



**MANAGEMENT'S  
DISCUSSION & ANALYSIS**

# REPORT TO SHAREHOLDERS

Year ended December 31, 2018



## MANAGEMENT'S DISCUSSION AND ANALYSIS

### Table of Contents

1. About Pembina .....	2
2. Financial & Operating Overview .....	3
3. Segment Results .....	7
4. Liquidity & Capital Resources .....	19
5. Capital Expenditures .....	22
6. Dividends .....	22
7. Selected Quarterly Information .....	23
8. Other .....	25
9. Accounting Policies & Estimates .....	27
10. Risk Factors .....	33
11. Non-GAAP Measures .....	48
12. Abbreviations .....	52
13. Forward-Looking Statements & Information .....	53

### Basis of Presentation

The following Management's Discussion and Analysis ("MD&A") of the financial and operating results of Pembina Pipeline Corporation ("Pembina" or the "Company") is dated February 21, 2019, and is supplementary to, and should be read in conjunction with, Pembina's December 31, 2018 audited consolidated financial statements ("Consolidated Financial Statements"). The Consolidated Financial Statements have been prepared in accordance with International Financial Reporting Standards ("IFRS"), using the accounting policies described in Note 4 of the Consolidated Financial Statements. All dollar amounts contained in this MD&A are expressed in Canadian dollars unless otherwise noted. Additional information about Pembina filed with Canadian and U.S. securities commissions, including quarterly and annual reports, Annual Information Forms (filed with the U.S. Securities and Exchange Commission under Form 40-F), Management Information Circulars and annual and quarterly financial statements, can be found online at [www.sedar.com](http://www.sedar.com), [www.sec.gov](http://www.sec.gov) and through Pembina's website at [www.pembina.com](http://www.pembina.com).

### Abbreviations

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

### Non-GAAP Financial Measures

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

### Risk Factors and Forward-Looking Information

The Company's financial and operational performance is potentially affected by a number of factors, including, but not limited to, the factors described within the Risk Factors and Forward-Looking statements & Information sections of this MD&A. This MD&A contains forward-looking statements based on Pembina's current expectations, estimates, projections and assumptions. This information is provided to assist readers in understanding the Company's future plans and expectations and may not be appropriate for other purposes.

# 1. ABOUT PEMBINA

Calgary-based Pembina Pipeline Corporation is a leading transportation and midstream service provider that has been serving North America's energy industry for over 60 years. Pembina owns an integrated system of pipelines that transport various hydrocarbon liquids and natural gas products produced primarily in western Canada. The Company also owns gas gathering and processing facilities and an oil and natural gas liquids infrastructure and logistics business. Pembina's integrated assets and commercial operations along the majority of the hydrocarbon value chain allow it to offer a full spectrum of midstream and marketing services to the energy sector. Pembina is committed to identifying additional opportunities to connect hydrocarbon production to new demand locations through the development of infrastructure that would extend Pembina's service offering even further along the hydrocarbon value chain. These new developments will contribute to ensuring that hydrocarbons produced in the Western Canadian Sedimentary Basin and the other basins where Pembina operates can reach the highest value markets throughout the world.

Purpose of Pembina:

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

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

Pembina's strategy is to:

- **Preserve Value** by providing safe, environmentally conscious, cost-effective and reliable services;
- **Diversify** by providing integrated solutions which enhance profitability and customer service;
- **Implement Growth** by pursuing projects or assets that are expected to generate cash flow per share accretion and capture long-life, economic hydrocarbon reserves; and
- **Secure Global Markets** by understanding what the world needs, where they need it, and delivering it.

Pembina is structured into three Divisions: Pipelines Division, Facilities Division and Marketing & New Ventures Division.

Pembina's common shares trade on the Toronto and New York stock exchanges under PPL and PBA, respectively. For more information, visit [www.pembina.com](http://www.pembina.com).

## Acquisition of Veresen Inc. ("Veresen")

On October 2, 2017, Pembina completed its acquisition of Veresen by way of a plan of arrangement pursuant to Section 193 of the *Business Corporations Act* (Alberta) (the "Acquisition"). Total consideration of \$6.4 billion was comprised of \$1.5 billion in cash, \$4.4 billion of Pembina common shares and \$522 million of Pembina preferred shares.

## 2. FINANCIAL & OPERATING OVERVIEW

(\$ millions, except where noted)	3 Months Ended December 31 (unaudited)		12 Months Ended December 31	
	2018	2017 <sup>(1)</sup>	2018	2017 <sup>(1)</sup>
Revenue	1,726	1,716	7,351	5,400
Net revenue <sup>(2)</sup>	706	709	2,836	2,238
Operating expense	165	130	551	450
Realized (gain) loss on commodity-related derivative financial instruments	(5)	42	51	94
Share of profit from equity accounted investees	129	116	411	116
Depreciation and amortization included in operations	101	112	391	359
Unrealized (gain) on commodity-related derivative financial instruments	(89)	(14)	(73)	(23)
Gross profit	663	555	2,327	1,474
General and administrative expenses (excluding corporate depreciation)	66	57	253	213
Net finance costs	56	71	279	185
Current income tax expense	8	29	70	48
Deferred tax expense (recovery)	139	(70)	394	94
Earnings	368	445	1,278	883
Earnings per common share – basic (dollars)	0.66	0.83	2.28	1.87
Earnings per common share – diluted (dollars)	0.66	0.83	2.28	1.86
Cash flow from operating activities	674	523	2,256	1,513
Cash flow from operating activities per common share – basic (dollars) <sup>(2)</sup>	1.33	1.04	4.47	3.55
Adjusted cash flow from operating activities <sup>(2)</sup>	543	499	2,154	1,396
Adjusted cash flow from operating activities per common share – basic (dollars) <sup>(2)</sup>	1.07	0.99	4.27	3.27
Common share dividends declared	289	272	1,131	873
Dividends per common share (dollars)	0.57	0.54	2.24	2.04
Preferred share dividends declared	31	26	122	83
Capital expenditures	356	314	1,226	1,839
Acquisition	—	6,400	—	6,400
<b>Proportionately Consolidated Financial Overview<sup>(2)(3)</sup></b>				
Volumes (mboe/d) <sup>(4)(5)</sup>	3,453	3,250	3,398	3,050
Operating Margin <sup>(2)</sup>	800	749	3,154	1,922
Adjusted EBITDA <sup>(2)</sup>	715	674	2,835	1,697

<sup>(1)</sup> Financial results reported for all 2017 periods have been restated to reflect the Corporate Reorganization and adoption of IFRS 15.

<sup>(2)</sup> Refer to "Non-GAAP Measures".

<sup>(3)</sup> Refer to "Proportionately Consolidated Overview".

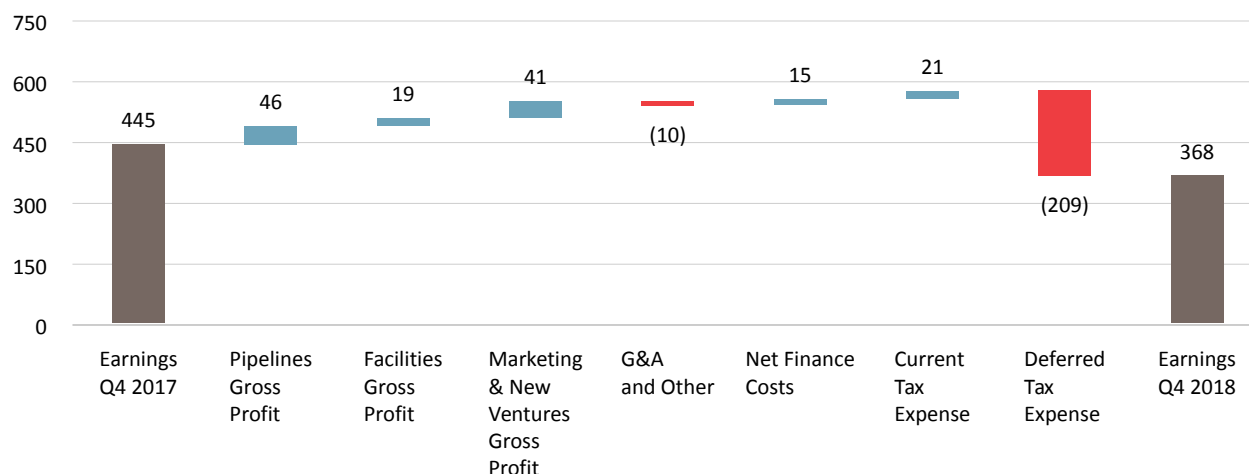
<sup>(4)</sup> Total revenue volumes. Revenue volumes are physical volumes plus volumes recognized from take-or-pay commitments. Volumes are stated in mboe/d, with natural gas volumes converted to mboe/d from MMcf/d at a 6:1 ratio. Volumes for 2017 have been restated to reflect the Corporate Reorganization.

<sup>(5)</sup> Average volumes for assets acquired in the Acquisition are calculated over the period following the Acquisition, rather than the full twelve months ended December 31, 2017, which would have resulted in average volumes of 2,608 mboe/d.

## Bridge Analysis of Earnings

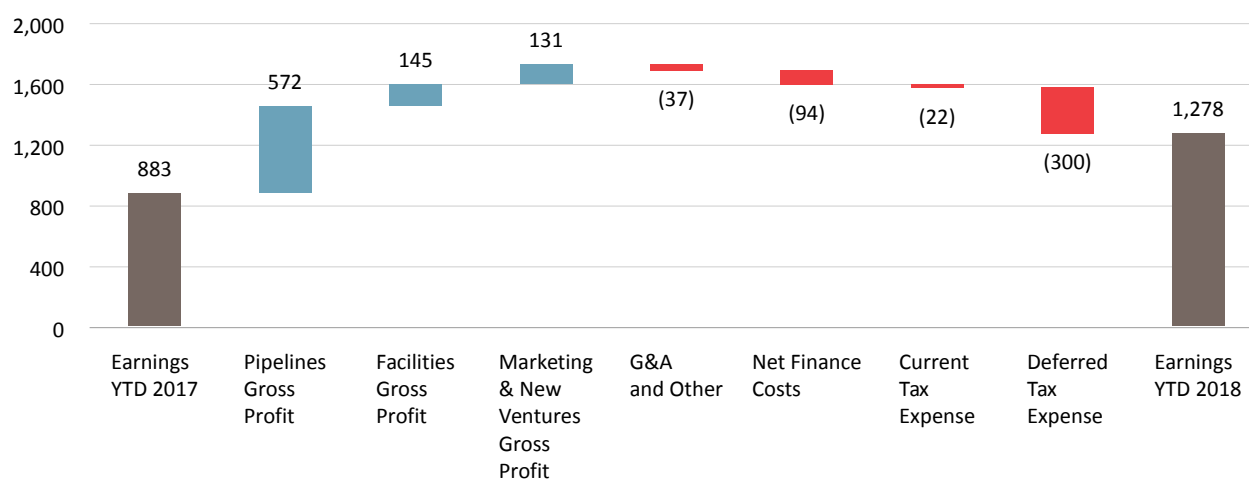
### Three Months Ended December 31, 2018

(\$ millions)



### Twelve Months Ended December 31, 2018

(\$ millions)



## Financial Overview

Pembina delivered strong financial and operational results in the fourth quarter and full year of 2018. Revenue in the fourth quarter of 2018 was \$1.7 billion, consistent with the same period in 2017. Strong demand for existing assets and increased utilization on assets placed into service in the prior year, was offset by lower revenue in the Marketing & New Ventures Division, due to lower crude and NGL market prices. Net revenue in the fourth quarter of 2018 was \$706 million compared to \$709 million in the same period in 2017. The decrease in net revenue was largely due to the lower margins in the Marketing & New Ventures Division. Full year revenue was \$7.4 billion for 2018 compared to \$5.4 billion for the same period of 2017. Net revenue was \$2.8 billion for full year 2018 compared to \$2.2 billion for the same period of 2017. The increases for the full year were primarily driven by the full year contribution from the Acquisition, combined with the same factors impacting the fourth quarter offset slightly by higher average crude oil prices and increased sales volumes in 2018.

Operating expenses were \$165 million for the fourth quarter of 2018 compared to \$130 million during the same period of 2017. This increase was driven by higher repairs and maintenance, power costs and labour expenses. For the twelve months

ended December 31, 2018, operating expenses were \$551 million compared to \$450 million in the same period of 2017. This increase was due to the same factors impacting the fourth quarter combined with the full year of operations of the Alberta Ethane Gathering System ("AEGS").

Share of profit from equity accounted investees was \$129 million in the fourth quarter of 2018 and \$411 million year-to-date, compared to \$116 million for both periods of 2017. The increase in the fourth quarter is primarily due to strong performance at Aux Sable, which accounted for \$17 million of the increase, benefiting from access to US markets which offer strong propane plus margins relative to Edmonton and a wide Chicago-AECO natural gas differential. This increase was partially offset by a financing gain recorded in Veresen Midstream during the fourth quarter of 2017 and later reversed due to debt renegotiations in 2018. On a year-to-date basis, the increase is primarily due to the full year contribution of the equity accounted investments acquired in the Acquisition.

Depreciation and amortization included in operations during the three and twelve months ended December 31, 2018 was \$101 million and \$391 million compared to \$112 million and \$359 million for the same periods in 2017. The decrease in the fourth quarter was largely the result of useful life adjustments made during 2017 that resulted in \$17 million in additional depreciation, offset by increased depreciation due to the larger asset base. The increase on a year-to-date basis was due to the year-over-year growth in Pembina's asset base with the system expansions in the Pipelines Division and new fractionation facilities and gas processing plants in the Facilities Division placed into service in late 2017, partially offset by \$42 million in additional depreciation in 2017 related to the useful life adjustments mentioned above.

For the three and twelve months ended December 31, 2018, the unrealized gain on the mark-to-market positions of commodity-related derivative financial instruments was \$89 million and \$73 million, respectively, compared to unrealized gains of \$14 million and \$23 million for the same periods in the prior year. The current year gains were predominantly driven by decreasing NGL and crude market prices during the fourth quarter of 2018.

Gross profit for the fourth quarter of 2018 was \$663 million compared to \$555 million during the fourth quarter of 2017. This increase includes a \$46 million increase in the Pipelines Division, a \$19 million increase in the Facilities Division and a \$41 million increase in Marketing & New Ventures Division. The increases in the Pipelines and Facilities Divisions were primarily driven by strong demand on existing assets and increased utilization on assets placed into service in the prior year. The increase in the Marketing & New Ventures Division was due to higher net gains on commodity-related derivative financial instruments, combined with strong performance from Aux Sable. For the twelve months ended December 31, 2018, gross profit was \$2.3 billion compared to \$1.5 billion in the same period of 2017, primarily due to the full year contribution from new assets placed into service in 2017 and the assets acquired in the Acquisition, combined with the net gains on commodity-related derivative financial instruments, which were \$93 million higher during 2018.

For the three months ended December 31, 2018, Pembina incurred general and administrative expenses (excluding corporate depreciation and amortization) of \$66 million compared to \$57 million during the comparable period of 2017. This increase was due to increased salaries as a result of increased staff to support the growth in the Company's asset base. Year-to-date, Pembina incurred general and administrative expenses (excluding corporate depreciation and amortization) of \$253 million compared to \$213 million in the same period in the prior year. This increase was primarily driven by the same factors noted above.

Net finance costs incurred during the fourth quarter of 2018 were \$56 million compared to \$71 million for the same period in 2017. This decrease was primarily due to a fair value gain on non-commodity-related derivatives compared to a loss in the same period in 2017. For full year 2018, net finance costs were \$279 million compared to \$185 million for the same period of 2017. This increase was primarily due to higher average debt outstanding in 2018 following the Acquisition, and lower capitalized interest due to assets being placed into service.

Income tax expense for the fourth quarter of 2018 totaled \$147 million, including current tax expense of \$8 million and deferred tax expense of \$139 million, compared to an income tax recovery of \$41 million in the same period of 2017, including current tax expense of \$29 million and deferred tax recovery of \$70 million. Current tax expense for the fourth quarter of 2018

was lower than the comparable period in 2017 mainly due to a one-time tax provision relating to the enactment of the *Tax Cuts and Jobs Act* (“U.S. Tax Reform”) that was recorded in 2017, partially offset by higher earnings before taxes in 2018. Deferred tax expense for the fourth quarter of 2018 was higher than the comparable period in 2017 as a result of a deferred tax recovery in the comparable period which was attributable to the remeasurement of deferred tax assets and liabilities in Pembina's U.S. entities due to the U.S. corporate tax rate reduction from 35 percent to 21 percent enacted under the U.S. Tax Reform. Income tax expense was \$464 million for the twelve months ended December 31, 2018, including current taxes of \$70 million and deferred taxes of \$394 million, respectively, compared to income tax expense of \$142 million in 2017, including current taxes of \$48 million and deferred taxes of \$94 million, respectively, in the same periods of 2017. For the full year 2018 the increases in current and deferred tax expense were due to the same factors noted above and higher earnings before taxes as a result of the inclusion of a full year of operations from the Acquisition.

