been rated 'Pfd-3 (high)' 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 has confirmed a rating of 'BBB' to each issued senior unsecured note and assigned a rating of 'BB+' to the Subordinated Notes, Series 1.

The BBB rating is the fourth highest rating, of S&P's ten rating categories for issuances of long-term debt which range from 'AAA' to 'D'. 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 weaken the obligor's capacity to meet its financial commitment on the obligation. The BB rating is the fifth highest rating of S&P's ten rating categories for issues of long-term debt. Issues of debt securities rated BB are, according to the S&P rating system, 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 BB is less vulnerable to non-payment than other speculative issues; however, S&P regards the obligor as facing 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. 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.

Each issued series of Class A Preferred Shares, other than the Series 2021-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 'D'. "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".

# **Escrowed Securities and Securities Subject to Contractual Restrictions on Transfer**

Number of Securities Held in Escrow or that are Subject to a Contractual Restriction on

	Contractual Restriction on	
Designation of Class	Transfer	Percentage of Class
Series 2021-A Class A Preferred Shares <sup>(1)</sup>	600,000	0.57%

#### Note:

<sup>(1)</sup> See "Description of the Capital Structure of Pembina – Class A Preferred Shares" for additional information relating to the Series 2021-A Class A Preferred Shares, including the name of the trustee of the Series 2021-A Class A Preferred Shares and the date of and conditions governing the automatic delivery of the Series 2021-A Class A Preferred Shares to the holders of the Subordinated Notes, Series 1.

#### **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 25<sup>th</sup> calendar day of each month (except for the December record date, which is December 31<sup>st</sup>), 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 15<sup>th</sup> calendar day of the month following the record date. Should the payment date fall on a weekend or on a statutory holiday, the business day prior to the weekend or statutory holiday becomes the payment date. The following table sets forth the amount of monthly cash dividends paid by Pembina on its Common Shares in 2019, 2020, 2021 and to date in 2022.

#### **Cash Dividends Per Common Share**

Month of Payment Date	2019	2020	2021	2022	
January	\$0.19	\$0.20	\$0.21	\$0.21 <sup>(3)</sup>	_
February	\$0.19	\$0.21 <sup>(2)</sup>	\$0.21	\$0.21 <sup>(4)</sup>	
March	\$0.19	\$0.21	\$0.21	N/A	
April	\$0.19	\$0.21	\$0.21	N/A	
May	\$0.19 <sup>(1)</sup>	\$0.21	\$0.21	N/A	
June	\$0.20	\$0.21	\$0.21	N/A	
July	\$0.20	\$0.21	\$0.21	N/A	
August	\$0.20	\$0.21	\$0.21	N/A	
September	\$0.20	\$0.21	\$0.21	N/A	
October	\$0.20	\$0.21	\$0.21	N/A	
November	\$0.20	\$0.21	\$0.21	N/A	
December	\$0.20	\$0.21	\$0.21	N/A	
Total	\$2.35	\$2.51	\$2.51	\$0.42	

#### Notes:

#### 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 calendar 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 calendar 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 15<sup>th</sup> calendar day of February, May, August and November of each year, if, as and when declared by the Board. Dividends on the Series 2021-A Preferred Shares are only payable, if, as and when declared by the

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

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

<sup>(3)</sup> On January 6, 2022, 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 February 15, 2022 to holders of Common Shares of record on January 25, 2022.

<sup>(4)</sup> On February 3, 2022, 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 15, 2022 to holders of Common Shares of record on February 25, 2022.

Board, following the delivery to the holders of the Subordinated Notes, Series 1. 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 2019, 2020, 2021 and to date in 2022.

#### Cash Dividends Per Class A Preferred Share

Quarterly Payment Date <sup>(1)</sup>	Series 1	Series 3	Series 5	Series 7	Series 9	Series 11 <sup>(2)</sup>	Series 13 <sup>(3)</sup>	Series 15	Series 17	Series 19	Series 21	Total
2019												
Mar	\$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	\$0.306625	\$0.279875	\$0.285813	\$0.273750	\$0.296875	\$0.359375	\$0.359375	\$0.279000	\$0.301313	\$0.312500	\$0.306250	\$3.360751
June	\$0.306625	\$0.279875	\$0.285813	\$0.273750	\$0.296875	\$0.359375	\$0.359375	\$0.279000	\$0.301313	\$0.312500	\$0.306250	\$3.360751
Sept	\$0.306625	\$0.279875	\$0.285813	\$0.273750	\$0.296875	\$0.359375	\$0.359375	\$0.279000	\$0.301313	\$0.292750	\$0.306250	\$3.341001
Dec	\$0.306625	\$0.279875	\$0.285813	\$0.273750	\$0.296875	\$0.359375	\$0.359375	\$0.279000	\$0.301313	\$0.292750	\$0.306250	\$3.341001
2021												
Mar	\$0.306625	\$0.279875	\$0.285813	\$0.273750	\$0.268875	\$0.359375	\$0.359375	\$0.279000	\$0.301313	\$0.292750	\$0.306250	\$3.313001
June	\$0.306625	\$0.279875	\$0.285813	\$0.273750	\$0.268875	N/A	\$0.359375	\$0.279000	\$0.301313	\$0.292750	\$0.306250	\$2.953626
Sept	\$0.306625	\$0.279875	\$0.285813	\$0.273750	\$0.268875	N/A	N/A	\$0.279000	\$0.301313	\$0.292750	\$0.306250	\$2.594251
Dec	\$0.306625	\$0.279875	\$0.285813	\$0.273750	\$0.268875	N/A	N/A	\$0.279000	\$0.301313	\$0.292750	\$0.306250	\$2.594251
2022												
Mar <sup>(4)</sup>	\$0.306625	\$0.279875	\$0.285813	\$0.273750	\$0.268875	N/A	N/A	\$0.279000	\$0.301313	\$0.292750	\$0.306250	\$2.594251

Quarterly Payment Date <sup>(1)</sup>	Series 23 <sup>(5)</sup>	Series 25 <sup>(6)</sup>	Total
2020			
Feb	\$0.328125	\$0.325000	\$0.653125
May	\$0.328125	\$0.325000	\$0.653125
Aug	\$0.328125	\$0.325000	\$0.653125
Nov	\$0.328125	\$0.325000	\$0.653125
2021			
Feb	\$0.328125	\$0.325000	\$0.63125
May	\$0.328125	\$0.325000	\$0.63125
Aug	\$0.328125	\$0.325000	\$0.63125
Nov	\$0.328125	\$0.325000	\$0.63125
2022			
Feb	\$0.328125	\$0.325000	\$0.63125