The Company's earnings were \$368 million during the fourth quarter of 2018 compared to \$445 million in the same period of 2017. The decrease in the fourth quarter was a result of a \$108 million increase in gross profit combined with a \$15 million decrease in net finance costs, offset by \$188 million increased tax expense and a \$9 million increase in general and administrative expenses. Earnings attributable to common shareholders, net of dividends attributable to preferred shareholders, during the fourth quarter of 2018 were \$337 million (\$0.66 per common share – basic and diluted) and \$418 million in the fourth quarter of 2017 (\$0.83 per common share – basic and diluted). Earnings were \$1.3 billion for 2018 compared to \$883 million during the same period of the prior year. This year-to-date increase was due to \$853 million increase in gross profit partially offset by \$94 million increase in net finance costs, \$322 million increase in income taxes and a \$43 million increase in general and administrative expenses. On a year-to-date basis, earnings attributable to common shareholders, net of dividends attributable to preferred shareholders, in 2018 were \$1.2 billion compared to \$803 million in the same period of 2017.

Cash flow from operating activities for the quarter ended December 31, 2018 was \$674 million (\$1.33 per common share – basic) compared to \$523 million (\$1.04 per common share – basic) during the fourth quarter of 2017. The increase in the fourth quarter was mainly due to higher gross profit, a positive change in non-cash working capital, combined with higher distributions from investments in equity accounted investees. For the twelve months ended December 31, 2018, cash flow from operating activities was \$2.3 billion (\$4.47 per common share - basic) compared to \$1.5 billion (\$3.55 per common share - basic) during the same period in 2017. This increase was primarily due to higher gross profit, higher distributions from investments in equity accounted investees, partially offset by an increase in interest paid and change in non-cash working capital. Distributions from equity accounted investees increased \$10 million quarter over quarter and \$465 million year to date 2018 compared to 2017.

Adjusted cash flow from operating activities for the fourth quarter of 2018 was \$543 million (\$1.07 per common share – basic) compared to \$499 million (\$0.99 per common share – basic) during the fourth quarter of 2017. Cash flow from operating activities, net of changes in non-cash working capital, increased \$45 million and was partially offset by the \$11 million increase in preferred share dividends. For the twelve months ended December 31, 2018, adjusted cash flow from operating activities was \$2.2 billion (\$4.27 per common share - basic) compared to \$1.4 billion (\$3.27 per common share - basic) in the same period of 2017, largely due to a \$808 million increase in cash flow from operating activities, net of changes in non-cash working capital, partially offset by the \$39 million increase in preferred share dividends.

Capital expenditures were \$356 million in the fourth quarter of 2018 as compared to \$314 million during the same period in 2017. For the twelve months ended December 31, 2018, capital expenditures were \$1.2 billion compared to \$1.8 billion during the same period in the prior year. The majority of spending in both 2018 and 2017 related to Pembina's pipeline expansion programs. Please refer to disclosure under the heading "Capital Expenditures" in this MD&A for further detail.

### **Proportionately Consolidated Overview<sup>(1)</sup>**

In accordance with IFRS, Pembina's investments in equity accounted investees are accounted for using equity accounting. Under equity accounting, the assets and liabilities of the investment are net into a single line item on the Consolidated

Statement of Financial Position, Investments in Equity Accounted Investees. Net earnings from investments in equity accounted investees are recognized in a single line item in the Consolidated Statement of Earnings and Comprehensive Earnings, Share of Profit of Investments in Equity Accounted Investees. Cash contributions and distributions from investments in equity accounted investees represent Pembina's share paid and received in the period to and from the investments in equity accounted investees.

To assist the readers' understanding and evaluation of the performance of these investments, Pembina is supplementing the IFRS disclosure with non-GAAP disclosure of Pembina's proportionately consolidated interest in the investments in equity accounted investees. Pembina's proportionate interest in equity accounted investees has been included in operating margin and adjusted EBITDA and other reconciling items to share of profit. Refer to "Non-GAAP Measures." For comparison purposes, volumes have also been disclosed on a proportionately consolidated basis.

Volumes were 3,453 mboe/d in the fourth quarter of 2018 as compared to 3,250 mboe/d in the same period in the prior year. For the twelve months ended December 31, 2018, volumes were 3,398 mboe/d compared to 3,050 mboe/d in the same period of 2017. See table below under "Financial and Operational Overview by Division" for a breakdown by operating segment.

During the fourth quarter of 2018, operating margin increased by seven percent to \$800 million compared to \$749 million in the fourth quarter of 2017. This increase is largely the result of increased demand and utilization of assets placed into service in the prior year, partially offset by lower margins in the marketing business. For the twelve months ended December 31, 2018, operating margin increased 64 percent to \$3.2 billion compared to \$1.9 billion for the same period in the prior year. These increases are due to the full year contribution from the Acquisition, combined with the same factors impacting the fourth quarter.

Pembina generated adjusted EBITDA of \$715 million during the fourth quarter of 2018 and \$2.8 billion for the full year compared to \$674 million and \$1.7 billion for the same periods in 2017. These six percent and 67 percent respective increases were due to increased operating margin as noted above.

<sup>(1)</sup> Refer to "Non-GAAP Measures".

## Financial and Operational Overview by Division

	3 Months Ended December 31						12 Months Ended December 31					
	(unaudited)											
	2018			2017 <sup>(1)</sup>			2018			2017 <sup>(1)</sup>		
(\$ millions)	Volumes <sup>(2)</sup>	Gross Profit	Operating Margin <sup>(3)</sup>	Volumes <sup>(2)</sup>	Gross Profit	Operating Margin <sup>(3)</sup>	Volumes <sup>(2)</sup>	Gross Profit	Operating Margin <sup>(3)</sup>	Volumes <sup>(2)(5)</sup>	Gross Profit	Operating Margin <sup>(3)</sup>
Pipelines Division	2,529	301	437	2,450	255	395	2,521	1,255	1,773	2,304	683	948
Facilities Division	924	155	238	800	136	186	877	574	899	746	429	596
Marketing & New Ventures Division <sup>(4)</sup>	—	203	121	—	162	166	—	484	468	—	353	369
Corporate	—	4	4	—	2	2	—	14	14	—	9	9
<b>Total</b>	<b>3,453</b>	<b>663</b>	<b>800</b>	<b>3,250</b>	<b>555</b>	<b>749</b>	<b>3,398</b>	<b>2,327</b>	<b>3,154</b>	<b>3,050</b>	<b>1,474</b>	<b>1,922</b>

<sup>(1)</sup> Financial results reported for all 2017 periods have been restated to reflect the Corporate Reorganization and adoption of IFRS 15.

<sup>(2)</sup> Pipelines and Facilities Divisions are revenue volumes which are physical volumes plus volumes recognized from take-or-pay commitments. Volumes are stated in mboe/d, with natural gas volumes converted to mboe/d from MMcf/d at a 6:1 ratio. Volumes for 2017 have been restated to reflect the Corporate Reorganization.

<sup>(3)</sup> Refer to "Non-GAAP Measures".

<sup>(4)</sup> Marketed NGL volumes are excluded from Volumes to avoid double counting. Refer to "Marketing & New Ventures Division" section for further information.

<sup>(5)</sup> Average volumes for assets acquired in the Acquisition are calculated over the period following the Acquisition, rather than the full twelve months ended December 31, 2017, which would have resulted in average volumes of 1,909 mboe/d for the Pipelines Division, 699 mboe/d for the Facilities Division and total average volumes of 2,608 mboe/d.

## 3. SEGMENT RESULTS

### Pipelines Division

#### Business Overview

The Pipelines Division includes liquids and natural gas pipelines with a total capacity of approximately 3 million barrels of oil equivalent per day, serving various markets and basins across North America. The Pipelines Division is comprised of Pembina's conventional, transmission and oil sands and heavy oil pipeline assets. The primary objectives of the Division are to provide safe, responsible, reliable and cost-effective transportation services for customers; pursue opportunities for increased throughput; maintain and grow sustainable operating margin on invested capital by capturing incremental volumes; provide solutions to our customers; grow revenue; and follow a disciplined approach to operating expenses.

Pembina's conventional pipeline assets comprise a strategically located network of pipelines and related infrastructure including various hubs and terminals. This network transports crude oil, condensate and natural gas liquids ("NGL") across much of Alberta and parts of British Columbia. The contracts for conventional pipelines are fee-for-service in nature, but vary in their structure, and include both firm and non-firm contracts and varying levels of take-or-pay commitments.

Pembina's transmission pipeline assets have developed through the strategic acquisition of key natural gas and specification ethane transportation infrastructure assets, positioned in some of the most prolific gas producing regions in western Canada and the United States. Pembina's transmission pipelines provide customers with access to premium markets primarily on a take-or-pay basis under extendible long-term contracts.

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

As part of the Corporate Reorganization, the following assets have been reclassified:

- Vantage Pipeline has been reclassified from a conventional asset to a transmission asset within the Pipelines Division;
- the Swan Hills System has been reclassified from a conventional asset to an oil sands asset within the Pipelines Division;
- the Canadian Diluent Hub ("CDH") and the Edmonton North Terminal ("ENT") have been reclassified from the former Midstream operating segment to conventional assets within the Pipelines Division; and
- AEGS, Ruby Pipeline and Alliance Pipeline, all formerly reported under the Veresen operating segment, are now transmission assets included in the Pipelines Division.

All other assets comprising the previous Conventional and Oil Sands Pipelines operating segments are also included in the Pipelines Division (as conventional or oil sands pipelines assets, respectively). All financial and operating results in this MD&A for all periods commencing on or after January 1, 2017 have been restated to reflect the Corporate Reorganization.

## Results of Operations

	3 Months Ended December 31 (unaudited)		12 Months Ended December 31	
	2018	2017 <sup>(4)</sup>	2018	2017 <sup>(4)</sup>
<i>(\$ millions, except where noted)</i>				
<b>Financial Overview</b>				
Revenue <sup>(1)</sup>	403	350	1,588	1,136
Operating expenses <sup>(1)</sup>	120	98	396	330
Share of profit from equity accounted investees	74	72	279	72
Depreciation and amortization included in operations	56	69	216	195
Gross profit	301	255	1,255	683
Capital expenditures	188	211	711	1,328
<b>Proportionately Consolidated Financial Overview<sup>(2)</sup></b>				
Volumes (mboe/d) <sup>(3)(5)</sup>	2,529	2,450	2,521	2,304
Operating Margin <sup>(1)(2)</sup>	437	395	1,773	948

<sup>(1)</sup> Includes inter-Division transactions. See note 20 of the Consolidated Financial Statements.

<sup>(2)</sup> Refer to "Non-GAAP Measures".

<sup>(3)</sup> Revenue volumes, which are physical volumes plus volumes recognized from take-or-pay commitments. Volumes are stated in mboe/d, with natural gas volumes converted to mboe/d from MMcf/d at a 6:1 ratio. Volumes for 2017 have been restated to reflect the Corporate Reorganization.

<sup>(4)</sup> Financial results reported for all 2017 periods have been restated to reflect the Corporate Reorganization and adoption of IFRS 15.

<sup>(5)</sup> Average volumes for assets acquired in the Acquisition are calculated over the period following the Acquisition, rather than the full twelve months ended December 31, 2017, which would have resulted in average volumes of 1,909 mboe/d.

	3 Months Ended December 31 (unaudited)						12 Months Ended December 31					
	2018			2017 <sup>(1)</sup>			2018			2017 <sup>(1)</sup>		
	Volumes <sup>(2)</sup>	Gross Profit	Operating Margin <sup>(3)</sup>	Volumes <sup>(2)</sup>	Gross Profit	Operating Margin <sup>(3)</sup>	Volumes <sup>(2)</sup>	Gross Profit	Operating Margin <sup>(3)</sup>	Volumes <sup>(2)(4)</sup>	Gross Profit	Operating Margin <sup>(3)</sup>
<b>Pipelines Division</b>												
Conventional Pipelines	897	182	220	796	138	186	878	776	922	688	439	579
Transmission Pipelines	566	86	176	567	84	170	570	352	694	565	110	213
Oil Sands Pipelines	1,066	33	41	1,087	33	39	1,073	127	157	1,051	134	156
Total	2,529	301	437	2,450	255	395	2,521	1,255	1,773	2,304	683	948

<sup>(1)</sup> Financial results reported for all 2017 periods have been restated to reflect the Corporate Reorganization and adoption of IFRS 15.

<sup>(2)</sup> Revenue volumes are physical plus volumes recognized from take-or-pay commitments. Volumes are mboe/d and have been restated to reflect the Corporate Reorganization.

<sup>(3)</sup> Refer to "Non-GAAP Measures".

<sup>(4)</sup> Average volumes for assets acquired in the Acquisition are calculated over the period following the Acquisition, rather than the full twelve months ended December 31, 2017, which would have resulted in average volumes of 170 mboe/d for Transmission Pipelines and total average volumes of 1,909 mboe/d.

## Operational Overview

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

Significant Projects <sup>(1)</sup>	In-service Date
Phase V Peace Pipeline Expansion	December 2018
Phase IV Peace Pipeline Expansion	December 2018
NEBC Pipeline Expansion	October 2017
Phase III Peace Pipeline Expansion	June 2017
Canadian Diluent Hub ("CDH")	June 2017
Edmonton North Terminal ("ENT")	Throughout 2017

<sup>(1)</sup> For further details on the Company's significant assets refer to the Pembina's Annual Information Form filed at [www.sedar.com](http://www.sedar.com) (filed with the U.S. Securities and Exchange Commission at [www.sec.gov](http://www.sec.gov) under Form 40-F) and through Pembina's website at [www.pembina.com](http://www.pembina.com).

During the fourth quarter of 2018, the Pipelines Division's volumes averaged 2,529 mboe/d, an increase of three percent compared to the same period of 2017, when volumes were 2,450 mboe/d. On a year-to-date basis in 2018, volumes increased

nine percent to an average of 2,521 mboe/d, compared to 2,304 mboe/d for the same period of 2017. The increase in volumes was predominately the result of increased utilization on the Peace and Drayton systems including assets placed into service in the prior year. Certain volumes from integrated pipeline assets have been excluded from the calculation.

### **Financial Overview**

During the fourth quarter of 2018, the Pipelines Division generated revenue of \$403 million, a 15 percent increase compared to the \$350 million generated in the same quarter of the previous year. For the twelve months ended December 31, 2018, revenue was \$1.6 billion compared to \$1.1 billion in the same period of 2017. These increases resulted from the same factors impacting volumes discussed above and the full year contribution from the Acquisition and new assets placed into service in mid 2017, on a year-to-date basis. For the fourth quarter of 2018, \$34 million of take-or-pay revenue in excess of physical deliveries has been collected and deferred. Revenue of \$27 million related to take-or-pay deferrals was recognized during the period. For the twelve months ending December 31, 2018, \$133 million of take-or-pay revenue in excess of physical deliveries has been collected and deferred in addition to the \$8 million that had been deferred at January 1, 2018. Revenue of \$134 million related to take-or-pay deferrals was recognized during the period and outstanding deferrals as at December 31, 2018 are \$7 million.

During the fourth quarter of 2018, operating expenses were \$120 million, an increase of \$22 million over operating expenses recognized in the fourth quarter of 2017. Year-to-date operating expenses totaled \$396 million in 2018 compared to \$330 million in the same period of 2017. These increases were primarily caused by increased repairs and maintenance costs driven by higher integrity and geotechnical spending as a result of a larger asset base, increased power costs as a result of higher power pool prices and increased consumption, and higher labour expenses associated with increased headcount.

Share of profit from equity accounted investees during the three and twelve months ended December 31, 2018 totaled \$74 million and \$279 million, respectively, compared to \$72 million in both periods in the prior year. Share of profit during the fourth quarter was consistent with the prior year, while the increase on a year-to-date basis is due to the full year contribution from Alliance and Ruby as a result of the Acquisition. Pembina's share of profit from Alliance pipeline during the three and twelve months ended December 31, 2018 totaled \$44 million and \$160 million, respectively and \$40 million for both periods in 2017. Volumes remain consistent with the previous quarters of 2018 and continue to benefit from record reliability and strong demand on daily firm and interruptible services driven by capacity restrictions on alternative egress routes. This has created an oversupply of gas in the Alberta market, resulting in a wide Chicago-AECO natural gas differential. Ruby pipeline generated share of profit for the fourth quarter of \$30 million and \$118 million on a year-to-date basis, which represents the dividend received associated with the Company's preferred interest.

Depreciation and amortization included in operations during the fourth quarter and full year 2018 was \$56 million and \$216 million, respectively, compared to \$69 million and \$195 million recognized during the same periods of the prior year. The higher depreciation in the fourth quarter of 2017 was due to certain useful life adjustments. The increase on a year-to-date basis was due to the additional assets placed into service throughout 2017.

Capital expenditures for the fourth quarter and full year 2018 totaled \$188 million and \$711 million, respectively, compared to \$211 million and \$1.3 billion for the same periods in 2017. The majority of the 2018 spending is related to Pembina's ongoing Peace pipeline expansion. In 2017 the majority of spending related to Phase III expansion, ENT, CDH and the NEBC Expansion project.