#### Notes

A holder of Series 1, 3, 5, 7, 9 and 21 Class A Preferred Shares is entitled to receive a fixed, cumulative preferential dividend payable quarterly on the first calendar day of March, June, September and December, as declared by the Board of Directors. Prior to the redemption of the Series 11 and 13 Class A Preferred Shares in March and June 2021, respectively, a holder of Series 11 and 13 Class A Preferred Shares was entitled to receive a fixed, cumulative preferential dividend payable quarterly on the first calendar 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 calendar 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 15<sup>th</sup> calendar day of February, May, August and November, as declared by the Board of Directors. A holder of the Series 2021-A Class A Preferred Shares shall not be entitled to receive any dividends, nor shall any dividends accumulate or accrue, on the Series 2021-A Class A Preferred Shares shall not be entitled to receive any dividends hackuptcy or insolvency events in respect of Pembina. Thereafter, holders of the Series 2021-A Class A Preferred Shares will be entitled to receive a fixed, cumulative preferential dividend payable semi-annually on the 25th calendar day of January and July, as declared by the Board of Directors.

<sup>(2)</sup> On March 1, 2021, Pembina redeemed all of its 6.8 million issued and outstanding Series 11 Class A Preferred Shares for a redemption price equal to \$25.00 per Series 11 Class A Preferred Share.

- (3) On June 1, 2021, Pembina redeemed all of its 10.0 million issued and outstanding Series 13 Class A Preferred Shares for a redemption price equal to \$25.00 per Series 13 Class A Preferred Share.
- (4) On January 6, 2022, 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, \$0.288813 per Series 5 Class A Preferred Share, \$0.273750 per Series 7 Class A Preferred Share, \$0.268875 per Series 9 Class A Preferred Share and \$0.306250 per Series 21 Class A Preferred Share to be paid, subject to applicable law, on March 1, 2022 to holders of record on February 1, 2022. On January 6, 2022, Pembina announced that the Board of Directors had declared a quarterly dividend of \$0.279000 per Series 15 Class A Preferred Share, \$0.301313 per Series 17 Class A Preferred Share and \$0.292750 per Series 19 Class A Preferred Share to be paid, subject to applicable law, on March 31, 2022 to holders of record on March 15, 2022.
- (5) 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 Morgan Canada 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.
- (6) 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 Morgan Canada 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.

#### **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 and on the NYSE for 2021.

		TSX (	PPL) <sup>(1)</sup>			NYSE	(PBA) <sup>(2)</sup>	
Month	High (\$)	Low (\$)	Close (\$)	Volume	High (US\$)	Low (US\$)	Close (US\$)	Volume
January	36.42	30.47	33.66	77,662,636	28.82	23.85	26.30	23,976,176
February	36.08	32.30	32.36	76,030,642	28.35	25.38	25.39	30,796,138
March	38.77	32.86	36.30	104,464,842	30.95	25.92	28.84	39,578,938
April	38.44	35.96	37.94	63,128,174	31.25	28.61	30.86	17,514,610
May	39.60	37.41	38.89	70,117,252	32.73	30.83	32.32	18,950,984
June	41.63	37.05	39.39	95,525,620	34.25	30.81	31.77	27,516,309
July	41.67	38.27	41.24	70,658,157	33.51	30.06	33.05	18,631,324
August	41.57	37.96	38.45	51,738,262	33.47	29.63	30.45	19,096,209
September	40.60	38.13	40.15	56,020,118	32.09	30.33	31.69	18,035,267
October	42.97	39.56	40.97	59,957,240	34.73	31.36	33.09	15,900,139
November	43.00	37.39	37.80	85,943,539	34.60	29.17	29.65	26,406,779
December	38.92	37.02	38.37	56,492,474	30.87	28.89	30.33	17,844,462

#### Notes:

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 15 Class A Preferred Shares, Series 17 Class A Preferred Shares, Series 19 Class A Preferred Shares, Series 21 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.O", "PPL.PR.O", "PPL.PR.O", "PPL.PR.O", "PPL.PR.S", "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 15, Series 17, Series 19, Series 21, Series 23 and Series 25 Class A Preferred Shares on the TSX for 2021.

	Series 1 (PPL.PR.A) <sup>(1)</sup>					Series 3 (PPL.PR.C) <sup>(1)</sup>					Series 5 (PPL.PR.E) <sup>(1)</sup>		
Month	High (\$)	Low (\$)	Close (\$)	Volume	High (\$)	Low (\$)	Close (\$)	Volume	High (\$)	Low (\$)	Close (\$)	Volume	
January	17.46	15.06	16.79	242,755	16.80	14.83	16.39	115,954	18.30	15.83	17.77	225,459	
February	17.70	16.79	17.46	213,884	17.86	16.48	17.70	170,040	18.67	17.73	18.56	196,247	
March	19.05	17.44	18.99	195,940	18.88	17.57	18.85	229,258	20.52	18.47	20.49	192,940	
April	19.80	18.76	19.74	116,460	19.87	18.66	19.81	298,225	21.61	20.35	21.61	220,958	
May	20.74	19.70	20.74	73,869	20.29	19.50	20.10	103,509	22.42	21.43	22.42	154,722	
June	21.85	20.80	21.14	102,341	21.35	20.18	20.79	144,668	23.26	22.39	22.80	212,165	
July	21.40	20.46	20.97	209,329	21.05	20.25	20.80	153,591	23.02	21.59	22.87	173,470	
August	21.57	20.64	21.39	94,008	21.49	20.80	21.33	68,279	23.40	22.79	23.38	208,352	
September	21.48	20.92	21.36	47,088	21.43	21.01	21.43	46,405	23.50	22.92	23.40	147,055	

<sup>(1)</sup> As reported by all Canadian marketplaces. Source: Bloomberg.

<sup>&</sup>lt;sup>(2)</sup> As reported by all U.S. marketplaces. Source: Bloomberg.