## Proportionately Consolidated Financial Overview<sup>(1)</sup>

Based on proportionate consolidation accounting for investments in equity accounted investees, operating margin was \$437 million in the fourth quarter of 2018 compared to \$395 million for the same period of 2017. On a year-to-date basis, operating margin was \$1.8 billion compared to \$948 million for the same period in the prior year. These increases are due to the same factors impacting gross profit noted above, including the new assets placed into service and the Acquisition of equity accounted investments in Alliance and Ruby in the fourth quarter of 2017. Operating margin derived from Alliance and Ruby (on a proportionately consolidated basis) in the fourth quarter of 2018 was \$100 million and \$53 million, respectively, and \$381 million and \$196 million on a year-to-date basis, compared to \$91 million and \$49 million for the same periods in 2017.

<sup>(1)</sup> Refer to "Non-GAAP Measures".

## New Developments

The Company's conventional pipelines continue to receive strong customer demand for transportation services which has resulted in a significant and ongoing build-out of pipeline systems to support the production growth in the Montney, Duvernay and Deep Basin resource plays.

Pembina's Phase IV and Phase V expansions of the Peace Pipeline system were both placed into service in December 2018, on-time and slightly over budget. The Phase IV expansion added approximately 180 mbpd of capacity between Fox Creek and Namao, Alberta, while the Phase V expansion debottlenecked upstream of Fox Creek, adding approximately 260 mbpd of capacity between Lator and Fox Creek, Alberta.

Pembina continues to progress its Phase VI Peace Pipeline expansion, which includes: upgrades at Gordondale, Alberta; a 16-inch pipeline from La Glace to Wapiti, Alberta and associated pump station and terminal upgrades; and a 20-inch pipeline from Kakwa to Lator, Alberta. This project is trending over budget, with an anticipated in-service date in the second half of 2019, subject to environmental and regulatory approvals.

Aligning with the Phase VI expansion, the Company is progressing the Wapiti Condensate Lateral, a 12-inch lateral, which will connect growing condensate volumes from a third-party owned facility in the Pipestone Montney region into Pembina's Peace Pipeline. Subject to regulatory and environmental approvals, this lateral is expected to be in service in the second half of 2019.

As previously announced in the quarter, Pembina is proceeding with the Phase VII Peace Pipeline expansion, which will include: a new 20-inch, approximately 220-kilometer pipeline in the La Glace-Valleyview-Fox Creek corridor, as well as six new pump stations or terminal upgrades, between La Glace and Edmonton, Alberta. Phase VII will add approximately 240 mbpd of incremental capacity upstream of Fox Creek, accessing capacity available on the mainlines downstream of Fox Creek. This project has an estimated capital cost of \$950 million and is anticipated to be in service in the first half of 2021, subject to environmental and regulatory approvals.

As was recently announced subsequent to the quarter, Pembina is proceeding with the Phase VIII Peace Pipeline expansion, which will include: new 10 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, Alberta. This project has an estimated capital cost of \$500 million and is anticipated to be placed into service in stages starting in 2020 through the first half of 2022, subject to regulatory and environmental approvals.

Development continues on the previously announced NEBC Montney Infrastructure in proximity to the Company's Birch Terminal. This includes producer tie-in connections to Pembina's Birch Terminal as well as upgrades to the terminal including additional storage and pumps, along with minor site modifications. This new infrastructure is anticipated to be in service in Q3 2019, in conjunction with producer infrastructure availability.

On January 29, 2019, the Company's primary shipper on the Ruby Pipeline, PG&E Corporation ("PG&E"), announced it has filed voluntary petitions under Chapter 11 of the U.S. Bankruptcy Code. PG&E is currently expected to continue operations throughout the Chapter 11 proceedings and is seeking court approval to access debtor-in-possession financing to support operations. Pembina is working closely with its joint venture partner on the Ruby Pipeline to assess the potential impacts of

this announcement, but at this time has concluded that no impairment exists. PG&E continues to utilize their capacity on Ruby to support the energy needs of California residents. Pembina benefits from its 50 percent convertible preferred interest in the Ruby Pipeline which provides for distributions of US\$91 million annually in priority to distributions on common equity.

## Facilities Division

### Business Overview

The Facilities Division includes natural gas processing and NGL fractionation facilities and related infrastructure that provide 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 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 processing services for its customers, primarily on a fee-for-service basis under long-term contracts. Virtually all of the condensate and NGL extracted through these facilities is transported by assets in Pembina's Pipelines Division. A significant portion of the volumes are further processed at Pembina's NGL fractionation facilities. In total, Pembina has gas processing facilities with approximately 6 bcf/d of net gas processing capacity<sup>(1)</sup>.

Additionally, the Facilities Division includes NGL fractionation, cavern storage, and terminalling (loading and off-loading services) facilities. These facilities are fully integrated with the Company's other divisions, providing customers across the WCSB and North America with the ability to contract for more than one service with Pembina and access a comprehensive suite of services to enhance the value of their hydrocarbons. In total, Pembina has fractionation facilities with 326 mboe/d of net fractionation capacity<sup>(1)</sup>, and approximately 14 mmbbls of liquids storage.

As part of the Corporate Reorganization, the following assets have been reclassified:

- the Empress NGL Extraction Facility and the Younger NGL Extraction Facility have been reclassified from the former Midstream operating segment to gas services assets within the Facilities Division;
- Burstall Ethane Storage, which was previously reported under the Veresen operating segment, is now classified as an NGL services asset included in the Facilities Division; and
- Veresen Midstream, which was previously reported under the Veresen operating segment, is now classified as a gas services asset included in the Facilities Division.

All other assets comprising the previous Gas Services and Midstream operating segments are also included in the Facilities Division other than CDH and ENT (which are in the Pipelines Division) and commodity marketing activities, which are in the Marketing & New Ventures Division. All financial and operating results in this MD&A for all 2017 periods commencing on or after January 1, 2017 have been restated to reflect the Corporate Reorganization.

<sup>(1)</sup> Includes Aux Sable capacity, as further described below. The financial and operational results for Aux Sable are included in the Marketing & New Ventures Division; excludes projects under development.

## Results of Operations

(\$ millions, except where noted)	3 Months Ended December 31 (unaudited)		12 Months Ended December 31	
	2018	2017 <sup>(4)</sup>	2018	2017 <sup>(4)</sup>
<b>Financial Overview</b>				
Revenue <sup>(1)</sup>	402	293	1,468	969
Cost of goods sold, including product purchases	137	80	462	197
Net revenue <sup>(1)(2)</sup>	265	213	1,006	772
Operating expenses <sup>(1)</sup>	87	62	313	227
Share of profit from equity accounted investees	16	22	30	22
Depreciation and amortization included in operations	39	37	149	138
Gross profit	155	136	574	429
Capital expenditures	101	77	348	440
Contributions to equity accounted investees	—	—	58	1
<b>Proportionately Consolidated Financial Overview<sup>(2)</sup></b>				
Volumes (mboe/d) <sup>(3)(5)</sup>	924	800	877	746
Operating Margin <sup>(1)(2)</sup>	238	186	899	596

<sup>(1)</sup> Includes inter-Division transactions. See note 20 of the Consolidated Financial Statements.

<sup>(2)</sup> Refer to "Non-GAAP Measures".

<sup>(3)</sup> Revenue volumes which are physical volumes plus volumes recognized from take-or-pay commitments. Volumes are stated in mboe/d, with natural gas volumes converted to mboe/d from MMcf/d at a 6:1 ratio. Volumes for 2017 have been restated to reflect the Corporate Reorganization.

<sup>(4)</sup> Financial results reported for all 2017 periods have been restated to reflect the Corporate Reorganization and adoption of IFRS 15.

<sup>(5)</sup> Average volumes for assets acquired in the Acquisition are calculated over the period following the Acquisition, rather than the full twelve months ended December 31, 2017, which would have resulted in average volumes of 699 mboe/d.

(\$ millions, except where noted)	3 Months Ended December 31 (unaudited)						12 Months Ended December 31					
	2018			2017 <sup>(1)</sup>			2018			2017 <sup>(1)</sup>		
	Volumes <sup>(2)</sup>	Gross Profit	Operating Margin <sup>(5)</sup>	Volumes <sup>(2)</sup>	Gross Profit	Operating Margin <sup>(5)</sup>	Volumes <sup>(2)</sup>	Gross Profit	Operating Margin <sup>(5)</sup>	Volumes <sup>(2)(4)</sup>	Gross Profit	Operating Margin <sup>(5)</sup>
<b>Facilities Division</b>												
Gas Services	683	83	146	606	80	108	664	301	554	577	239	323
NGL Services	241	72	92	194	56	78	213	273	345	169	190	273
Total	924	155	238	800	136	186	877	574	899	746	429	596

<sup>(1)</sup> Financial results reported for all 2017 periods have been restated to reflect the Corporate Reorganization and adoption of IFRS 15.

<sup>(2)</sup> Revenue volumes which are physical volumes plus volumes recognized from take-or-pay commitments. Volumes are stated in mboe/d, with natural gas volumes converted to mboe/d from MMcf/d at a 6:1 ratio. Volumes for 2017 have been restated to reflect the Corporate Reorganization.

<sup>(3)</sup> Refer to "Non-GAAP Measures".

<sup>(4)</sup> Average volumes for assets acquired in the Acquisition are calculated over the period following the Acquisition, rather than the full twelve months ended December 31, 2017, which would have resulted in average volumes of 531 mboe/d for Gas Services and total average volumes of 699 mboe/d.

## Operational Performance

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

Significant Projects <sup>(1)</sup>	In-service Date
Cavern Storage	Throughout 2018 & 2017
Duvernay Complex ("Duvernay I")	November 2017
Third fractionator at Redwater ("RFS III")	June 2017
Terminalling for the North West Redwater Sturgeon Refinery	Throughout 2017
<b>Veresen Midstream<sup>(2)</sup></b>	
North Central Liquids Hub	June 2018
Saturn Phase II Gas Plant	January 2018
Saturn Phase I Gas Plant	November 2017
Tower Gas Plant <sup>(3)</sup>	September 2017
Sunrise Gas Plant <sup>(3)</sup>	September 2017

<sup>(1)</sup> For further details on the Company's significant assets refer to the Pembina's Annual Information Form filed at [www.sedar.com](http://www.sedar.com) (filed with the U.S. Securities and Exchange Commission at [www.sec.gov](http://www.sec.gov) under Form 40-F) and through Pembina's website at [www.pembina.com](http://www.pembina.com).

<sup>(2)</sup> Investment in equity accounted investee, which Pembina has a 45 percent interest in as of December 31, 2018. Results from Veresen Midstream impact share of profit from equity accounted investees and proportionally consolidated metrics. See note 10 to the Consolidated Financial Statements.

<sup>(3)</sup> Asset placed into service prior to the Acquisition, however impacts financial and operating results following the Acquisition.

During the fourth quarter of 2018, the Facilities Division's volumes averaged 924 mboe/d, an increase of 16 percent compared to the same period of 2017, when volumes were 800 mboe/d. On a year-to-date basis in 2018, volumes increased 18 percent to an average of 877 mboe/d compared to 746 mboe/d for the same period of 2017. These increases were caused by new volumes arising from a full year of operations from Veresen Midstream's Sunrise, Tower and Saturn facilities in 2018, increased utilization at Duvernay I gas plant and Redwater complex, combined with higher volumes at the majority of the other facilities as customers continued to increase production in the resource basins where Pembina operates. Certain volumes from the integrated facilities assets have been excluded to avoid double counting.

## Financial Overview

The Facilities Division realized \$402 million in revenue during the fourth quarter of 2018 compared to \$293 million in the fourth quarter of 2017. On a year-to-date basis, revenue was \$1.5 billion compared to \$969 million for the same period in 2017. The increase for the fourth quarter was primarily driven by increased utilization and demand. On a year-to-date basis, the Company benefited from the full year contribution from the third fractionator at Redwater, infrastructure that supports the North West Redwater Partnership's refinery, the startup of the Duvernay I gas plant in the fourth quarter of 2017, increased take-or-pay commitments and additional customer volumes. For the fourth quarter of 2018, no take-or-pay revenue was deferred and revenue of \$1 million related to take-or-pay deferrals was recognized during the period. For the twelve months ending December 31, 2018, \$8 million of take-or-pay revenue in excess of physical deliveries has been collected and deferred. Revenue of \$6 million related to take-or-pay deferrals was recognized during the period, and outstanding deferrals as at December 31, 2018 were \$2 million.

Net revenue recognized during the fourth quarter of 2018 was \$265 million and \$1.0 billion on a year-to-date basis compared to \$213 million and \$772 million for the same periods in 2017. These increases were due to increased revenues resulting from the operational items noted above.

During the fourth quarter of 2018, Facilities Division incurred operating expenses of \$87 million compared to \$62 million in the fourth quarter of 2017. On a year-to-date basis, operating expenses were \$313 million compared to \$227 million for the same period in 2017. These increases were primarily caused by increased repairs and maintenance costs driven by higher transportation and field maintenance costs as a result of a larger asset base, higher power costs as a result of higher power pool prices and increased consumption, and higher labour expenses associated with increased headcount.

Share of profit from equity accounted investees totaled \$16 million in the fourth quarter of 2018 and \$30 million on a year-to-date basis, compared to \$22 million for the same periods in the prior year due to the Acquisition. The decrease in the fourth quarter is impacted by a financing gain of \$24 million recorded in the fourth quarter of 2017 when Veresen Midstream negotiated a reduction in pricing on its outstanding debt facilities. Further debt renegotiations have resulted in the reversal of the prior year gain, included in share of profit from equity accounted investees in the first half of 2018. Veresen Midstream continues to recognize strong volumes following the Sunrise, Tower and Saturn facilities going into service late in 2017.

Depreciation and amortization included in operations during the fourth quarter and full year 2018 was \$39 million and \$149 million, respectively, compared to \$37 million and \$138 million recognized during the same periods in the prior year. These increases were primarily attributable to increased depreciation due to the addition of the Duvernay I gas plant, RFS III and the infrastructure that supports the North West Redwater Partnership's refinery.

Capital expenditures for the fourth quarter of 2018 were \$101 million and \$348 million on a year-to-date basis, compared to \$77 million and \$440 million for the same periods in 2017. Capital spending in 2018 was largely to progress construction on the Duvernay II, Burstall Ethane Storage, Redwater Cogeneration and on the progression of the Prince Rupert Terminal. In 2017, capital spending was largely to progress the development in the Duvernay area as well as the construction of RFS III.

### **Proportionately Consolidated Financial Overview<sup>(1)</sup>**

Facilities Division realized operating margin, based on proportionate consolidation accounting for investments in equity accounted investees, of \$238 million in the fourth quarter of 2018 compared to \$186 million during the same period of the prior year. On a year-to-date basis operating margin was \$899 million in 2018 and \$596 million in the same period in 2017. These increases were primarily the result of strong operational results following the Sunrise, Tower and Saturn facilities going into service in the fourth quarter of the prior year, combined with the factors mentioned above.

<sup>(1)</sup> Refer to "Non-GAAP Measures".

### **New Developments**

Pembina continues with the construction of new fractionation and terminalling facilities at the Company's Empress, Alberta extraction plant for a total expected capital cost of approximately \$120 million. Detailed engineering is on track and all major equipment purchases have been made. These facilities have an anticipated in-service date of late 2020.

The Company's one million barrel Burstall Ethane Storage facility located near Burstall, Saskatchewan was placed into service in January 2019.

Development continues at Pembina's Prince Rupert LPG export terminal. The terminal is located on Watson Island, British Columbia and is expected to have a permitted capacity of approximately 25 mbpd of LPG. The LPG supply will be sourced primarily from the Company's Redwater complex. Detailed engineering is ongoing and early construction work continues. This project is anticipated to have a total capital cost of \$250 million and is anticipated to be in service in mid-2020, subject to regulatory and environmental approvals.

Pembina continues to progress construction of Duvernay II, the 100 MMcf/d sweet gas, shallow cut processing facility, including 30,000 bpd condensate stabilization and other associated infrastructure. The facilities have an expected total capital cost of \$290 million. Construction has commenced and the project continues to track on budget and schedule with an expected in-service date in Q4 2019.

As announced during the quarter, Pembina has executed further agreements which will see the Company construct and operate additional infrastructure ("Duvernay III") at the Company's Duvernay Complex. Duvernay III will include a 100 MMcf/d sweet gas, shallow cut processing facility (a replica of Pembina's Duvernay I and II gas plants) and 20,000 bpd of condensate stabilization and water handling infrastructure. Pembina expects the total capital cost to be \$165 million with an anticipated in-service date of mid-to-late 2020, subject to regulatory and environmental approvals.