	Series 1 (PPL.PR.A) <sup>(1)</sup>				Series 3 (PPL.PR.C) <sup>(1)</sup>				Series 5 (PPL.PR.E) <sup>(1)</sup>			
Month	High (\$)	Low (\$)	Close (\$)	Volume	High (\$)	Low (\$)	Close (\$)	Volume	High (\$)	Low (\$)	Close (\$)	Volume
October	22.75	21.00	22.57	181,333	22.83	21.27	22.62	76,106	24.39	23.40	24.38	130,289
November	22.95	21.80	21.80	108,999	22.90	21.85	21.91	120,247	24.49	23.72	23.72	97,520
December	21.81	19.95	21.17	88,400	21.75	19.54	21.27	41,937	23.82	21.61	22.77	90,274

		Series 7 (F	PL.PR.G) <sup>(1)</sup>			Series 9 (	PPL.PR.I) <sup>(1)</sup>			Series 15 (PPL.PR.O) <sup>(1)</sup>			
Month	High (\$)	Low (\$)	Close (\$)	Volume	High (\$)	Low (\$)	Close (\$)	Volume	High (\$)	Low (\$)	Close (\$)	Volume	
January	18.11	15.71	17.57	85,522	21.42	18.96	21.22	125,861	18.21	15.80	17.63	539,771	
February	18.63	17.56	18.42	260,942	22.44	20.76	22.25	305,696	18.91	17.52	18.60	58,513	
March	20.19	18.40	20.19	153,058	23.11	22.19	23.00	93,781	20.38	18.84	20.38	211,293	
April	20.79	19.97	20.79	82,704	23.55	22.70	23.50	169,167	20.83	19.48	20.83	148,443	
May	21.93	20.80	21.93	94,922	25.18	23.33	25.18	200,831	21.90	20.47	21.79	97,602	
June	22.65	21.90	22.10	190,917	25.51	25.00	25.30	297,001	22.58	21.15	21.88	58,737	
July	22.36	21.58	22.35	56,280	26.40	25.20	25.34	641,883	22.21	21.28	22.12	121,358	
August	22.80	22.12	22.72	182,110	25.80	25.20	25.45	102,342	22.85	21.93	22.78	156,508	
September	22.80	22.42	22.75	55,388	25.52	24.91	25.44	54,406	22.74	22.08	22.26	38,507	
October	23.83	22.60	23.72	61,066	25.70	25.17	25.40	61,833	23.85	21.87	23.85	70,721	
November	23.78	23.15	23.18	47,363	25.43	24.78	25.00	57,297	23.88	23.13	23.20	231,088	
December	23.03	20.66	22.01	31,458	24.92	24.23	24.80	43,844	23.20	20.78	22.36	100,045	

	Series 17 (PPL.PR.Q) <sup>(1)</sup>					Series 19 (PPL.PR.S) <sup>(1)</sup>					Series 21 (PPL.PF.A) <sup>(1)</sup>			
Month	High (\$)	Low (\$)	Close (\$)	Volume	High (\$)	Low (\$)	Close (\$)	Volume	High (\$)	Low (\$)	Close (\$)	Volume		
January	18.55	16.00	18.10	254,805	22.87	20.25	22.58	122,059	24.40	22.83	24.00	140,080		
February	19.22	18.09	19.10	60,523	23.30	22.42	23.30	158,471	24.40	23.77	24.01	210,249		
March	20.96	19.00	20.85	170,810	24.15	23.25	24.08	109,739	24.99	23.99	24.40	257,072		
April	21.86	20.70	21.86	302,120	24.57	23.89	24.42	137,703	25.43	24.20	25.32	155,695		
May	22.95	21.80	22.95	183,821	25.65	24.22	25.64	77,239	25.65	25.10	25.50	319,218		
June	24.20	22.99	23.60	196,897	26.27	25.18	25.34	156,052	25.93	25.19	25.44	310,713		
July	24.18	23.11	24.15	135,622	26.99	25.25	25.48	378,518	25.75	25.28	25.50	144,455		
August	24.50	23.50	23.73	246,708	26.17	25.37	26.10	52,185	25.75	25.19	25.55	105,314		
September	24.00	21.55	23.46	63,069	26.00	25.15	25.60	142,029	25.58	25.36	25.58	239,600		
October	24.52	23.51	24.48	172,999	26.06	25.50	25.75	42,323	26.29	25.43	26.29	92,735		
November	24.72	24.25	24.25	57,086	25.82	25.40	25.40	62,520	26.23	24.90	24.90	185,455		
December	24.20	21.91	23.38	46,297	25.44	24.52	25.43	49,569	25.87	24.90	25.87	173,653		

		Series 23 (	PPL.PF.C) <sup>(1)</sup>			Series 25 (	PPL.PF.E) <sup>(1)</sup>	
Month	High (\$)	Low (\$)	Close (\$)	Volume	High (\$)	Low (\$)	Close (\$)	Volume
January	25.15	24.25	24.68	252,876	25.00	23.93	24.62	161,012
February	25.10	24.62	24.90	248,032	25.00	24.49	24.84	127,612
March	25.22	24.50	25.08	556,192	25.10	24.66	25.10	299,492
April	25.78	24.88	25.78	147,670	25.56	24.74	25.55	576,833
May	25.95	25.34	25.94	116,006	26.19	25.32	26.13	120,316
June	26.25	25.47	25.99	137,638	26.20	25.55	26.05	390,527
July	25.99	25.35	25.67	84,245	26.03	25.40	25.82	92,210
August	25.95	25.22	25.81	149,877	26.00	25.30	25.85	124,868
September	26.00	25.50	25.99	53,657	26.09	25.50	26.09	148,131
October	26.18	25.66	25.96	91,201	26.24	25.70	26.07	62,770
November	26.04	25.35	25.35	49,620	26.23	25.25	25.26	214,579
December	25.97	25.31	25.78	52,013	26.00	25.04	26.00	62,602

 $<sup>\,^{(1)}\,\,</sup>$  As reported by Canadian marketplaces. Source: Bloomberg.

Note:

#### **Prior Sales**

In 2021, 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 <sup>(3)(4)</sup> 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.
Cynthia Carroll <sup>(3)(4)(6)</sup> Naples, Florida, U.S.	May 8, 2020	Independent businesswoman since 2013; prior thereto, Chief Executive Officer of Anglo American plc from 2007 to 2013, and prior thereto, held various executive roles at Alcan Aluminum Corporation, including President of Bauxite, Alumina and Specialty Chemicals and Chief Executive Officer of the Primary Metal Group, Alcan's core business. Currently a member of the board of directors of each of Hitachi Ltd., American Securities, Prince International Corporation (a subsidiary of American Securities LLC), Baker Hughes Company and Glencore plc.
J. Scott Burrows Calgary, Alberta, Canada	February 22, 2022	President and Chief Executive Officer of Pembina since February 22, 2022; prior thereto, interim President and Chief Executive Officer of Pembina from November 19, 2021 until February 21, 2022; prior thereto, 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.
Randall J. Findlay <sup>(1)(5)(6)(7)</sup> 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.
Robert G. Gwin <sup>(3)(5)(6)</sup> Houston, Texas, U.S.	May 8, 2020	Independent businessman since 2019; prior thereto, President of Anadarko Petroleum Corporation, until its acquisition by Occidental Petroleum Corporation in 2019; prior thereto, Executive Vice President, Finance and Chief Financial Officer of Anadarko from 2009 to 2018; President and Chief Executive Officer of Western Gas Partners, LP from 2007 to 2010, as well as a member of the board of directors from 2007 to 2019; served on the board of directors of LyondellBasell Industries, N.V. from 2011 to 2018, including serving as its Chairman from 2013 to 2018. Currently a member of the board of directors of Crescent Energy Company.
Maureen E. Howe <sup>(2)(5)(8)</sup> 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; previously served as a member of the board of directors and acted as Chair of the audit committee of Mosaic Forest Management Corp. Currently a member of the board of directors of Methanex Corporation and Freehold Royalties Ltd.

Name and Residence	Date Appointed	Principal Occupation During the Past Five Years
Gordon J. Kerr <sup>(2)(5)(8)</sup> 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; previously served as Chairman of the Canadian Association of Petroleum Producers, a former director of Deer Creek Energy Limited and Laricina Energy Ltd., and a past member of the Canadian Council of Chief Executives.
David M.B. LeGresley <sup>(3)(5)</sup> Toronto, Ontario, Canada	August 16, 2010	Corporate director since 2010; prior thereto, Vice Chairman of National Bank Financial from 2006 to 2008 and Executive Vice President, Corporate and Investment Banking from 1999 to 2006. Currently a member and Chair of the board of directors of Equitable Group Inc. and its subsidiary, Equitable Bank Inc.
Leslie A. O'Donoghue <sup>(2)(4)(6)</sup> Calgary, Alberta, Canada	December 17, 2008	Retired as Executive Advisor to the Chief Executive Officer and Executive Vice President, Chief Strategy and Corporate Development Officer of Nutrien Ltd. in 2019 after 20 years with the company; prior thereto, Executive Vice President, Corporate Development and Strategy and Chief Risk Officer of Agrium Inc. (merged with Potash Corporation of Saskatchewan to form Nutrien Ltd.) since October 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. Currently a member of the board of directors of Methanex Corporation.
Bruce D. Rubin <sup>(2)(4)</sup> Swarthmore, Pennsylvania, U.S.	May 5, 2017	Independent businessman since 2014; prior thereto, 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.
Henry W. Sykes <sup>(2)(3)(6)(9)(10)</sup> 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; prior thereto, Executive Vice President, Business Development of Gulf Canada Resources Ltd.

#### Notes:

- (1) Chair of the Board.
- (2) Member of Audit Committee.

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- (3) Member of Human Resources, Health and Compensation Committee.
- (4) Member of the Safety, Environment and Operational Excellence Committee.
- (5) Member of the Governance, Nominating and Social Responsibility Committee.
- (6) Previously a member of the CEO Succession Committee, which fulfilled its mandate on February 22, 2022 with the appointment of Mr. Burrows as President and Chief Executive Officer of Pembina.
- (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. 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.
- <sup>(9)</sup> Following closing of the Veresen Acquisition, Ms. Howe and Mr. Sykes were appointed to Pembina's Board of Directors effective October 2, 2017.
- 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. Burrows, 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 standing committees, the Audit Committee, the Safety, Environment and Operational Excellence Committee, the Human Resources, Health and Compensation Committee, and the Governance, Nominating and Corporate Social Responsibility Committee. In addition, in response to Mr. Dilger's departure in November 2021, the Board formed the CEO Succession Committee, an *ad hoc* committee of the Board, to assist the Board in appointing a permanent Chief Executive Officer for Pembina. The CEO Succession Committee completed its mandate with the appointment of Mr. Burrows as President and Chief Executive Officer of Pembina on February 22, 2022. Additional information regarding the responsibilities of these committees will be contained in Pembina's management information circular for its 2022 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 at least the past five years.

Name and Residence <sup>(1)</sup>	Office with Pembina	Principal Occupation During the Past Five Years		
J. Scott Burrows Calgary, Alberta, Canada	President and Chief Executive Officer	President and Chief Executive Officer since February 2022; prior thereto, interim President and Chief Executive Officer since November 2021; prior thereto, Senior Vice President and Chief Financial Officer since August 2017; prior thereto, Vice President, Finance and Chief Financial Officer of Pembina since January 2015.		
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 2018; prior thereto, Senior Vice President, NGL and Natural Gas Facilities of Pembina since September 2013.		
Cameron J. Goldade Calgary, Alberta, Canada	Interim Chief Financial Officer	Interim Chief Financial Officer since November 2021; prior thereto, Vice President, Capital Markets since June 2017; prior thereto, Senior Manager of Capital Markets of Pembina since January 2015.		
Janet C. Loduca <sup>(2)</sup> Calgary, Alberta, Canada	Senior Vice President, External Affairs and Chief Legal and Sustainability Officer	Senior Vice President, External Affairs and Chief Legal and Sustainability Officer since April 2021; prior thereto, General Counsel and Vice President, Legal and Sustainability since November 2020; prior thereto, Senior Vice President and General Counsel of Pacific Gas and Electric Company ("PG&E"), a regulated gas and utility company, from January 2019 until August 2020; prior thereto Vice President and Deputy General Counsel of PG&E since March 2017; prior thereto, Vice President, Investor Relations of PG&E since January 2015.		
Jaret A. Sprott Calgary, Alberta, Canada	Senior Vice President and Chief Operating Officer, Pipelines and Facilities	Senior Vice President and Chief Operating Officer, Pipelines and Facilities since February 2022; prior thereto, Senior Vice President and Chief Operating Officer, Facilities since January 2018; prior thereto, Vice President, Gas Services of Pembina since January 2015.		

#### Notes:

- (1) Eva Bishop will be joining Pembina as Senior Vice President, Corporate Services, with her appointment effective upon her relocation from London, United Kingdom to Calgary, Alberta in April 2022. Ms. Bishop joins Pembina from BP Europa SE, BP Group's European public utility company, where she served as a non-executive director from April 2016 to December 2021. Ms. Bishop was Partner and CEO Designate of 53° Capital, a private equity investment company, from August 2019 to February 2020; prior thereto Ms. Bishop was Associate General Counsel, BP Downstream of BP plc from September 2012 to June 2017. Ms. Bishop also serves as a Board Trustee of the charity "Power of Zero", a UNICEF and UNESCO backed global campaign to teach young children the skills and values they need for a connected world, which is a position she has held since November 2020.
- (2) Ms. Loduca was an executive officer of PG&E from January 2019 until July 2020, acting as Senior Vice President and General Counsel from January 2019 until July 2020. On or about January 29, 2019, PG&E filed voluntary petitions for relief under Chapter 11 of the United States Bankruptcy Code. In the Chapter 11 proceedings, PG&E successfully completed its restructuring process and the implementation of its plan of reorganization, as approved by the Bankruptcy Court. PG&E emerged from Chapter 11 on June 20, 2020.