Also announced during the quarter, the Hythe Developments project will see Pembina and its 45 percent owned joint venture, Veresen Midstream, construct natural gas gathering and processing infrastructure in the Pipestone Montney region. The infrastructure consists of: an expansion of up to 125 MMcf/d (57 MMcf/d net to Pembina), of sour gas processing at Veresen Midstream's existing Hythe facility; the construction, by Veresen Midstream, of a new, approximately 60 km, 12-inch sour gas pipeline and the construction, by Pembina, of various laterals. Collectively, the Hythe Developments have an estimated total capital cost of approximately \$380 million (\$185 million net to Pembina) and have an anticipated in-service date of late 2020, subject to regulatory and environmental approvals.

The previously announced Redwater co-generation facility is trending under budget and is expected to be placed into service in the first quarter of 2019.

## **Marketing & New Ventures Division**

### **Business Overview**

The Marketing & New Ventures Division strives to maximize the value of hydrocarbon liquids and natural gas originating in the basins where the Company operates.

Pembina seeks to create new markets, and further enhance existing markets, to support both the Company's and its customers' overall business interests. In particular, Pembina seeks to identify opportunities to connect hydrocarbon production to new demand locations through the development of infrastructure. Pembina strives to increase producer netbacks and product demand to improve the overall competitiveness of the basins where the Company operates.

Within the Marketing & New Ventures Division, Pembina undertakes value-added commodity marketing activities including buying and selling products (natural gas, ethane, propane, butane, condensate and crude oil), commodity arbitrage, and optimizing storage opportunities. The marketing business enters into contracts for capacity on both Pembina's and third-party infrastructure, handles proprietary and customer volumes and aggregates production for onward sale. Through this infrastructure capacity, as well as utilizing the Company's rail fleet and rail logistics capabilities, Pembina's marketing business adds incremental value to the commodities by transporting volumes to high value markets across North America. 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.

Pembina's marketing business also includes results from Aux Sable including a NGL extraction facility near Chicago, Illinois and other natural gas and NGL processing facilities, logistics and distribution assets in the United States and Canada.

The Marketing & New Ventures Division also currently includes the propylene and polypropylene facility ("PDH/PP Facility"), being developed by Pembina's joint venture, CKPC; and the proposed Jordan Cove LNG project.

As part of the Corporate Reorganization, the following assets have been reclassified:

- CKPC's PDH/PP Facility, previously included in the former Midstream operating segment, is now included in the Marketing & New Ventures Division; and
- Aux Sable and the proposed Jordan Cove LNG Project, which were both previously reported under the Veresen operating segment, are now included in the Marketing & New Ventures Division.

In addition, Pembina's commodity marketing activities, which were previously reported in the former Midstream operating segment, are now included in the Marketing & New Ventures Division. All financial and operating results in this MD&A for all periods commencing on or after January 1, 2017 have been restated to reflect the Corporate Reorganization.

## Results of Operations

(\$ millions, except where noted)	3 Months Ended December 31 (unaudited)		12 Months Ended December 31	
	2018	2017 <sup>(1)</sup>	2018	2017 <sup>(1)</sup>
<b>Financial Overview</b>				
Revenue <sup>(2)</sup>	1,028	1,133	4,721	3,533
Cost of goods sold <sup>(2)</sup>	952	959	4,335	3,105
Net revenue <sup>(2)(3)</sup>	76	174	386	428
Share of profit from equity accounted investees	39	22	102	22
Realized (gain) loss on commodity-related derivative financial instruments	(5)	42	51	93
Unrealized gain on commodity-related derivative financial instruments	(89)	(14)	(73)	(22)
Depreciation and amortization included in operations	6	6	26	26
Gross profit	203	162	484	353
Capital expenditures	46	23	134	57
Contributions to equity accounted investees	—	6	—	6
<b>Proportionately Consolidated Financial Overview<sup>(3)</sup></b>				
Volumes (mboe/d) <sup>(4)(5)</sup>	201	197	175	180
Operating Margin <sup>(2)(3)</sup>	121	166	468	369

<sup>(1)</sup> Financial results reported for all 2017 periods have been restated to reflect the Corporate Reorganization and adoption of IFRS 15.

<sup>(2)</sup> Includes inter-Division transactions. See note 20 of the Consolidated Financial Statements.

<sup>(3)</sup> Refer to "Non-GAAP Measures".

<sup>(4)</sup> Marketed NGL volumes. Volumes are stated in mboe/d. Volumes for 2017 have been restated to reflect the Corporate Reorganization.

<sup>(5)</sup> Average volumes for assets acquired in the Acquisition are calculated over the period following the Acquisition, rather than the full twelve months ended December 31, 2017, which would have resulted in average volumes of 143 mboe/d.

(\$ millions, except where noted)	3 Months Ended December 31 (unaudited)						12 Months Ended December 31					
	2018			2017 <sup>(1)</sup>			2018			2017 <sup>(1)</sup>		
	Volumes <sup>(2)</sup>	Gross Profit	Operating Margin <sup>(3)</sup>	Volumes <sup>(2)</sup>	Gross Profit	Operating Margin <sup>(3)</sup>	Volumes <sup>(2)</sup>	Gross Profit	Operating Margin <sup>(3)</sup>	Volumes <sup>(2)(5)</sup>	Gross Profit	Operating Margin <sup>(3)</sup>
<b>Marketing &amp; New Ventures Division</b>												
Marketing	201	203	121	197	162	166	175	484	468	180	353	369
New Ventures <sup>(4)</sup>	—	—	—	—	—	—	—	—	—	—	—	—
Total	201	203	121	197	162	166	175	484	468	180	353	369

<sup>(1)</sup> Financial results reported for all 2017 periods have been restated to reflect the Corporate Reorganization and adoption of IFRS 15.

<sup>(2)</sup> Marketed NGL volumes. Volumes are stated in mboe/d. Volumes for 2017 have been restated to reflect the Corporate Reorganization.

<sup>(3)</sup> Refer to "Non-GAAP Measures".

<sup>(4)</sup> All New Ventures projects have not yet commenced operations and therefore have no results of operations.

<sup>(5)</sup> Average volumes for assets acquired in the Acquisition are calculated over the period following the Acquisition, rather than the full twelve months ended December 31, 2017, which would have resulted in average volumes of 143 mboe/d.

### Financial Overview

The Marketing & New Ventures Division realized net revenue of \$76 million during the fourth quarter of 2018 compared to \$174 million in the fourth quarter of 2017. The fourth quarter net revenue decrease of 56 percent was due to lower margins on commodity sales as a result of lower crude and NGL market prices compared to the same period in 2017, combined with increased market-based intercompany fees. On a year-to-date basis, net revenue was \$386 million compared to \$428 million for the same period in 2017. This decrease in net revenue of 10 percent is primarily due to the same factors impacting the fourth quarter, slightly offset by higher average crude prices and increased crude sales volumes during 2018.

Share of profit from equity accounted investees for Aux Sable totaled \$39 million and \$102 million during the fourth quarter and full year 2018, compared to \$22 million for both the fourth quarter and full year 2017. Gross profit recognized by Aux Sable during the 2018 periods benefited from access to US markets which offer relatively strong propane plus margins and a wide Chicago-AECO natural gas differential.

Realized and unrealized gains on commodity-related financial derivatives during the fourth quarter of 2018 were \$5 million and \$89 million, respectively, compared to a realized loss of \$42 million and an unrealized gain of \$14 million, respectively, in the same period of 2017. The fourth quarter gains were predominantly driven by decreasing NGL and crude market prices. On a year-to-date basis, realized losses were \$51 million and unrealized gains were \$73 million, respectively, in 2018 compared to a realized loss of \$93 million and an unrealized gain of \$22 million, in the same periods of 2017. The decrease in the realized loss and increase in the unrealized gain were both impacted by decreasing commodity prices in 2018. Pembina enters into commodity-related derivative financial instruments to protect margins in changing commodity price environments. Currently, Pembina has hedged approximately 23 percent of the Company's frac spread throughput for 2019 (excluding its interest in Aux Sable).

Capital expenditures for the fourth quarter of 2018 were \$46 million and \$134 million year-to-date, compared to \$23 million and \$57 million for the same periods in 2017. Capital expenditures in the current year primarily relate to the Company's proposed Jordan Cove LNG project, which was acquired in the fourth quarter of 2017 as part of the Acquisition.

### **Proportionately Consolidated Financial Overview<sup>(1)</sup>**

Marketing & New Ventures Division realized operating margin of \$121 million in the fourth quarter of 2018 compared to \$166 million during the same period of the prior year. This decrease was due to the lower margins discussed above, offset by the swing to a realized gain on commodity-related financial derivatives, compared to the realized loss in the same period of 2017. On a year-to-date basis operating margin was \$468 million in 2018 compared to \$369 million in 2017. This increase was the result of the full year contribution from the equity accounted investment in Aux Sable.

<sup>(1)</sup> Refer to "Non-GAAP Measures".

### **New Developments**

Subsequent to the quarter, Pembina along with Petrochemical Industries Company K.S.C. ("PIC") of Kuwait, announced a positive final investment decision to construct a 550,000 tonne per annum integrated propane dehydrogenation ("PDH") plant and polypropylene ("PP") upgrading facility ("PDH/PP Facility") through their equally-owned joint venture entity, Canada Kuwait Petrochemical Corporation. The PDH/PP Facility will be located adjacent to Pembina's Redwater complex and will convert approximately 23,000 bpd of locally supplied propane into polypropylene, a high value recyclable polymer used in a wide range of finished products including automobiles, medical devices, food packaging and home electronic appliances, among others. Pembina's net investment in this project is expected to be \$2.5 billion with an expected contribution to annual Adjusted EBITDA of \$275 to \$350 million, net to Pembina. This project is expected to be in service mid-2023, subject to environmental and regulatory approvals.

Pembina continues to progress its proposed Jordan Cove LNG project that will transport natural gas from the Malin Hub in southern Oregon to an export terminal. The Company has received a Notice of Schedule that indicates the U.S. Federal Energy Regulatory Commission ("FERC") will provide a decision not later than November 2019. Pembina continues to work with various state and other agencies to progress the project on a similar time line. In addition, as previously disclosed, the Company executed non-binding off-take agreements, for a total of 11 million tonnes per annum ("Mtpa"), which exceeds the planned capacity of 7.5 Mtpa. Pembina is working to conclude off-take agreements in the first quarter of 2019. Pembina continues to anticipate first gas in 2024, pending the receipt of the necessary regulatory approvals, a positive final investment decision and other requirements.

## 4. LIQUIDITY & CAPITAL RESOURCES

As at December 31 (\$ millions)	2018	2017
Working capital <sup>(1)</sup>	(477)	(128)
Variable rate debt <sup>(2)</sup>		
Bank debt	1,305	1,778
Total variable rate debt outstanding (weighted average of 3.2% (2017: 2.9%))	1,305	1,778
Fixed rate debt <sup>(2)</sup>		
Senior unsecured notes	540	540
Senior unsecured medium-term notes	5,700	5,150
Total fixed rate debt outstanding (weighted average of 4.2% (2017: 4.3%))	6,240	5,690
Convertible debentures <sup>(2)</sup>	—	95
Finance lease liability	19	12
Total debt and debentures outstanding	7,564	7,575
Cash and unutilized debt facilities	2,372	1,063

<sup>(1)</sup> As at December 31, 2018, working capital includes \$480 million (December 31, 2017: \$256 million) associated with the current portion of loans and borrowings and convertible debentures.

<sup>(2)</sup> Face value.

Pembina anticipates its cash flow from operating activities, the majority of which is derived from fee based contracts, will be more than sufficient to meet its short-term and long-term operating obligations and fund its targeted dividends. In the short term, Pembina expects to source funds required for capital projects and contributions to investments in equity accounted investees from cash, its credit facilities and by accessing the capital markets, as required. Based on its successful access to financing in the capital markets over the past several years, Pembina believes it should continue to have access to additional funds as required. Refer to "Risk Factors – Additional Financing and Capital Resources" in this MD&A and note 24 to the Consolidated Financial Statements for the year ended December 31, 2018 for more information. Management remains satisfied that the leverage employed in Pembina's capital structure is sufficient and appropriate given the characteristics and operations of the underlying asset base.

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

Pembina's credit facilities consist of an unsecured \$2.5 billion (December 31, 2017: \$2.5 billion) revolving credit facility which includes a \$750 million accordion feature and matures in May 2023, an unsecured \$1.0 billion non-revolving term loan which matures in March 2021, and an operating facility of \$20 million (December 31, 2017: \$20 million) due in May 2019 and is typically renewed on an annual basis. There are no repayments due over the term of these facilities. As at December 31, 2018, Pembina had \$2.4 billion (December 31, 2017: \$1.1 billion) of cash and unutilized debt facilities. At December 31, 2018, Pembina had loans and borrowings (excluding deferred financing costs and finance lease liabilities) of \$7.5 billion (December 31, 2017: \$7.5 billion). Pembina also had an additional \$69 million (December 31, 2017: \$26 million) in letters of credit issued pursuant to separate credit facilities. Pembina is required to meet certain specific and customary affirmative and negative financial covenants under its senior unsecured notes, medium-term notes, revolving credit, non-revolving term and operating facilities, including a requirement to maintain certain financial ratios. Pembina is also subject to customary restrictions on its operations and activities under its notes and credit facilities, including restrictions on the granting of security, incurring indebtedness and the sale of its assets.

Pembina's financial covenants include the following:

Debt Instrument	Financial Covenant <sup>(1)</sup>	Ratio	Ratio at December 31, 2018
Senior unsecured medium-term notes	Funded Debt to Capitalization	Maximum 0.70	0.34
Revolving unsecured credit facility and non-revolving term loan	Debt to Capital	Maximum 0.65	0.34
	EBITDA to senior interest coverage	Minimum 2.5:1.0	8.84

<sup>(1)</sup> Terms as defined in relevant agreements.

In addition to the table above, Pembina has customary covenants on its other senior unsecured notes. Pembina was in compliance with all covenants under its notes and facilities as at December 31, 2018 (December 31, 2017: in compliance).

Pembina continues to actively monitor and reassess the creditworthiness of its counterparties. Financial assurances to mitigate and reduce risk may include guarantees, letters of credit and cash. Letters of credit totaling \$122 million (December 31, 2017: \$110 million) were held at December 31, 2018, primarily in respect of customer trade receivables.

### Financing Activity

On March 9, 2018, Pembina closed its \$1.0 billion non-revolving term loan ("Term Loan") with certain existing lenders. The Term Loan has been used to partially repay existing amounts drawn under Pembina's \$2.5 billion revolving credit facility, thereby providing additional liquidity, flexibility and interest cost savings. The Term Loan has an initial term of three years and is pre-payable at the Company's option. The other terms and conditions of the Term Loan, including financial covenants, are substantially similar to Pembina's \$2.5 billion revolving credit facility. Concurrently, Pembina also completed an extension of its \$2.5 billion revolving credit facility, which now matures May 31, 2023.

On March 26, 2018, Pembina closed an offering of \$400 million of senior unsecured Series 10 medium-term notes (the "Series 10 Notes"). The Series 10 Notes have a fixed coupon of 4.02 percent per annum, paid semi-annually, and mature on March 27, 2028. Simultaneously, Pembina closed an offering of \$300 million of senior unsecured Series 11 medium-term notes (the "Series 11 Notes"). The Series 11 Notes have a fixed coupon of 4.75 percent per annum, paid semi-annually, and mature on March 26, 2048. The net proceeds were used to repay short-term indebtedness of the Company under its credit facilities, as well as to fund Pembina's capital program and for general corporate purposes.

On April 4, 2018, Pembina entered into a note exchange agreement with AEGS noteholders to exchange AEGS senior notes for unsecured senior notes ("Series A") of Pembina under Pembina's Note Indenture. The Series A fixed coupon remained at 5.565 percent per annum and the notes are non-amortizing with a bullet payment of \$73 million at maturity on May 4, 2020.

On November 22, 2018, Pembina's \$150 million senior unsecured medium term note 1A matured and was fully repaid.

On December 31, 2018, Pembina's Series F Convertible Debentures matured. At maturity, the outstanding principal of \$1.6 million plus accrued and unpaid interest was settled in cash.

### Financing Activities for Equity Accounted Investees

On March 29, 2018, Ruby Pipeline, L.L.C., in which Pembina owns a 50 percent preferred interest, amended the maturity date of its US\$203 million 364-Day Term Loan, originally maturing March 30, 2018 to March 28, 2019. The Term Loan will continue to amortize at US\$16 million per quarter (US\$8 million per quarter net to Pembina), beginning March 30, 2018, until a final bullet payment of US\$141 million (US\$70 million net to Pembina) is payable on the amended maturity date, unless otherwise extended.

On April 20, 2018 Veresen Midstream, in which Pembina owns a 45 percent interest, successfully amended and extended its Senior Secured Credit Facilities which were originally scheduled to mature on March 31, 2020. Under the terms of the amendment and extension reached with a syndicate of lenders, Veresen Midstream increased its borrowing capacity to \$200 million under the Revolving Credit Facility and to \$2.6 billion of availability under the Term Loan A and used the proceeds to repay an existing US\$705 million Term Loan B on April 30, 2018. Other terms and conditions in the facilities were modified to

reflect the operating nature of the business including modifying the covenant package and increasing the permitted distributions out of Veresen Midstream. The maturity date of the two debt facilities was extended to April 20, 2022.