As at February 23, 2022, the directors and executive officers of Pembina beneficially owned, or controlled or directed, directly or indirectly, an aggregate of 412,210 Common Shares, representing approximately 0.07 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 Maureen E. Howe, as Chair, Gordon J. Kerr, Leslie O'Donoghue, 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.

#### Maureen E. Howe

Maureen E. Howe is the Chair of the Audit Committee and 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. She currently serves as a member of the board of directors of Methanex Corporation and Freehold Royalties Ltd. Ms. Howe previously served as a member of the board of directors and chair of the audit committee of Mosaic Forest Management, 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. Ms. Howe is a member of the Institute of Corporate Directors. 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.

# Gordon J. Kerr

Mr. Kerr has been a member of the Audit Committee since February 27, 2015 and was the Chair of the Audit Committee from May 5, 2017 to May 7, 2021. 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 former President and Chief Executive Officer and director 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, a past member of the Canadian Council of Chief Executives and a past member of the Management Advisory Council of the Haskayne School of Business at the University of Calgary. 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. Mr. Kerr is a member of the Institute of Corporate Directors and is also a member of the Executive of the Calgary Chapter of the Institute of Corporate Directors. 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.

# Leslie O'Donoghue

Leslie O'Donoghue has been a member of the Audit Committee since May 8, 2020. Ms. O'Donoghue 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. O'Donoghue retired from Nutrien Ltd. at end of 2019, after 20 years with the company. Her most recent roles were Executive Vice President & Chief Strategy & Corporate Development Officer and Executive Advisor to the CEO. While at Agrium Inc., the predecessor to Nutrien Ltd. prior to its merger with Potash Corporation of Saskatchewan, Ms. O'Donoghue held a number of roles including Executive Vice President, Corporate Development & Strategy & Chief Risk Officer, Executive Vice President, Operations and Chief Legal Officer and Senior Vice President, Business Development. Before joining Agrium Inc., Ms. O'Donoghue was a partner in the national law firm of Blake, Cassels & Graydon LLP. She holds a Bachelor of Arts (Economics) degree from the University of Calgary and an LL.B. from Queen's University; she was admitted to the Alberta Bar in 1989. She currently serves as a director of Methanex Corporation. Ms. O'Donoghue is also a member of the Institute of Corporate Directors. This business experience provides Ms. O'Donoghue with the skill set and financial literacy required to carry out her 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. Mr. Rubin is a member of the Institute of Corporate Directors. 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, 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 paid or payable by Pembina for professional services provided by KPMG LLP during each of the last two financial years:

YEAR	AUDIT FEES <sup>(1)</sup>	AUDIT-RELATED FEES <sup>(2)</sup>	TAX FEES <sup>(3)</sup>	ALL OTHER FEES <sup>(4)</sup>
2021	\$2,724,500	\$119,000	\$120,305	\$199,250
2020	\$2,197,500	\$128,500	\$95,000	\$31,750

#### 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 2021, fees included additional expenses for: (a) the 2021 Short Form Base Shelf Prospectus; (b) the 2021 Short Form Medium Term Notes Base Shelf Prospectus; and (c) pricing supplements in relation to the sale and issue of Medium Term Notes, Series 17 and Series 18. n 2020, fees included additional expenses for: (a) pricing supplements in relation to the sale and issue of Medium Term Notes, Series 7, Series 10, Series 11, Series 12 and Series 16; (b) the 2020 Base Shelf Prospectus; and (c) the prospectus supplements in relation to the sale and issue of the Subordinated Notes, Series 1.
- (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 2021, these fees included audit fees for the pension plan and Younger facility pension plan audits of \$25,000 (2020 \$30,000) and \$18,000 (2020 \$30,000), respectively.
- (3) Tax fees were for tax compliance of \$2,850 (2020: \$2,700) and tax advice and tax planning of \$117,455 (2020: \$92,300). 2021 and 2020 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" which included fees related to advice and assistance with assurance and advisory services over GHG emissions and ESG sustainability reporting.

#### **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 most recent 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 (the severity of which could increase due to climate change), market inventory levels, general economic conditions, the availability and price of transportation logistics, changes in crude oil markets and other factors. Pembina manages its risk exposure by balancing purchases and sales to secure less volatile margins. Notwithstanding Pembina's management of price and quality risk, marketing margins for commodities can vary and have varied significantly from period to period in the past. This variability could have an adverse effect on the results of Pembina's Marketing business and its overall results of operations. To assist in reducing this inherent variability in its Marketing business, Pembina has invested, and will continue to invest, in assets that have a fee-based revenue component.

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

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

For more information with respect to Pembina's financial instruments and financial risk management program, see Note 25 to Pembina's Consolidated Financial Statements, which note is incorporated by reference herein.

# Regulation and Legislation

Legislation in Alberta and British Columbia, the jurisdictions from which most products transported by Pembina are produced, exists to ensure that producers have fair and reasonable opportunities to produce, process and market their reserves. Regulatory authorities in Alberta and British Columbia may declare the operator of a pipeline a common carrier of crude oil, NGL or natural gas. Common carriers must not discriminate between producers who seek access to the pipeline. Regulatory authorities may also establish conditions under which the common 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 for pipelines other than the Alliance Pipeline and the Cochin Pipeline (the tolls and tariffs of which are otherwise subject to CER oversight), while considered remote by Pembina, could result in tariff levels that are less advantageous to Pembina and could impair the economic operation of such pipeline systems.