At December 31, 2018, Pembina's Investments in Equity Accounted Investees had long term debt of \$2.4 billion.

## Credit Ratings

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

Pembina targets strong 'BBB' credit ratings. DBRS rates Pembina's senior unsecured notes and senior unsecured medium-term notes 'BBB' and Class A Preferred Shares Pfd-3. S&P's long-term corporate credit rating on Pembina is 'BBB' and its rating of the Class A Preferred Shares is P-3 (High).

## Contractual Obligations

Pembina had the following contractual obligations outstanding at December 31, 2018:

Contractual Obligations <sup>(1)</sup> (\$ millions)	Payments Due By Period				
	Total	Less than 1 year	1 – 3 years	3 – 5 years	After 5 years
Leases and other <sup>(2)</sup>	796	118	220	163	295
Loans and borrowings <sup>(3)</sup>	10,794	724	2,334	1,183	6,553
Construction commitments <sup>(4)</sup>	1,001	643	34	19	305
Advances to related parties <sup>(5)</sup>	96	96	—	—	—
<b>Total contractual obligations</b>	<b>12,687</b>	<b>1,581</b>	<b>2,588</b>	<b>1,365</b>	<b>7,153</b>

<sup>(1)</sup> Pembina enters into product purchase agreements and power purchase agreements to secure supply for future operations. Purchase prices of both NGL and power are dependent on current market prices. Volumes and prices for NGL and power contracts cannot be reasonably determined and therefore an amount has not been included in the contractual obligations schedule. Product purchase agreements range from one to 10 years and involve the purchase of NGL products from producers. Assuming product is available, Pembina has secured between 24 and 105 mtpd each year up to and including 2027. Power purchase agreements range from one to 25 years and involve the purchase of power from electrical service providers. The Company has secured up to 59 megawatts per day each year up to and including 2043.

<sup>(2)</sup> Includes office space, surface land, vehicles and approximately 3,000 rail car leases (supporting future propane transportation in the Marketing & New Ventures Division). The Company has sublet office space and rail cars up to 2027 and has contracted sub-lease payments for a potential of \$85 million over the term.

<sup>(3)</sup> Excluding deferred financing costs. Including interest payments on senior unsecured notes.

<sup>(4)</sup> Excluding significant projects that are awaiting regulatory approval at December 31, 2018 and for which Pembina is not committed to construct.

<sup>(5)</sup> The Company has a contractual commitment to advance \$96 million (US\$70 million) to the Company's jointly controlled investment, Ruby Pipeline, L.L.C. by March 28, 2019.

Pembina is, subject to certain conditions, contractually committed to the construction and operation of Duvernay II, Redwater Cogeneration as well as certain pipeline connections and laterals and other corporate infrastructure. See "Forward-Looking Statements & Information" and "Liquidity & Capital Resources".

## 5. CAPITAL EXPENDITURES

(\$ millions)	3 Months Ended December 31 (unaudited)		12 Months Ended December 31	
	2018	2017 <sup>(1)</sup>	2018	2017 <sup>(1)</sup>
Pipelines Division	188	211	711	1,328
Facilities Division	101	77	348	440
Marketing & New Ventures Division	46	23	134	57
Corporate/other projects	21	3	33	14
Total capital	356	314	1,226	1,839
Contributions to equity accounted investees <sup>(2)</sup>	—	6	58	7
Acquisitions	—	6,400	—	6,400

<sup>(1)</sup> Financial results for all 2017 periods have been restated to reflect the Corporate Reorganization.

<sup>(2)</sup> Contributions in 2018 are primarily contributions to Veresen Midstream.

For the three months ended December 31, 2018, capital expenditures were \$356 million compared to \$314 million during the same three-month period of 2017. For the twelve months ended December 31, 2018, capital expenditures were \$1.2 billion compared to \$1.8 billion during the same twelve month period of 2017. Pipelines Division's capital expenditures were primarily related to Pembina's ongoing pipeline expansion projects. In 2018, Facilities Division's capital expenditures were largely related to the construction on Duvernay II, the Burstall Ethane Storage, Redwater Cogeneration and the Prince Rupert Terminal. In 2017, Facilities Division's capital expenditures were largely related to the development in the Duvernay area as well as the construction of RFS III. Capital expenditures in the Marketing & New Ventures Division in 2018 primarily related to the Jordan Cove LNG project.

## 6. DIVIDENDS

### Common Share Dividends

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

On May 3, 2018, Pembina's Board of Directors approved a 5.6 percent increase in its monthly common share dividend rate (from \$0.18 per common share to \$0.19 per common share), commencing with the dividend paid on June 15, 2018.

### Preferred Share Dividends

The holders of Pembina's Class A Preferred Shares are entitled to receive fixed cumulative dividends. Dividends on the Series 1, 3, 5, 7, 9, 11, 13 and 21 preferred shares are payable quarterly on the 1st day of March, June, September and December, if, as and when declared by the Board of Directors of Pembina, for the initial fixed-rate period for each series of preferred share. Dividends on the preferred shares Series 15, 17 and 19 are payable on the last day of March, June, September and December in each year, if, as and when declared by the Board of Directors.

On November 16, 2018, Pembina announced that none of the 10 million Cumulative Redeemable Rate Reset Class A Preferred Series 1 shares outstanding would be converted into Cumulative Redeemable Floating Rate Class A Preferred Series 2 shares. For more information on the terms of, and risks associated with an investment in, the Series 1 Shares and the Series 2 Shares, please see the prospectus supplement dated July 19, 2013 and the news release dated November 16, 2018.

On January 30, 2019, Pembina announced that it does not intend to exercise its right to redeem the six million Cumulative Redeemable Rate Reset Class A Preferred Shares, Series 3 ("Series 3 Shares") shares outstanding on March 1, 2019 (the "Conversion Date"). For more information on the terms of, and risks associated with an investment in, the Series 3 Shares

and the Series 4 Shares, please see the prospectus supplement dated September 25, 2013 and the news release dated January 30, 2019.

## DRIP

Pembina suspended its Premium Dividend™ and Dividend Reinvestment Plan ("DRIP") effective April 25, 2017. Accordingly, the March 2017 dividend was the last dividend with the ability to be reinvested through the DRIP. Shareholders who were enrolled in the program automatically receive dividends in the form of cash. If Pembina elects to reinstate the DRIP in the future, shareholders that were enrolled in the DRIP at suspension and remain enrolled at reinstatement will automatically resume participation in the DRIP.

## 7. SELECTED QUARTERLY INFORMATION

### Selected Quarterly Operating Information

<i>(mboe/d unless stated otherwise)</i>	2018				2017 <sup>(3)(4)</sup>			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
<b>Volumes<sup>(1)(2)</sup></b>								
Pipelines Division								
Conventional Pipelines	897	946	900	766	796	715	620	617
Transmission Pipelines	566	571	559	584	567	38	36	35
Oil Sands Pipelines	1,066	1,076	1,077	1,074	1,087	1,087	1,015	1,015
Facilities Division								
Gas Services	683	669	650	636	606	486	485	545
NGL Services	241	203	199	206	194	188	133	159
<b>Total</b>	<b>3,453</b>	<b>3,465</b>	<b>3,385</b>	<b>3,266</b>	<b>3,250</b>	<b>2,514</b>	<b>2,289</b>	<b>2,371</b>

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

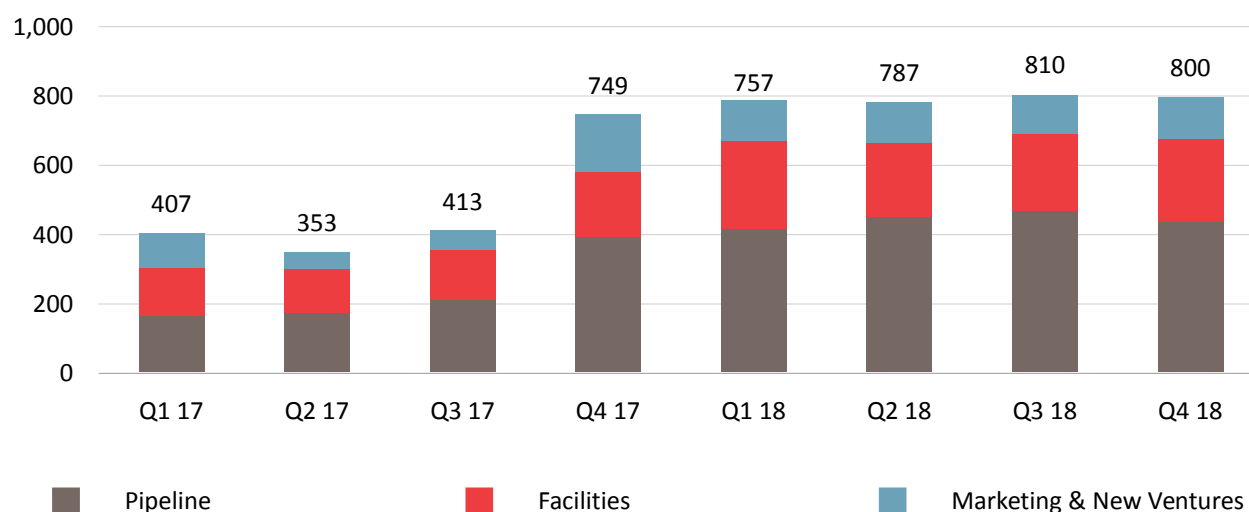
<sup>(2)</sup> Includes Pembina's proportionate share of results from equity accounted investees.

<sup>(3)</sup> 2017 volumes have been restated for the Corporate Reorganization and to exclude compression volumes relating to Veresen Midstream.

<sup>(4)</sup> Average volumes for assets acquired in the Acquisition are calculated over the period following the Acquisition, rather than the full twelve months ended December 31, 2017.

### Quarterly Segmented Operating Margin<sup>(1)</sup>

*(\$ millions)*



<sup>(1)</sup> Refer to "Non-GAAP Measures".

## Quarterly Financial Information

(\$ millions, except where noted)	2018				2017			
	Q4	Q3	Q2 <sup>(2)</sup>	Q1	Q4	Q3 <sup>(2)</sup>	Q2	Q1 <sup>(2)</sup>
Revenue	1,726	2,045	1,743	1,837	1,716	1,151	1,159	1,374
Net revenue <sup>(1)</sup>	706	742	669	719	709	536	444	549
Operating expenses	165	136	100	150	130	112	101	107
Realized (gain) loss on commodity-related derivative financial instruments	(5)	29	9	18	42	17	(5)	40
Share of profit from equity accounted investees	129	110	96	76	116	—	—	—
Gross profit	663	585	511	568	555	274	269	376
Earnings	368	334	246	330	445	111	117	210
Earnings per common share – basic (dollars)	0.66	0.60	0.43	0.59	0.83	0.23	0.24	0.48
Earnings per common share – diluted (dollars)	0.66	0.60	0.42	0.59	0.83	0.23	0.24	0.48
Cash flow from operating activities	674	481	603	498	523	302	362	326
Cash flow from operating activities per common share – basic (dollars) <sup>(1)</sup>	1.33	0.95	1.20	0.99	1.04	0.75	0.90	0.82
Adjusted cash flow from operating activities <sup>(1)</sup>	543	523	558	530	499	314	275	308
Adjusted cash flow from operating activities per common share – basic <sup>(1)</sup> (dollars)	1.07	1.03	1.11	1.05	0.99	0.78	0.68	0.77
Common shares outstanding (millions):								
Weighted average – basic	507	506	504	503	502	403	401	398
Weighted average – diluted	509	509	508	508	507	404	403	400
End of period	508	506	504	503	503	403	403	400
Common share dividends declared	289	288	282	272	272	205	205	191
Dividends per common share	0.57	0.57	0.56	0.54	0.54	0.51	0.51	0.48
Preferred share dividends declared	31	30	31	30	26	19	19	19
Capital expenditures	356	291	255	324	314	341	475	709
Contributions to equity accounted investees	—	—	—	58	6	—	1	—
<b>Proportionately Consolidated Financial Overview</b>								
Operating margin <sup>(1)</sup>	800	810	787	757	749	413	353	407
Adjusted EBITDA <sup>(1)</sup>	715	732	700	688	674	369	297	358

<sup>(1)</sup> Refer to "Non-GAAP Measures".

<sup>(2)</sup> Pembina corrected revenue and costs of goods sold in the Marketing & New Ventures Division. The adjustments reduce revenue and cost of goods sold for the quarters ending June 30, 2018 (\$202 million) and March 31, 2017 (\$106 million) and increase revenue and cost of goods sold for the quarter ending September 30, 2017 (\$106 million). There was no impact to earnings as a result of the adjustments.

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

- The Acquisition on October 2, 2017;
- Increased production in key operating areas and resource plays within the WCSB (Deep Basin, Montney and Duvernay) which has supported increased revenue and sales volumes on Pembina's existing assets in the Pipelines and Facilities Divisions;
- New large-scale growth projects across Pembina's business being placed into service;
- Volatility in commodity market prices impacting margins within the marketing business, partially mitigated through Pembina's risk management program;
- Lower income tax rates on U.S. operations following the enactment of U.S. Tax Reform legislation in December 2017;
- Higher net finance costs associated with debt related to acquisitions and growth projects; and
- Increased common and preferred shares outstanding and corresponding dividends due to the Acquisition.

## 8. OTHER

### Changes in Reporting

Over the past few years, Pembina has experienced transformational growth. From 2015 through 2017, the Company placed approximately \$8 billion of new projects into service. Furthermore, in 2017, the Company completed the multi-billion dollar Veresen Acquisition. Given the enhanced scale and scope of Pembina's business and considering the future needs of both the Company and the energy industry, Pembina's management structure was reorganized, effective January 1, 2018, into three Divisions: Pipelines, Facilities and Marketing & New Ventures ("Corporate Reorganization").

Accordingly, the Company's financial reporting format has changed to better align with the new structure. The new organizational structure and reporting format provides a number of benefits including consistency between how Pembina's business is managed and how results are reported; the placement of like assets together within the same reporting segment; the creation of centres of excellence, which will increase operating reliability and cost efficiencies; and the establishment of a separate reporting segment for Pembina's commodity marketing activities and the development of larger-scale, value-chain extension projects.

Pembina also retrospectively adopted IFRS 15 *Revenue from Contracts with Customers* ("IFRS 15"), effective January 1, 2018. While this change has not had material impact on annual revenue recognition, it has resulted in a change in timing for quarterly revenue recognition.

For the fourth quarter of 2018, \$34 million of take-or-pay revenue in excess of physical deliveries has been collected and deferred and revenue of \$28 million related to take-or-pay deferral was recognized during the period.

For the twelve months ending December 31, 2018, \$141 million of take-or-pay revenue in excess of physical deliveries has been collected and deferred in addition to the \$8 million that had been deferred at January 1, 2018. Revenue of \$140 million related to take-or-pay deferral was recognized during the period, and the outstanding deferral as at December 31, 2018 was \$9 million.

Financial results reported for all 2017 periods have been restated to reflect the Corporate Reorganization and the retrospective adoption of IFRS 15.

### Selected Annual Financial Information

<i>(\$ millions, except where noted)</i>	2018	2017 <sup>(1)</sup>	2016 <sup>(3)(4)</sup>
Revenue	7,351	5,400	4,148
Earnings	1,278	883	466
Per common share - basic <i>(dollars)</i>	2.28	1.87	1.02
Per common share - diluted <i>(dollars)</i>	2.28	1.86	1.01
Total assets	26,664	25,566	15,017
Long-term financial liabilities <sup>(2)</sup>	7,996	8,199	4,832
Declared dividends per common share <i>(\$ per share)</i>	2.24	2.04	1.90
Preferred share dividends declared	122	83	69

<sup>(1)</sup> Financial results reported for all 2017 periods have been restated to reflect the Corporate Reorganization and adoption of IFRS 15.

<sup>(2)</sup> Includes long-term loans and borrowings, long-term convertible debentures, long-term derivative financial instruments, contract liabilities, provisions and employee benefits, share-based payments, taxes payable and other liabilities.

<sup>(3)</sup> Financial results reported for all 2016 periods have not been restated to reflect the adoption of IFRS 15.

<sup>(4)</sup> Pembina corrected revenue and costs of goods sold in the Marketing & New Ventures Division. The adjustment reduces revenue and cost of goods sold by \$117 million. There was no impact to earnings as a result of the adjustments.

### Related Party Transactions

Pembina enters into transactions with related parties in the normal course of business. These transactions primarily include advancing funds to equity accounted investees, providing management, administrative, operational and workforce related services to various affiliates. These services are provided under separate consulting services agreements with no profit or

margin charged for the services delivered. For more information on these transactions and for a summary of Key Management Personnel and Director Compensation, refer to Note 28 to the Consolidated Financial Statements.