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

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

In 2019, the federal government overhauled the environmental assessment and federal energy regulation regime in Canada. The National Energy Board ("NEB") and NEB Act were replaced by the CER and the Canadian Energy Regulator Act (Canada) ("CER Act"). Similarly, the Canadian Environmental Assessment Act, 2012 (Canada) ("CEAA") was replaced by the Impact Assessment Act (Canada) ("IAA") and the Canadian Environmental Assessment Agency was replaced by the new IAAC as the

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

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

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

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

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 Pembina's marine terminal; failure to maintain adequate supplies of spare parts; operator error; labour disputes; disputes with interconnected facilities and carriers; operational disruptions or apportionment on third-party systems or refineries, which may prevent the full utilization of Pembina's facilities and pipelines; and catastrophic events, including, but not limited to, those related to climate change and extreme weather events, including fires, floods and other natural disasters, explosions, train derailments, earthquakes, widespread epidemics or pandemic outbreaks, acts of civil protest or disobedience, terrorism or sabotage, and other similar events, many of which are beyond the control of Pembina and all of which could result in operational disruptions, damage to assets, related releases or other environmental issues, and delays in construction, labour and materials. Pembina may also be exposed from time to time to additional operational risks not stated in the immediately preceding sentence. In addition, the consequences of any operational incident (including as a result of adverse sea conditions) at Vancouver Wharves and Prince Rupert Terminal or involving a vessel receiving products from Vancouver Wharves or Prince Rupert 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 Pembina's ability to effectively carry on operations at Vancouver Wharves and the Prince Rupert 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 inline inspection tools and various other leak detection technologies. Pembina's maintenance, excavation and repair programs are focused on risk mitigation and, as such, resources are directed to the areas of greatest benefit and infrastructure is replaced or repaired as required. Pembina carries insurance coverage with respect to some, but not all, casualty occurrences in amounts customary for similar business operations, which coverage may not be sufficient to compensate for all casualty occurrences. In addition, Pembina has a comprehensive Security Management Program designed to reduce security-related risks.

#### Inflation

The general rate of inflation impacts the economies and business environments in which Pembina operates. Increased inflation and any economic conditions resulting from governmental attempts to reduce inflation, such as the imposition of higher interest rates or wage and price controls, may negatively impact levels of demand for Pembina's services and cost of inputs, and could, accordingly, have a material adverse effect on Pembina's business, financial condition and results of operations. Higher interest rates as a result of inflation could negatively impact the Company's borrowing costs, which could, in turn, have a material adverse effect on Pembina's cash flow and ability to service obligations under its debt securities and other debt obligations.

#### Completion and Timing of Expansion Projects

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

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

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

# Possible Failure to Realize Anticipated Benefits of Corporate Strategy

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

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

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

# Joint Ownership and Third-Party Operators

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

# Reserve Replacement, Throughput and Product Demand

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

Over the long-term, the ability and willingness of shippers to continue production will also depend, in part, on the level of demand and prices for crude oil, condensate, NGL and natural gas in the markets served by the crude oil, NGL and natural gas

pipelines and gas processing and gathering infrastructure in which Pembina has an interest. Producers may shut-in production at lower product prices or higher production costs.

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

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

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

# Competition

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

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 are unable to perform their obligations under the various agreements with Pembina, the revenue and dividends of the Company and the operations of Pembina could be negatively impacted. See "General Risk Factors – Counterparty Credit Risk" below.

# **Customer Contracts**

Throughput on Pembina's pipelines is governed by transportation contracts or tolling arrangements with various crude oil and natural gas producers. Pembina is party to numerous contracts of varying durations in respect of its gas gathering, processing and fractionation facilities as well as its terminalling and storage services. Any default by counterparties under such contracts or any expiration or early termination of such contracts or tolling arrangements without renewal or replacement, provided that such contracts are material to Pembina's business and operations, may have an adverse effect on Pembina's business and results from operations and there is no guarantee that any of the contracts that Pembina currently has in place will be renewed at the end of their term, including on terms favourable to Pembina, or replaced with other contracts in the event of early termination. Further, some contracts associated with the services described above are comprised of a mixture of firm

and non-firm commitments. The revenue that Pembina earns on non-firm or firm commitments without take-or-pay service is dependent on the volume of crude oil, condensate, NGL and natural gas produced by producers in the relevant geographic areas. Accordingly, lower production volumes in these areas, including for reasons such as low commodity prices, may have an adverse effect on Pembina's revenue.

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

# Risks Relating to Leases and Rights of Way Access

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

# Reputation

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

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

#### **Environmental Costs and Liabilities**

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

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

environmental legislative initiatives that may materially impact Pembina's business and financial results and conditions are outlined below.

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

The federal government mandated a pan-Canadian carbon price beginning at \$20 per tonne in 2019, rising by \$10 per tonne per year to \$50 per tonne in 2022. Pursuant to the New Federal Climate Plan, after 2022, the carbon price will rise by \$15 a year to \$170 in 2030. The GGPPA establishes a set of minimum national standards for carbon pricing in Canada, which standards apply to provinces that otherwise fail to impose adequate provincial carbon pricing measures. The New Federal Climate Plan indicates the federal government will review the standard for adequacy of provincial carbon pricing measures under the GGPPA. This may result in the GGPPA applying more broadly to the provinces and territories. In 2021, a majority of the Supreme Court of Canada confirmed that the carbon pricing regime established under the GGPPA is constitutional. Future amendments to the GGPPA, including the potential increase in carbon price in accordance with the New Federal Climate Plan (which does not currently have the force of law), may impose additional costs on the operations of Pembina and Pembina's customers.

The federal Regulations Respecting Reduction in the Release of Methane and Certain Volatile Organic Compounds (Upstream Oil and Gas Sector) ("Federal Methane Regulations"), which require reduction of fugitive and vented gas emissions from the upstream oil and gas sector, came into force on January 1, 2020. The federal government reported on the effectiveness of the Federal Methane Regulations in December 2021 and confirmed that the stringency of the Federal Methane Regulations will increase. The federal government has committed to reducing oil and gas methane emissions by at least 75 percent below 2012 levels by 2030 and expects to release draft regulations to implement this commitment in early 2023. The Federal Methane Regulations may impose additional costs on the operations of Pembina and Pembina's customers.

The federal government is also developing a Clean Fuel Standard that will require all producers and importers of liquid fossil fuels in Canada to reduce or offset the carbon intensity of the fuels they produce or import leading to a decrease of approximately 13 percent (below 2016 levels) in the carbon intensity of liquid fuels used in Canada by 2030. The final version of the regulations implementing the Clean Fuel Standard have been delayed and are now expected in early 2022. Pembina will continue to monitor the development of regulations on liquid fossil fuels. The potential costs and benefits of the Clean Fuel Standard to Pembina and its customers are continuing to be assessed.

Alberta satisfies federal requirements with respect to output-based carbon pricing for large emitters but is subject to the federal fuel charge pursuant to the GGPPA as of January 1, 2020. The fuel charge was \$40 per tonne on April 1, 2021 and will rise to \$50 per tonne on April 1, 2022.