## **U.S. Tax Reform**

The U.S. Tax Reform was substantively enacted on December 22, 2017 with the majority of the legislation effective January 1, 2018. In 2017, Pembina recorded the tax impact of the corporate tax rate reduction from 35 percent to 21 percent resulting in a deferred tax recovery of \$196 million and recognized a one-time deemed mandatory repatriation tax of approximately \$30 million. This amount was reduced by \$8 million in 2018 due to revisions made in the calculation. Pembina is continuing to analyze the impact of the provisions enacted in the U.S. Tax Reform as regulations and guidance from the U.S. Treasury and the Internal Revenue Service are released. Pembina recorded a \$3 million current tax expense for the Base Erosion and Anti-Abuse Tax ("BEAT"). BEAT is an additional minimum tax imposed on U.S. corporations that make certain payments to foreign related parties.

## **Pension Liability**

Pembina maintains a defined contribution plan and non-contributory defined benefit pension plans covering employees and retirees. The defined benefit plans include a funded registered plan for all qualified employees and an unfunded supplemental retirement plan for those employees affected by the Canada Revenue Agency maximum pension limits. At the end of 2018, the pension plans carried a net obligation of \$31 million compared to a net obligation of \$21 million at the end of 2017. At December 31, 2018, plan obligations amounted to \$224 million (2017: \$203 million) compared to plan assets of \$193 million (2017: \$182 million). In 2018, the pension plans' expense was \$15 million (2017: \$14 million). Pembina's contributions to the pension plans totaled \$19 million in 2018 (2017: \$16 million).

## **Disclosure Controls and Procedures ("DC&P") and Internal Controls over Financial Reporting ("ICFR")**

### **Disclosure Controls and Procedures**

Pembina maintains disclosure controls and procedures designed to provide reasonable assurance that information required to be disclosed in Pembina's filings is reviewed, recognized and disclosed accurately and in the appropriate time period.

An evaluation, as at December 31, 2018, of the effectiveness of the design and operation of Pembina's disclosure controls and procedures, as defined in Rule 13a - 15(e) and 15d - 15(e) *under the United States Securities Exchange Act of 1934*, as amended (the "Exchange Act") and National Instrument 52-109 *Certification of Disclosure in Issuer's Annual and Interim Filings* ("NI 52-109"), was carried out by management, including the Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO"). Based on that evaluation, the CEO and CFO have concluded that the design and operation of Pembina's disclosure controls and procedures were effective as at December 31, 2018 to ensure that material information relating to the Company is made known to the CEO and CFO by others.

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

### **Management's Annual Report on Internal Control over Financial Reporting**

Pembina maintains internal control over financial reporting which is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS.

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a - 15(f) and 15d - 15(f) under the Exchange Act and under NI 52-109.

Management, including the CEO and the CFO, has conducted an evaluation of Pembina's internal control over financial reporting based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of

Sponsoring Organizations of the Treadway Commission (COSO). Based on management's assessment as at December 31, 2018, the CEO and CFO have concluded that Pembina's internal control over financial reporting is effective.

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

The effectiveness of internal control over financial reporting as at December 31, 2018 was audited by KPMG LLP, an independent registered public accounting firm, as stated in their Report of Independent Registered Public Accounting Firm, which is included in this 2018 Annual Report to shareholders.

### Changes in Internal Control over Financial Reporting

There has been no change in the Company's internal control over financial reporting that occurred during the year covered by the Consolidated Financial Statements that has materially affected, or are reasonably likely to materially affect, Pembina's internal control over financial reporting.

## 9. ACCOUNTING POLICIES AND ESTIMATES

### Changes in accounting policies

#### New standards adopted in 2018

Except for the changes as described below, accounting policies as disclosed in Note 4 of the Consolidated Financial Statements have been applied to all periods consistently.

The Company has retrospectively adopted IFRS 15 *Revenue from Contracts with Customers* effective January 1, 2018.

#### IFRS 15 *Revenue from Contracts with Customers*

##### a. Transition

IFRS 15 establishes a comprehensive framework for determining whether, how much and when revenue is recognized, and has replaced IAS 18 *Revenue* and related interpretations. The Company adopted IFRS 15 at the date of initial application of January 1, 2018, and has applied IFRS 15 retrospectively, restating the reported comparative period. In determining the restated values, the Company used the practical expedient to not restate contracts that began and ended in the same annual reporting period. No significant impact was identified as a result of the practical expedient applied on transition.

##### b. Consolidated financial statement impacts

An opening Consolidated Statement of Financial Position at January 1, 2017 has not been presented as the impact of the adoption of IFRS 15 on the opening Consolidated Statement of Financial Position is immaterial.

The following table presents the impact of adopting IFRS 15 on the Company's Consolidated Statement of Financial Position, Consolidated Statement of Earnings and Comprehensive Income and the Consolidated Statement of Cash Flows for the year ended December 31, 2017 for each of the line items affected.

##### i. Consolidated Statement of Financial Position

As at December 31, 2017 (\$ millions)	Previously Reported	Adjustments	Restated
Trade payables and accrued liabilities	713	(36)	677
Contract liabilities	—	44	44
Deficit	(2,075)	(8)	(2,083)

## ii. Consolidated Statement of Earnings and Other Comprehensive Income

For the year ended December 31, 2017			
<i>(\$ millions)</i>	Previously Reported	Adjustments	Restated
Revenue	5,408	(8)	5,400
Earnings before income tax	1,033	(8)	1,025
Earnings attributable to shareholders	891	(8)	883
Basic earnings per common share	1.89	(0.02)	1.87
Diluted earnings per common share	1.88	(0.02)	1.86

## iii. Consolidated Statement of Cash Flows

For the year ended December 31, 2017			
<i>(\$ millions)</i>	Previously Reported	Adjustments	Restated
<b>Cash provided by (used in)</b>			
<b>Operating activities</b>			
Earnings	891	(8)	883
Net change in contract liabilities	33	8	41
<b>Cash flow from operating activities</b>	<b>1,513</b>	<b>—</b>	<b>1,513</b>

## c. Accounting policies

The details of significant accounting policies under IFRS 15 and the nature of the changes to previous accounting policies under IAS 18 are outlined below.

### Take-or-Pay

The Company provides transportation, gas processing, fractionation, terminalling, and storage services under take-or-pay contracts. In a take-or-pay contract, the Company is entitled to a minimum fee for the firm service promised to a customer over the contract period, regardless of actual volumes transported, processed, or stored. This minimum fee can be represented as a set fee for an annual minimum volume, or an annual minimum revenue requirement. In addition, these contracts may include variable consideration for operating costs that are flow through to the customer.

The Company satisfies its performance obligations and recognizes revenue for services under take-or-pay commitments when volumes are transported, processed, or stored. Make-up rights may arise when a customer does not fulfill their minimum volume commitment in a certain period, but is allowed to use the delivery of future volumes to meet this commitment. These make-up rights are subject to expiry and have varying conditions associated with them. Under IFRS 15, when contract terms allow a customer to exercise their make-up rights using firm volume commitments, revenue is not recognized until these make-up rights are used, expire, or management determines that it is remote that they will be utilized. If the Company bills a customer for unused service in an earlier period and the customer utilizes available make-up rights, the Company records a refund liability for the amount to be returned to the customer through an annual adjustment process. For contracts where no make-up rights exist, revenue is recognized to take-or-pay levels once Pembina has an enforceable right to payment for the take-or-pay volumes. Make-up rights generally expire within a contract year, and the majority of the related contract years follow the calendar year.

Under the previously utilized IAS 18, revenue was recognized based on capacity provided under contracted firm service rather than volumes transported, processed, or stored. This resulted in revenue being recognized to take-or-pay levels once firm service had been provided for all contracts. As a result of IFRS 15 adoption, when customers are transporting, processing, or storing volumes below their take-or-pay commitments early in a contract year, and the customer has the right to exercise their make up rights against future firm volume commitments, there will be a change to the timing of revenue recognition. Where the Company has a right to invoice to take-or-pay levels throughout the contract year, revenue is deferred and a contract

liability is recorded for the volumes invoiced that were not utilized by the customer. Once the customer has used its make-up rights or it is determined to be remote that a customer will use them, the previously deferred revenue is recognized. In these instances, there will be a deferral of revenue in early quarters of the year, with subsequent recognition occurring in later quarters although there is no impact on cash flows. The change did not have a significant impact on annual revenue recognition as the majority of related contracts have make-up rights that expire within a given calendar year.

For certain arrangements where the customer does not have make-up rights, where the make-up rights have been determined to be insignificant, and for cost of service agreements, revenue is recognized using the practical expedient to recognize revenue in an amount equal to the Company's right to invoice. For these arrangements, the consideration the Company is entitled to invoice in each period is representative of the value provided to the customer. There is no change to how revenue is recognized for these contracts under IFRS 15 compared to IAS 18.

When up-front payments or non-cash consideration is received in exchange for future services to be performed, revenue is deferred as a contract liability and recognized over the period the performance obligation is expected to be satisfied. Non-cash consideration is measured at the fair value of the non-cash consideration received. There is no change to how revenue is recognized for these contracts under IFRS 15 compared to IAS 18.

#### **Fee-for-Service**

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

There is no change to how revenue is recognized for fee-for-service revenue under IFRS 15 compared to IAS 18.

#### **Product Sales**

The Company satisfies its performance obligation on product sales at the time legal title to the product is transferred to the customer. Certain commodity buy/sell arrangements where control of the product has not transferred to the Company are recognized on a net basis in revenue.

For product sales, revenue is recognized using the practical expedient to recognize revenue in an amount equal to the Company's right to invoice as the consideration the Company is entitled to invoice in each period is representative of the value provided to the customer. There is no change to how revenue is recognized for these product sales under IFRS 15 compared to IAS 18.

#### **New standards and interpretations not yet adopted**

Certain new standards, interpretations, amendments and improvements to existing standards were issued by the IASB or IFRIC and are effective for accounting periods beginning after January 1, 2019. These standards have not been applied in preparing these consolidated financial statements.

Those which may be relevant to Pembina are described below:

#### **IFRS 16 Leases**

IFRS 16 replaces existing leases guidance, including IAS 17 *Leases*, IFRIC 4 *Determining whether an Arrangement contains a Lease*, SIC-15 *Operating Leases-Incentives* and SIC-27 *Evaluating the Substance of Transactions Involving the Legal Form of a Lease*.

Pembina will adopt the new standard on the effective date of January 1, 2019.

IFRS 16 introduces a new lease definition which increases the focus on control of the underlying asset and may change which contracts are identified as leases. In addition, IFRS 16 introduces a single, on balance sheet lease accounting model for lessees. For all identified lessee arrangements, subject to recognition exemptions for short term leases where the term is 12 months or

less and leases of low value items (under \$5,000), a right-of-use ("ROU") asset and a lease liability are recognized, representing the right to use the underlying asset and the obligation to make lease payments respectively. For identified lessor arrangements, the accounting remains similar to the current standard with lessors continuing to classify such arrangements as finance or operating leases.

#### *Leases in which Pembina is a lessee*

Pembina has substantially completed the determination of which lessee arrangements are or contain leases. System and new process implementation continue. The initial quantitative impact of applying IFRS 16 has been estimated for lessee accounting, however the disclosed impact may change as Pembina is working through the testing and assessment of controls over its new information technology system as well as finalizing decisions regarding practical expedients. In addition, new guidance and interpretations continue to be released and Pembina's accounting policies are subject to change until Pembina presents its first financial statements that include the date of initial adoption.

A material impact is expected to result from the recognition of new assets and liabilities for rail car, office space and land surface operating lease arrangements. The nature of expenses related to identified lessee arrangements will change as IFRS 16 replaces straight-line operating lease expense with depreciation of right of use assets and interest expense relating to lease liabilities, which will result in higher adjusted EBITDA throughout the term of the lease. In addition, cash flow from operating activities and adjusted cash flow from operating activities will increase and cash flow from financing activities will decrease as lease obligation repayments will be reported as financing activities on the Consolidated Statement of Cash Flows. There will be no net impact on cash flows.

Pembina estimates that lease liabilities and ROU assets in excess of \$400 million will be recorded on adoption of IFRS 16.

The Company continues to evaluate if it will elect to apply the practical expedient to account for lease components and non-lease components as a single lease component by class of underlying asset. If this practical expedient were to be selected, it would result in an increase in the ROU asset and lease liability on initial adoption.

The Company does not expect the adoption of IFRS 16 to impact its ability to comply with debt covenants described in Note 13.

#### *Leases in which Pembina is a lessor*

Pembina continues to assess certain transportation, storage and other service arrangements to determine if lessor accounting would apply when considering the new lease definition. As these assessments are not yet finalized, the impact of lessor accounting related to these arrangements cannot be determined.

#### *Transition*

Pembina intends to adopt IFRS 16 using the modified retrospective approach, which will result in the cumulative effect of initial application recognized as an adjustment to the opening balance of retained earnings at January 1, 2019 and no restatement of the comparative period. Pembina intends to assess whether all contracts are, or contain, a lease using the IFRS 16 definition and not apply the practical expedient to carry forward lease assessments using existing leases guidance.

#### **Conceptual Framework**

In March 2018, the IASB issued a revised Conceptual Framework for Financial Reporting, effective for annual periods beginning on or after January 1, 2020 with early application permitted. The Conceptual Framework sets out the fundamental concepts of financial reporting and is applied to develop accounting policies when no IFRS Standard applies to a particular transaction. The revised Conceptual Framework includes: new concepts on measurement, presentation and disclosure, and derecognition; updated definitions of an asset and a liability and related recognition criteria; and clarifications in important areas, such as the roles of stewardship, prudence and measurement uncertainty in financial reporting. The Company intends to adopt the revised Conceptual Framework for Financial Reporting on its effective date. The Company is currently evaluating the impact that the standard will have on its earnings and financial position.

## Critical Accounting Judgments and Estimates

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

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

The following judgment and estimation uncertainties are those management considers material to the Company's consolidated financial statements:

### Judgments

#### (i) Business combinations

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

#### (ii) Depreciation and amortization

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

#### (iii) Impairment

Assessment of impairment of non-financial assets is based on management's judgment of whether or not there are sufficient internal or external factors that would indicate that an asset, investment, or cash generating unit ("CGU") is impaired. The determination of a CGU is based on management's judgment and is an assessment of the smallest group of assets that generate cash inflows independently of other assets. In addition, management applies judgment to assign goodwill acquired as part of a business combination to the CGU or group of CGUs that is expected to benefit from the synergies of the business combination for purposes of impairment testing. When an impairment test is performed, the carrying value of a CGU or group of CGUs is compared to its recoverable amount, defined as the greater of fair value less costs to sell and value in use. As such, the asset composition of a CGU or group of CGUs directly impacts both the carrying value and recoverability of the assets included therein.

#### (iv) Assessment of joint control over joint arrangements

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

#### (v) Pattern of revenue recognition

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

## **(vi) Leases**

Management applies judgment to determine if an arrangement contains a lease from both a lessee and lessor perspective. This assessment is based on management's expectations regarding existing and future customers and the nature of the underlying assets.

## **Estimates**

### **(i) Business combinations**

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

### **(ii) Provisions and contingencies**

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

Based on the long-term nature of the decommissioning provision, the most significant uncertainties in estimating the provision are the discount and inflation rates used, the costs that will be incurred and the timing of when these costs will occur.

### **(iii) Deferred taxes**

The calculation of the deferred tax asset or liability is based on assumptions about the timing of many taxable events and the enacted or substantively enacted rates anticipated to be applicable to income in the years in which temporary differences are expected to be realized or reversed.

### **(iv) Depreciation and amortization**

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

### **(v) Goodwill impairment test**

In determining the recoverable amount as part of annual goodwill impairment testing, management uses its best estimates of future cash flows, and assesses discount rates to reflect management's best estimate of a rate that reflects a current market assessment of the time value of money and the specific risks associated with the underlying assets and cash flows.

### **(vi) Impairment of financial assets**

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

### **(vii) Revenue from contracts with customers**

In estimating the contract value, management makes assessments as to whether variable consideration is constrained or not reasonably estimable, such that an amount or portion of an amount cannot be included in the estimate of the contract value. Management's estimates of the likelihood of a customer's ability to use outstanding make-up rights may impact the timing of revenue recognition. In addition, in determining the amount of consideration to be allocated to performance obligations that are not sold on a stand-alone basis, management estimates the stand-alone selling price of each performance obligation

under the contract, taking into consideration the location and volume of goods or services being provided, the market environment, and customer specific considerations.

#### **(viii) Fair value of financial instruments**

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

#### **(ix) Employee benefit obligations**

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

## **10. RISK FACTORS**

Pembina's value proposition is based on balancing economic benefit against risk. Where appropriate, Pembina will seek to reduce risk. Pembina continually works to mitigate the impact of risks to its business by identifying all significant risks so that they can be appropriately managed. To assist with identifying and managing risk, Pembina has implemented a comprehensive Risk Management Program. The risks that may affect the business and operation of Pembina and its operating subsidiaries are described at a high level within this MD&A and more fully within Pembina's Annual Information Form ("AIF"), an electronic copy of which is available at [www.pembina.com](http://www.pembina.com) or on Pembina's SEDAR profile at [www.sedar.com](http://www.sedar.com) and which is filed under Form 40-F on Pembina's EDGAR profile at [www.sec.gov](http://www.sec.gov). Further, additional discussion about counterparty risk, market risk, liquidity risk and additional information on financial risk management can be found in Note 24 of the Consolidated Financial Statements.