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

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

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

Pembina is subject to regulation by the AER under the Licensee Liability Rating Program and the Large Facility Liability Management Program. Currently, if a licensee's deemed liabilities exceed its deemed assets (as calculated pursuant to the programs), it must reduce its liabilities or provide the AER with a security deposit. Failure to do so may restrict the licensee's ability to transfer licenses or result in enforcement action by the AER. On July 30, 2020, the Government of Alberta announced a new Liability Management Framework that will replace the current regime. On December 1, 2021, AER Directive 088: Licensee Life-cycle Management ("Directive 088") came into force. Directive 088 will replace the AER's current Licensee Liability Rating Program when it is fully implemented in 2022. Directive 088 introduces several new programs and assessments relative to the life cycle of Pembina's energy assets that are regulated by the AER, including the new licensee capability assessment, Licensee Management Program, Inventory Reduction Program, and security collection requirements. Beginning January 1, 2022, all licensees that have liability associated with inactive infrastructure will be required to spend a specified amount each year on reclamation activities, or post equivalent security with the AER.

Pembina is subject to regulation by the BCOGC under the Liability Management Rating program. Currently, if a licensee's deemed liabilities exceed its deemed assets (as calculated pursuant to the programs), it must reduce its liabilities or provide the BCOGC with a security deposit. Failure to do so may restrict the licensee's ability to transfer licenses or result in enforcement action by the BCOGC. The Liability Management Rating Program is being replaced by the "Permittee Capability Assessment" program. The Permittee Capability Assessment program is being developed in collaboration with the AER, is expected to generally align Directive 088 and is expected to be implemented in April 2022.

Policy reviews relating to climate change, liability management and other environmental issues are ongoing in the jurisdictions in which Pembina operates. Through active participation with industry associations and direct engagement with regulatory bodies, Pembina will continue to monitor and assess for material impacts to Pembina's business as regulations and policies continue to be developed.

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

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

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

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

#### **Abandonment Costs**

Pembina is responsible for compliance with all applicable laws and regulations regarding the dismantling, decommissioning, environmental, reclamation and remediation activities associated with 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 to pay for dividends to Shareholders and to service obligations under Pembina's debt securities and Pembina's other debt obligations.

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

# Operating and Capital Costs

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

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

#### Risks Relating to NGL by Rail

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

Railway incidents in Canada and the U.S. have prompted regulatory bodies to initiate reviews of transportation rules and publish various directives. Regulators in Canada and the U.S. have begun to phase-in more stringent engineering standards for tank cars used to move hydrocarbon products, which require all North American tank cars carrying crude oil or ethanol to be retrofitted and all tank cars carrying flammable liquids to be compliant in accordance with the required regulatory timelines. In addition, in 2020, the Government of Canada directed industry to review and update the rules regarding the transportation of crude oil and liquefied petroleum gas. While most legislative and regulatory changes apply directly to railway companies,

costs associated with retrofitting locomotives and rail cars, implementing safety systems, increased inspection and reporting requirements may be indirectly passed on to Pembina through increased freight rates and car leasing costs. In addition, regulators in Canada and the U.S. have implemented changes that impose obligations directly on consignors and shippers, such as Pembina, relating to the certification of product, equipment procedures and emergency response procedures.

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

#### **Ongoing Impact of the COVID-19 Pandemic**

# **COVID-19** Related Impacts

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

The risks to Pembina of the ongoing COVID-19 pandemic include, among other things: risks to the health and safety of Pembina's employees; a slowdown or temporary suspension of operations in certain geographic locations in which Pembina operates; additional delays in the completion, or deferral, of Pembina's growth and expansion projects; the availability of labour for projects; and supply chain disruptions, all or any of which could materially adversely impact Pembina's business operations and financial results.

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

#### Impact on General Risks

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

#### **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.

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

#### **General Risk Factors**

Health and Safety

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

# Additional Financing and Capital Resources

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

#### Counterparty Credit Risk

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

Pembina continues to closely monitor and reassess the creditworthiness of its counterparties, including financial institutions. Pembina may reduce or mitigate its exposure to certain counterparties where it is deemed warranted and permitted under contractual terms. Pembina manages counterparty credit risk through established credit management techniques, including conducting comprehensive financial and other assessments on all new counterparties and regular reviews of existing counterparties to establish and monitor counterparties' creditworthiness, set exposure limits, monitor exposure to these limits and seek to obtain financial assurances where warranted and permitted under contractual terms. Pembina utilizes various sources of financial, credit and business information in assessing the creditworthiness of a counterparty, including external credit ratings, where available, and, in other cases, detailed financial statement analysis in order to generate an internal credit rating based on quantitative and qualitative factors. The establishment of counterparty exposure limits is governed by a Board-designated counterparty exposure limit matrix which represents the maximum dollar amounts of counterparty exposure by debt rating that can be approved for a particular counterparty.

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

Pembina has typically collected its receivables in full. At December 31, 2021, approximately 98 percent (December 31, 2020: 94 percent) of receivables were current. Pembina has a general lien and a continuing and first priority security interest in, and a secured charge on, all of a shipper's petroleum products in its custody. The risk of non-collection is considered to be low and no material impairment of trade and other receivables has been made as of the date hereof.

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

#### Debt Service

As at December 31, 2021, Pembina had exposure to floating interest rates on approximately \$594 million (2020: \$1.2 billion) in debt. Certain borrowings which occur under floating rates have been swapped to fixed rates using derivative financial instruments.

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

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

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

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

# Credit Ratings

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

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

# Reliance on Management, Key Individuals and a Skilled Workforce

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

#### Indigenous Land Claims and Consultation Obligations

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

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

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

The federal government is advancing recognition of Indigenous rights across Canada. As part of these efforts, the federal government enacted the *United Nations Declaration on the Rights of Indigenous Peoples* ("**UNDRIP**") *Act* on June 21, 2021. The purpose of the legislation is to affirm the application of the UNDRIP in Canadian law, but the practical effects of the legislation are yet to be determined as it only requires the government to prepare and implement an action plan for this application, and annually report on its progress. Structurally similar legislation was enacted by British Columbia in 2019; the *Declaration on the Rights of Indigenous Peoples Act* ("**DRIPA**").