#### **Commodity price risk**

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

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

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

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

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

For more information with respect to Pembina's financial instruments and financial risk management program, see Note 24 to Pembina's Financial Statements, which note is incorporated by reference herein.

### **Regulation and legislation**

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

The AER is the primary regulatory body that oversees Pembina's Alberta-issued energy permits, with some minor exceptions. Certain of Pembina's subsidiaries own pipelines in British Columbia, which are regulated by the BCOGC, and pipelines that cross provincial or international boundaries, which are regulated by the National Energy Board ("NEB") and/or the FERC. Certain of Pembina's operations and expansion projects are subject to additional regulations, and as Pembina's operations expand throughout Canada and North America, Pembina may be required to comply with the requirements of additional regulators and legislative bodies, including the Canadian Environmental Assessment Agency ("Environmental Assessment Agency"), the British Columbia Environmental Assessment Office ("BCEAO"), the Ontario Ministry of Natural Resources, the Saskatchewan Ministry of Economy and The Petroleum Branch of Manitoba Mineral Resources. In the U.S., tolls on pipelines are regulated by and reported to FERC and pipeline operations are governed by the Pipeline and Hazardous Materials Safety Administration ("PHMSA"), which sets standards for the design, construction, pressure testing, operation and maintenance, corrosion control, training and qualification of personnel, accident reporting and record keeping. The Office of Pipeline Safety, within the PHMSA, inspects and enforces the pipeline safety regulations across the U.S. All regulations and environmental compliance obligations are subject to change at the initiative of PHMSA. Pembina continually monitors existing and changing regulations in all jurisdictions in which it currently operates, or into which it may expand in the future, and the potential implications to its operations; however, Pembina cannot predict future regulatory changes, and any such compliance and regulatory changes in any one or multiple jurisdictions could have a material adverse impact on Pembina, its financial results and its shareholders.

On February 8, 2018, the Canadian federal government introduced Bill C-69, an Act to enact the *Impact Assessment Act* and the *Canadian Energy Regulator Act*, to amend the *Navigation Protection Act* and to make consequential amendments to other Acts ("Bill C-69"), which proposes to, among other things, overhaul the federal environmental assessment regime in Canada under the *Canadian Environmental Assessment Act* (Canada) ("CEAA"), and replace the NEB with a new regulator, the Canadian Energy Regulator ("CER"). If passed, Bill C-69 would result in the replacement of CEAA with the *Impact Assessment Act* (Canada) ("IAA") and the Environmental Assessment Agency with the new Impact Assessment Agency of Canada as the authority responsible for conducting all federal impact assessments (formerly "environmental assessments") for certain designated projects under the IAA, unless referred to a review panel. It is not yet known whether the list of designated projects which will be subject to mandatory assessment under the IAA will be the same as or similar to those under the CEAA. The proposed IAA also contains a broader project assessment process than under the CEAA and provides for enhanced consultation with groups that may be affected by proposed projects, while also expanding the scope of factors and considerations that need to be taken into account under the project assessment process. Bill C-69 also contemplates the adoption of the *Canadian Energy Regulator Act* (Canada) (the "CERA") and the repeal of the *National Energy Board Act* (Canada), which would replace the NEB with the CER. The CER would then continue to oversee approved federal, interprovincial and international energy projects in a manner similar to the current regime under the NEB, with new projects being referred to a review panel under the IAA. Pembina continues to actively monitor developments relating to Bill C-69 and other regulatory initiatives; however, as there can be no assurances that Bill C-69 will be passed in its current form, or at all, Pembina cannot predict the outcome of this or any other future regulatory initiatives. As such, the impact on Pembina resulting from the enactment of the IAA or the CERA, and any other future regulatory initiatives is uncertain. In the event that such changes, or any future proposed changes, negatively impact Pembina's current business and/or its ability to receive approvals for current and future growth projects in a timely and cost effective manner, such changes could materially and directly impact Pembina's business and financial results. Such regulatory initiatives could also indirectly affect Pembina's business and financial results by impacting the financial condition and growth projects of its customers and, ultimately, production levels and throughput on Pembina's pipelines and in its facilities.

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

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

### **Operational risks**

Operational risks include, but are not limited to: pipeline leaks; the breakdown or failure of equipment, pipelines and facilities, information systems or processes; the compromise of information and control systems; the performance of equipment at levels below those originally intended (whether due to misuse, unexpected degradation or design, construction or manufacturing defects); spills at truck terminals and hubs; spills associated with the loading and unloading of potentially harmful substances onto rail cars and trucks; failure to maintain adequate supplies of spare parts; operator error; labour disputes; disputes with interconnected facilities and carriers; operational disruptions or apportionment on third-party systems or refineries, which may prevent the full utilization of Pembina's facilities and pipelines; and catastrophic events including, but not limited to, extreme weather events, including fires, floods and other natural disasters, explosions, train derailments, earthquakes, acts of 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 spills 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. The occurrence or continuance of any of the foregoing events could increase the cost of operating Pembina's assets or reduce revenue, thereby impacting earnings. Additionally, facilities and pipelines are reliant on electrical power for their operations. A failure or disruption within the local or regional electrical power supply or

distribution or transmission systems could significantly affect ongoing operations. Further, a significant increase in the cost of power or fuel could have a materially negative effect on the level of profit realized in cases where the relevant contracts do not provide for recovery of such costs. In the long-term, constraints on natural resource development could be impacted by climate change initiatives or policies, resulting in additional operational costs, delays or restrictions.

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

### **Completion and timing of expansion projects**

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

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

### **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, project scoping and risk assessment could result in a loss in profits for Pembina. As part of its ongoing strategy, Pembina may complete acquisitions of assets or other entities in the future. Achieving the benefits of completed and future acquisitions depends, in part, on successfully consolidating functions and integrating operations, procedures and personnel in a timely and efficient manner, as well as Pembina's ability to realize the anticipated growth opportunities and synergies from combining the acquired businesses and operations with those of Pembina. In particular, large scale acquisitions may involve significant pricing and integration risk. The integration of acquired businesses and entities requires the dedication of substantial management effort, time and resources, which may divert management's focus and resources from other strategic opportunities and from operational matters during this process. The integration process may also result in the loss of key employees and the disruption of ongoing business, customer and employee relationships, which may adversely affect Pembina's ability to achieve the anticipated benefits of any acquisitions. Acquisitions may also expose Pembina to additional risks, including risks relating to entry into markets or businesses in which Pembina has little or no direct prior experience, increased credit risks through the assumption of additional debt, costs and contingent liabilities and exposure to liabilities of the acquired business or assets. See *"General risk factors - Additional financing and capital resources"* below.

#### **Joint ownership and third-party operators**

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

#### **Reserve replacement, throughput and product demand**

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

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

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

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

Pembina's gas processing assets are connected to various third-party trunk line systems. Operational disruptions or apportionment on those third-party systems may prevent the full utilization of Pembina's gas processing assets, which may have an adverse effect on its business if potential losses exceed or were not covered by Pembina's business interruption insurance policy.

### **Competition**

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

### **Reliance on principal customers**

Pembina sells services and products to large customers within its area of operations and relies on several significant customers to purchase product for the Marketing business. If for any reason these parties were unable to perform their obligations under the various agreements with Pembina, the revenue and dividends of the Company and the operations of Pembina could be negatively impacted. See "*General risk factors - 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 terminalling and storage services. Any default by counterparties under such contracts or any expiration of such contracts or tolling arrangements without renewal or replacement may have an adverse effect on Pembina's business and results from operations. Further, some contracts associated with the services described above are comprised of a mixture of firm and non-firm commitments. The revenue that Pembina earns on non-firm or firm commitments without take-or-pay service is dependent on the volume of crude oil, condensate, NGL and natural gas

produced by producers in the relevant geographic areas. Accordingly, lower production volumes in these areas, including for reasons such as low commodity prices, may have an adverse effect on Pembina's revenue.

### Reputation

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

### Environmental costs and liabilities

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

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

In 2016, the Canadian federal government announced that its initial proposed pan-Canadian carbon tax would be \$10 per tonne commencing in 2018 and would increase by \$10 per tonne per year to \$50 per tonne by 2022. As a regulatory backstop, the federal government has also implemented the *Greenhouse Gas Pollution Pricing Act* ("GGPPA"), which introduces a carbon pricing regime for those provinces that fail to impose adequate provincial measures. Saskatchewan and Ontario have recently launched constitutional challenges to the GGPPA, the results of which could significantly impact how greenhouse gas ("GHG") emissions are regulated throughout Canada.

In Alberta, the provincial government has launched two initiatives under the *Climate Change Act*. These initiatives include the enactment of a \$30 per tonne carbon levy on all carbon-based heating and transportation fuels, as well as output-based emission allocations for large facility emitters under the *Carbon Competitiveness Incentive Regulation* ("CCIR"). All Pembina entities within Alberta have obtained an exemption from the carbon levy for the majority of their business activities, which

will limit Pembina's exposure to the levy until those exemptions expire in 2023. Where applicable, Pembina entities have also obtained licences under the carbon levy regulations to buy and sell regulated fuels without the need to recover and remit the carbon levy on those fuel transactions. Pembina also continues to follow the proposed changes to the regulatory framework for the reduction of methane from fugitive and vented gas emissions. 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.

Pembina has three natural gas processing facilities subject to the large emitter regulations under the CCIR. At present, the operational and financial impacts are minimal and are anticipated to not change substantially over the next few years. As more facilities expand and increase production, it is anticipated that additional facilities will become subject to the CCIR. The potential costs and benefits to Pembina of those facilities under the CCIR are continuing to be assessed.

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

Similar policy reviews on climate change are underway in British Columbia, Saskatchewan and Manitoba. On July 3, 2018, Ontario announced the revocation of its previously enacted cap and trade emissions program. As Ontario has yet to implement a replacement GHG regime, the provisions of the GGPPA will apply to Ontario. As indicated above, Ontario has challenged the constitutionality of the GGPPA and has also announced plans to implement an alternative provincial regime.

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

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

See "*Reserve replacement, throughput and product demand*" above.

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

#### **Abandonment costs**

Pembina is responsible for compliance with all applicable laws and regulations regarding the dismantling, decommissioning, environmental, reclamation and remediation activities on abandonment of its pipeline systems and other assets at the end of their economic life, and these abandonment costs may be substantial. An accounting provision is made for the estimated cost of site restoration and is capitalized in the relevant asset category. A provision is recognized if, as a result of a past event, Pembina has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of

economic benefits will be required to settle the obligation. Pembina's estimates of the costs of such abandonment or decommissioning could be materially different than the actual costs incurred.

For more information with respect to Pembina's estimated net present value of decommissioning obligations, see Note 15 to Pembina's Consolidated Financial Statements for the year ended December 31, 2018, which is incorporated by reference herein.

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

To the best of its knowledge, Pembina has complied with NEB requirements on its wholly owned NEB-regulated pipelines for abandonment funding and has completed the compliance-based filings that are required under the applicable NEB rules and regulations regarding the abandonment of its pipeline systems and assets. Pembina also has ownership in NEB-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 NEB-compliance based filings for those NEB-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 NEB. Pembina owned and/or operated rate-regulated pipelines account for approximately 873 km of the total infrastructure in its Pipelines business.

#### **Operating and capital costs**

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

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

#### **Risks relating to NGL by rail**

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

partially mitigates this risk by securing insurance coverage, but such insurance coverage may not be adequate in the event of an incident.

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

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

#### **Canada-United States-Mexico Agreement**

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

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

Although the agreement has been signed, CUSMA is still required to be ratified and implemented by legislators from each of the three countries according to their own domestic legislative processes before it takes effect and replaces NAFTA. The ratification and implementation process in each of Canada, the U.S. and Mexico is not yet complete, although it is currently anticipated that CUSMA will come into force on January 1, 2020.

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

#### **Alberta production curtailment**

On December 2, 2018, the Alberta provincial government announced mandatory reductions to crude oil and bitumen production in Alberta in an attempt to narrow the price differentials on these products compared to North American benchmark prices. The reductions have been applied at the operator level based upon each operator's combined crude oil and bitumen production, with the first 10,000 barrels per day produced by each operator exempt from the curtailment program. The temporary production cut commenced in January 2019, with an initial reduction of 325,000 barrels per day, representing approximately 8.7 percent of the aggregate production of crude oil and bitumen in Alberta. This level of curtailment is expected to remain in place until March 31, 2019, followed by a reduced curtailment of approximately 95,000 barrels per day until the end of 2019. The production rate will be reviewed monthly by the Alberta Minister of Energy and revised, as necessary. Under the current regulations, the provincial government's authority to curtail crude oil and bitumen production in Alberta will end on December 31, 2019.

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

#### **Risk factors relating to the securities of Pembina**

##### **Dilution of shareholders**

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

##### **Risk factors relating to the activities of Pembina and the ownership of securities**

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

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

##### **Market value of common shares and other securities**

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

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

## General risk factors

### Additional financing and capital resources

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

### Counterparty credit risk

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

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

Financial assurances from counterparties may include guarantees, letters of credit and cash. As at December 31, 2018, letters of credit totaling approximately \$122 million (December 31, 2017: \$110 million) were held primarily in respect of customer trade receivables.

Pembina has typically collected its receivables in full. At December 31, 2018, approximately 99 percent (December 31, 2017: 96 percent) of receivables were current. Pembina has a general lien and a continuing and first priority security interest in, and a secured charge on, all of a shipper's petroleum products in its custody. The risk of non-collection is considered to be low and no material impairment of trade and other receivables has been made as of the date hereof.

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

### **Debt service**

At the end of 2018, Pembina had exposure to floating interest rates on approximately \$1.3 billion (2017: \$1.8 billion) in debt. Floating rate debt exposure is, in part, managed through the use of derivative financial instruments.

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

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

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

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

### **Credit ratings**

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

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

### **Reliance on management and other key individuals**

Pembina is dependent on senior management and directors of the Company in respect of the governance, administration and management of all matters relating to Pembina and its operations and administration. The loss of the services of key individuals could have a detrimental effect on Pembina. Further, the costs associated with retaining key individuals could adversely affect Pembina's business opportunities and financial results. There is no assurance that Pembina will continue to attract and retain all personnel necessary for the development and operation of its business.

## Aboriginal land claims and consultation obligations

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

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

In mid-2016, the Government of Canada issued changes to the CEAA *Technical Guidance for Assessing the Current Use of Lands for Traditional Purposes*. This technical guidance document is used with respect to "designated projects" as defined by the CEAA and the related regulations, including NEB-regulated onshore pipeline projects greater than 40 kilometres in length. These changes to the *Technical Guidance* lengthened the review timeline for projects subject to NEB review at the time of their release by approximately six months. These changes could therefore materially impact the amount of time and capital resources required by Pembina if it were to apply for approval to construct and operate a NEB-regulated pipelines project or other CEAA "designated project".

As described in "Regulation and Legislation" above, the Canadian federal government introduced Bill C-69 on February 8, 2018. If enacted, Bill C-69 would, among other things, replace the CEAA with the IAA, amend the National Energy Board Act (to be repealed and replaced by the CERA), the Fisheries Act and the Navigation Protection Act. A number of the federal regulatory process amendments pertain to the participation of Aboriginal groups and the protection of Aboriginal and treaty rights. The proposed amendments generally codify existing law and practice with respect to these matters. For example, decision makers would be expressly required to consider the effects (positive or negative) of a proposed project on constitutionally-protected Aboriginal rights, as well as Aboriginal peoples themselves, and ensure that consultation is undertaken during the planning phase of impact assessment processes. Bill C-69 would also create 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 require decision makers to consider Aboriginal traditional knowledge in certain cases. Bill C-69 is currently before the Senate, which has announced that it will undertake additional public consultation during 2019 with respect to the legislation and proposed amendments thereto. Pembina continues to actively monitor developments relating to Bill C-69 and other regulatory initiatives; however, as there can be no assurances that Bill C-69 will be passed in its current form, or at all, Pembina cannot predict the outcome of this or any other future regulatory initiatives on its operations at this time.

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

such legislation has been proposed as of the date hereof. Pembina will continue to monitor and assess the impacts the Rights Framework may have on its business as legislation and/or policies continue to be developed.

In 2018, the British Columbia government enacted Bill 51 - 2018 Environmental Assessment Act (the "2018 EA Act") as part of its commitment to revitalize environmental assessment in the province and facilitate its commitment to implementing the United Nations Declaration on the Rights of Indigenous Peoples ("UNDRIP"). The 2018 EA Act received Royal Assent on November 27, 2018 but is not expected to come into force until late 2019, after a number of policies and regulations required to support the legislation are developed. The 2018 EA Act is designed as a "consent-based" environmental assessment model and is intended to support reconciliation with Aboriginal peoples and the implementation of UNDRIP. The legislation requires the BCEAO to seek participating Aboriginal groups' consent with respect to, among other things, the decision to issue an environmental assessment certificate to a given project. While the 2018 EA Act does not strictly require consent in most cases, the legislation creates significant new participation opportunities for participating Aboriginal groups during the course of environmental assessments, which may increase the time required to obtain regulatory approvals and thereby impact Pembina's operations in British Columbia. Pembina continues to actively monitor the development of the regulations required to facilitate the implementation of the 2018 EA Act.