The recognition of Indigenous rights is also facilitated by the renewed British Columbia *Environmental Assessment Act* (the "EA Act") that came into force in late 2019. The EA Act is designed as a "consent-based" environmental assessment model and is intended to support reconciliation with Indigenous peoples and the implementation of the UNDRIP. The legislation requires the BCEAO to seek participating Indigenous groups' consent with respect to, among other things, the decision to issue an environmental assessment certificate to a given project. While the EA Act does not strictly require consent in most cases, the legislation creates significant new participation opportunities for Indigenous groups during environmental assessments, which may increase the time required to obtain regulatory approvals and thereby impact Pembina's operations in British Columbia.

Pembina continues to actively monitor the development of the regulations required to facilitate the implementation of the UNDRIP Act, DRIPA, EA Act and the impact that other federal and provincial government initiatives on Indigenous rights may have on its business.

In addition, Pembina is monitoring the impact of the recent judgment of the Supreme Court of British Columbia with respect to the claim brought by the Blueberry River First Nation ("BRFN") against British Columbia relating to the cumulative impact of industrial development within the BRFN treaty area. The judgment has created uncertainty and may result in the imposition of additional requirements to obtain regulatory approvals for developing pipelines or associated facilities in the area and could cause delays, suspensions, or deferrals in the development of such facilities. It may also impact the current and future activities of producers operating in the area and cause them to decrease production, which could, in turn, reduce such producers' demand for Pembina's existing pipeline capacity and processing assets, and may have an adverse effect on Pembina's business. On October 7, 2021, the government of British Columbia and BRFN reached an initial agreement which has been characterized as a first step in responding to the Court's decision. Pembina continues to actively monitor regulatory developments associated with this matter; however, Pembina cannot predict future regulatory changes that may arise to address the Court's decision and any such regulatory changes could impact the operations of Pembina and Pembina's customers.

#### Potential Conflicts of Interest

Shareholders and other security holders of Pembina are dependent on senior management and the directors of Pembina for the governance, administration and management of Pembina. Certain directors and officers of Pembina may be directors or

officers of entities in competition to Pembina or may be directors or officers of certain entities in which Pembina holds an equity investment in. As such, certain directors or officers of Pembina may encounter conflicts of interest in the administration of their duties with respect to Pembina. Pembina mitigates this risk by requiring directors and officers to disclose the existence of potential conflicts in accordance with Pembina's Code of Ethics and in accordance with the ABCA.

#### Litigation

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

# Changes in Tax Legislation

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

# Foreign Exchange Risk

Pembina's cash flows, namely a portion of its commodity-related cash flows, certain cash flows from U.S.-based infrastructure assets, and distributions from U.S.-based investments in equity accounted investees, are subject to currency risk, arising from the denomination of specific cash flows in U.S. dollars. Additionally, a portion of Pembina's capital expenditures, and contributions or loans to Pembina's U.S.-based investments in equity accounted investees, may be denominated in U.S. dollars. Pembina monitors, assesses, and responds to these foreign currency risks using an active risk management program, which may include the exchange of foreign currency for domestic currency at a fixed rate.

# Cyber Security

Pembina's infrastructure, technologies and data are becoming increasingly integrated. Such integration creates a risk that the failure of one system could lead to failure of other systems which may also have an impact on the Company's physical assets and its ability to safely operate such assets. Furthermore, Pembina and its third-party vendors collect and store sensitive data in the ordinary course of business, including personal identification information of employees as well as proprietary business information and that of the Company's customers, suppliers, investors and other stakeholders. Notable cybersecurity threats include unauthorized access to information technology systems due to hacking, viruses, cyber phishing attacks and other causes that can result in service disruptions, system failures and unauthorized access to confidential business information. Due to Pembina's high level of integration, such an attack on the information technology systems of one segment or asset of Pembina could have a material adverse effect on the broader business, operations or financial results of the Company.

As a result of the critical nature of energy infrastructure, the industry has experienced an increasing risk of cyber-attacks. Any breach in the security or failure of Pembina's information technology could result in operational outages, delays, damage to assets or the environment, reputational harm, lost profits, lost data and other adverse outcomes for which Pembina could be held liable, all of which could adversely affect Pembina's reputation, business, operations or financial results. As a result of a cyber-attack or security breach, Pembina could also be liable under laws that protect the privacy of personal information or subject to regulatory penalties.

# **Political Uncertainty**

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

# Risks Relating to Breach of Confidentiality

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

Concentration of Assets in the Western Canadian Sedimentary Basin

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

#### **Risks Related to Climate Change**

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

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

# **Energy Market Transition**

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

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

# Greenhouse Gas Emissions and Targets

Among other sustainability goals, Pembina has committed to reducing GHG emissions intensity of its operations by 30 percent by 2030 (based on a 2019 baseline year). The Company's ability to lower GHG emissions in respect of its 2030 emissions intensity reduction target is subject to numerous risks and uncertainties, and Pembina's actions taken in to implement these objectives may also expose the Company to certain additional and/or heightened financial and operational risks. A reduction in GHG emissions intensity relies on, among other things, Pembina's ability to implement and improve energy efficiency at all facilities, future development and growth opportunities, development and deployment of new technologies, investment in lower-carbon power and transition to greater use of renewable and lower emission energy sources. In the event that the Company is unable to implement these strategies and technologies as planned without negatively impacting its expected operations or business plans, or in the event that such strategies or technologies do not perform as expected, the Company may be unable to meet its GHG emissions intensity reduction targets or goals on the current timelines, or at all.

In addition, achieving the Company's GHG emissions intensity reductions target and goals could require significant capital expenditures and resources, with the potential that the costs required to achieve such target and goals materially differ from Pembina's original estimates and expectations, which differences may be material. In addition, while the intent is to improve efficiency and increase the use of renewable and lower-carbon energy, the shift in resources and focus towards GHG emissions reduction could have a negative impact on Pembina's operating results. The overall final cost of investing in and implementing a GHG emissions intensity reduction strategy and technologies in furtherance of such strategy, and the resultant change in the deployment of the Company's resources and focus, could have a material adverse effect on Pembina's business, financial condition and results of operations.

#### Risks Relating to Weather Conditions

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

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

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

See also "Risk Factors – Risks Inherent in Pembina's Business – Environmental Costs and Liabilities"; and "Risk Factors – Risks Inherent in Pembina's Business – Reputation".

#### 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, 2016 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 2021 or 2022 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.

#### REGISTRAR AND TRANSFER AGENT

The registrar and transfer agent for the Common Shares, the Class A Preferred Shares, the Medium Term Notes and the Subordinated Notes, Series 1 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 Pembina's 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:

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- 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 to the Board 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) recommending to the Board 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
    - j) 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 internal 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.