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

### **Litigation**

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

### **Foreign exchange risk**

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

### **Cyber security**

Pembina's infrastructure, technologies and data are becoming increasingly integrated, which creates a risk that the failure of one system could lead to failure of other systems. There is also a risk of a cyber-attack targeting the industry is also increasing. A breach in the security or failure of the Company'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. The Company's security strategy focuses on information technology security risk management, which includes continuous monitoring, threat detection and an incident response protocol.

## Health and safety

The operation of Pembina's business is subject to hazards of gathering, processing, transporting, fractionating, storing and marketing hydrocarbon products. Such hazards include, but are not limited to: blowouts; fires; explosions; gaseous leaks, including sour natural gas; migration of harmful substances; oil spills; corrosion; and acts of vandalism and terrorism. These hazards may interrupt operations, impact Pembina's reputation, cause loss of life or personal injury, result in loss of or damage to equipment, property, information technology systems, related data and control systems or cause environmental damage that may include polluting water, land or air.

## Risks relating to U.S. Tax Reform

On December 20, 2017, the U.S. Congress passed the *Tax Cuts and Jobs Act* (the "TCJA"), which was signed into law on December 22, 2017. The TCJA makes significant changes to the *Internal Revenue Code of 1986*, as amended, including, among other things, a reduction in the U.S. federal corporate tax rate from 35 percent to 21 percent, effective January 1, 2018. While Pembina does not currently expect a material tax impact to the Company based on the proposed regulations and guidance that have been released to date for certain technical provisions in the TCJA, future amendments to these regulations and interpretations could result in changes to the Company's assessment.

## 11. NON-GAAP MEASURES

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

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

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

### Non-GAAP proportionate consolidation of investments in equity accounted investees results

In accordance with IFRS, Pembina's jointly controlled investments are accounted for using equity accounting. Under equity accounting, the assets and liabilities of the investment are net into a single line item in the Consolidated Statement of Financial Position, Investments in Equity Accounted Investees. Net earnings from investments in equity accounted investees are recognized in a single line item in the Consolidated Statement of Earnings and Comprehensive Income, Share of Profit from Equity Accounted Investees. Cash contributions and distributions from investments in equity accounted investees represent Pembina's share paid and received in the period to and from the investments in equity accounted investees. To assist the readers understanding and evaluate the performance of these investments, Pembina is supplementing the IFRS disclosure with non-GAAP proportionate consolidation of Pembina's interest in the investments in equity accounted investees. Pembina's proportionate interest in equity accounted investees has been included in operating margin and adjusted EBITDA.

## Net revenue

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

3 Months Ended December 31 (\$ millions)	Pipelines Division		Facilities Division		Marketing & New Ventures Division		Corporate & Inter-Division Eliminations		Total	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
	Revenue	403	350	402	293	1,028	1,133	(107)	(60)	1,726
Cost of goods sold, including product purchases	—	—	137	80	952	959	(69)	(32)	1,020	1,007
Net revenue	403	350	265	213	76	174	(38)	(28)	706	709

12 Months Ended December 31 (\$ millions)	Pipelines Division		Facilities Division		Marketing & New Ventures Division		Corporate & Inter-Division Eliminations		Total	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
	Revenue	1,588	1,136	1,468	969	4,721	3,533	(426)	(238)	7,351
Cost of goods sold, including product purchases	—	—	462	197	4,335	3,105	(282)	(140)	4,515	3,162
Net revenue	1,588	1,136	1,006	772	386	428	(144)	(98)	2,836	2,238

## Adjusted earnings before interest, taxes, depreciation and amortization ("adjusted EBITDA")

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

Adjusted EBITDA also includes adjustments to earnings for losses (gains) on disposal of assets, transaction costs incurred in respect of acquisitions, impairment charges or reversals and write-downs in respect of goodwill, intangible assets and property, plant and equipment, and certain non-cash provisions. The adjustments made to earnings are also made to share of profit from investments in equity accounted investees. In addition, Pembina's proportionate share of results from investments in equity accounted investees with a preferred interest is presented in adjusted EBITDA as a 50 percent common interest. These additional adjustments are made to exclude various non-cash and other items that are not reflective of ongoing operations. Management believes that adjusted EBITDA provides useful information to investors as it is an important indicator of an issuer's ability to generate liquidity through cash flow from operating activities and equity accounted investees. Adjusted EBITDA is also used by investors and analysts for assessing financial performance and for the purpose of valuing an issuer, including calculating financial and leverage ratios. Management utilizes adjusted EBITDA to set objectives and as a key performance indicator of the Company's success. Pembina presents adjusted EBITDA as management believes it is a measure frequently used by analysts, investors and other stakeholders in evaluating the Company's financial performance.

	3 Months Ended December 31 (unaudited)		12 Months Ended December 31	
	2018	2017	2018	2017
<i>(\$ millions, except per share amounts)</i>				
Earnings attributable to shareholders	368	445	1,278	883
Adjustments to share of profit from equity accounted investees	105	78	439	89
Net finance costs	56	71	279	185
Income tax expense (recovery)	147	(41)	464	142
Depreciation and amortization	108	119	417	382
Unrealized gains on commodity-related derivative financial instruments	(89)	(14)	(73)	(23)
Impairment charges (reversals) and write-downs in respect of goodwill, intangible assets and property, plant and equipment, non-cash provisions and other	18	(2)	22	14
Transaction costs incurred in respect of acquisitions	2	18	9	25
Adjusted EBITDA	715	674	2,835	1,697
Adjusted EBITDA per common share – basic ( <i>dollars</i> )	1.41	1.34	5.62	3.98

### Adjusted cash flow from operating activities, cash flow from operating activities per common share and adjusted cash flow from operating activities per common share

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

	3 Months Ended December 31 (unaudited)		12 Months Ended December 31	
	2018	2017	2018	2017
<i>(\$ millions, except per share amounts)</i>				
Cash flow from operating activities	674	523	2,256	1,513
Cash flow from operating activities per common share – basic ( <i>dollars</i> )	1.33	1.04	4.47	3.55
Add (deduct):				
Change in non-cash operating working capital	(65)	41	83	18
Current tax expense	(8)	(29)	(70)	(48)
Taxes (received) paid, net of foreign exchange	(13)	6	23	30
Accrued share-based payments	(8)	(16)	(48)	(56)
Share-based payments	—	—	32	22
Preferred share dividends paid	(37)	(26)	(122)	(83)
Adjusted cash flow from operating activities	543	499	2,154	1,396
Adjusted cash flow from operating activities per common share – basic ( <i>dollars</i> )	1.07	0.99	4.27	3.27

### Operating margin

Operating margin is a non-GAAP measure which is defined as gross profit on a proportionately consolidated basis before depreciation and amortization included in operations and unrealized gain/loss on commodity-related derivative financial instruments from assets directly held and proportionate interest in operating margin from investments in equity accounted investees. Pembina's proportionate share of results from investments in equity accounted investees with a preferred distribution is presented in operating margin as a 50 percent common interest. Management believes that operating margin

provides useful information to investors for assessing the financial performance of the Company's operations and equity investments. Management utilizes operating margin in setting objectives and views it as a key performance indicator of the Company's success.

Reconciliation of operating margin to gross profit:

3 Months Ended December 31 (\$ millions)	Pipelines Division		Facilities Division		Marketing & New Ventures Division		Corporate & Inter-Division Eliminations		Total	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
	Revenue	403	350	402	293	1,028	1,133	(107)	(60)	1,726
Cost of sales (excluding depreciation and amortization included in operations)										
Operating expenses	120	98	87	62	—	—	(42)	(30)	165	130
Cost of goods sold, including product purchases	—	—	137	80	952	959	(69)	(32)	1,020	1,007
Realized (gains) losses on commodity-related derivative financial instruments	—	—	—	—	(5)	42	—	—	(5)	42
Proportionate operating margin from investments in equity accounted investees <sup>(1)</sup>	154	143	60	35	40	34	—	—	254	212
Operating margin	437	395	238	186	121	166	4	2	800	749
Depreciation and amortization included in operations	(56)	(69)	(39)	(37)	(6)	(6)	—	—	(101)	(112)
Unrealized gains on commodity-related derivative financial instruments	—	—	—	—	89	14	—	—	89	14
Share of profit from equity accounted investees	74	72	16	22	39	22	—	—	129	116
Proportionate operating margin from Investments in Equity Accounted Investees <sup>(1)</sup>	(154)	(143)	(60)	(35)	(40)	(34)	—	—	(254)	(212)
Gross profit	301	255	155	136	203	162	4	2	663	555

<sup>(1)</sup> Excludes depreciation and amortization included in earnings from investments in equity accounted investees of \$82 million, general and administrative expenses of \$21 million, finance costs of \$30 million and share of earnings in excess of equity of \$8 million for a total equity income of \$129 million.

12 Months Ended December 31 (\$ millions)	Pipelines Division		Facilities Division		Marketing & New Ventures Division		Corporate & Inter-Division Eliminations		Total	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
	Revenue	1,588	1,136	1,468	969	4,721	3,533	(426)	(238)	7,351
Cost of sales (excluding depreciation and amortization included in operations)										
Operating expenses	396	330	313	227	—	—	(158)	(107)	551	450
Cost of goods sold, including product purchases	—	—	462	197	4,335	3,105	(282)	(140)	4,515	3,162
Realized losses on commodity-related derivative financial instruments	—	1	—	—	51	93	—	—	51	94
Proportionate operating margin from investments in equity accounted investees <sup>(1)</sup>	581	143	206	51	133	34	—	—	920	228
Operating margin	1,773	948	899	596	468	369	14	9	3,154	1,922
Depreciation and amortization included in operations	(216)	(195)	(149)	(138)	(26)	(26)	—	—	(391)	(359)
Unrealized gains on commodity-related derivative financial instruments	—	1	—	—	73	22	—	—	73	23
Share of profit from equity accounted investees	279	72	30	22	102	22	—	—	411	116
Proportionate operating margin from Investments in Equity Accounted Investees <sup>(1)</sup>	(581)	(143)	(206)	(51)	(133)	(34)	—	—	(920)	(228)
Gross profit	1,255	683	574	429	484	353	14	9	2,327	1,474

<sup>(1)</sup> Excludes depreciation and amortization included in earnings from investments in equity accounted investees of \$332 million, general and administrative expenses of \$70 million, finance costs of \$150 million and share of earnings in excess of equity of \$43 million for a total equity income of \$411 million.

## 12. ABBREVIATIONS

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

<u>Measurement</u>		<u>Other</u>	
mmbbls	thousands of barrels	B.C.	British Columbia
mbspd	thousands of barrels per day	DRIP	Premium Dividend <sup>1</sup> and Dividend Reinvestment Plan
mmbpd	millions of barrels per day	GAAP	Canadian generally accepted accounting principles
mmbbls	millions of barrels	IFRS	International Financial Reporting Standards
mboe/d	thousands of barrels of oil equivalent per day	LNG	Liquified natural gas
MMcf/d	millions of cubic feet per day	LPG	Liquified petroleum gas
bcf/d	billions of cubic feet per day	NGL	Natural gas liquids
km	kilometer	U.S.	United States
		WCSB	Western Canadian Sedimentary Basin
		deep cut	Ethane-plus capacity extraction gas processing capabilities
		shallow cut	Sweet gas processing with propane and/or condensate-plus extraction capabilities
		volumes	For the Pipelines and Facilities Divisions volumes are revenue volumes, defined as physical volumes plus volumes recognized from take-or-pay commitments. For the Marking & New Ventures Division volumes are marketed NGL volumes. Volumes are stated in mboe/d, with natural gas volumes converted to mboe/d from MMcf/d at a 6:1 ratio.

### Investments in equity accounted investees:

Alliance	50 percent interest in the Alliance Pipeline;
Ruby	50 percent convertible preferred interest in the Ruby Pipeline which entitles Pembina to a US\$91 million distribution per year;
Veresen Midstream	45 percent interest (as of December 31, 2018) in Veresen Midstream, which owns assets in western Canada serving the Montney geological play in northwestern Alberta and northeastern B.C. including gas processing plants and gas gathering pipelines and compression;
Aux Sable	An ownership interest in Aux Sable (approximately 42.7 percent in Aux Sable U.S. and 50 percent in Aux Sable Canada), which includes an NGL fractionation facility and gas processing capacity near Chicago, Illinois and other natural gas and NGL processing facilities, logistics and distribution assets in the U.S. and Canada, as well as transportation contracts on Alliance;
CKPC	50 percent interest in Canada Kuwait Petrochemical Corporation ("CKPC");
Fort Corp	50 percent interest in Fort Saskatchewan Ethylene Storage Limited Partnership and Fort Saskatchewan Ethylene Corporation; and
Grand Valley	75 percent jointly controlled interest in Grand Valley 1 Limited Partnership wind farm ("Grand Valley").

Readers are referred to the Annual Information Form dated February 21, 2019 on [www.sedar.com](http://www.sedar.com) for additional descriptions.

<sup>1</sup>™ denotes trademark of Canaccord Genuity Corp.

### 13. FORWARD-LOOKING STATEMENTS & INFORMATION

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

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

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

- the future levels and sustainability of cash dividends that Pembina intends to pay to its shareholders, the dividend payment date and the tax treatment thereof;
- planning, construction, 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 the Company's new projects on its future financial performance;
- anticipated synergies between assets under development, assets being acquired and existing assets of the Company;
- pipeline, processing, fractionation and storage facility and system operations and throughput levels;
- treatment under governmental regulatory regimes in Canada and the U.S. including taxes and tax regimes, environmental and greenhouse gas regulations and related abandonment and reclamation obligations, and Aboriginal, landowner and other stakeholder consultation requirements;
- Pembina's estimates of and strategy for payment of future abandonment costs and decommissioning obligations, and deferred tax liability;
- Pembina's strategy and the development and expected timing of new business initiatives and growth opportunities and the impact thereof;
- increased throughput potential, processing capacity and fractionation capacity due to increased oil and gas industry activity and new connections and other initiatives on Pembina's pipelines and at Pembina's facilities;
- expected future cash flows and the sufficiency thereof, financial strength, sources of and access to funds at attractive rates, future contractual obligations, future financing options, future renewal of credit facilities, availability of capital to fund growth plans, operating obligations and dividends and the use of proceeds from financings;
- current ratings targets on Pembina's debt and the likelihood of a downgrade below investment-grade ratings;
- tolls and tariffs and processing, transportation, fractionation, storage and services commitments and contracts;
- operating risks (including the amount of future liabilities related to pipelines spills and other environmental incidents) and related insurance coverage and inspection and integrity programs;
- the adoption and impact of new accounting standards;
- inventory and pricing in North American liquids market;
- the impact of the current commodity price environment on Pembina; and
- competitive conditions and Pembina's ability to position itself competitively in the industry.

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

- oil and gas industry exploration and development activity levels and the geographic region of such activity;
- the success of Pembina's operations;
- prevailing commodity prices, interest rates and exchange rates and the ability of Pembina to maintain current credit ratings;
- the availability of capital to fund future capital requirements relating to existing assets and projects;

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

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

- the regulatory environment and decisions and Aboriginal and landowner consultation requirements;
- the impact of competitive entities and pricing;
- labour and material shortages;
- the failure to realize the anticipated benefits of the Acquisition following closing due to the factors set out herein, integration issues or otherwise;
- reliance on key relationships, joint venture partners, and agreements and the outcome of stakeholder engagement;
- the strength and operations of the oil and natural gas production industry and related commodity prices;
- non-performance or default by counterparties to agreements which Pembina or one or more of its subsidiaries has entered into in respect of its business;
- actions by joint venture partners or other partners which hold interests in certain of Pembina's assets.
- actions by governmental or regulatory authorities including changes in tax laws and treatment, changes in royalty rates, climate change initiatives or policies or increased environmental regulation;
- fluctuations in operating results;
- adverse general economic and market conditions in Canada, North America and elsewhere, including changes, or prolonged weakness, as applicable, in interest rates, foreign currency exchange rates, commodity prices, supply/demand trends and overall industry activity levels;
- constraints on, or the unavailability of adequate infrastructure;
- changes in the political environment, in North America and elsewhere, and public opinion;
- ability to access various sources of debt and equity capital;
- changes in credit ratings;
- technology and security risks;
- natural catastrophe; and
- the other factors discussed under "Risk Factors" herein and in Pembina's AIF for the year ended December 31, 2018. Pembina's AIF is available at [www.pembina.com](http://www.pembina.com) and in Canada under Pembina's company profile on [www.sedar.com](http://www.sedar.com) and in the U.S. on the Company's profile at [www.sec.gov](http://www.sec.gov).

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