

Pembina Pipeline  
Corporation

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2018 ANNUAL  
REPORT



**MANAGEMENT'S  
DISCUSSION & ANALYSIS**

# REPORT TO SHAREHOLDERS

Year ended December 31, 2018



## MANAGEMENT'S DISCUSSION AND ANALYSIS

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### Basis of Presentation

The following Management's Discussion and Analysis ("MD&A") of the financial and operating results of Pembina Pipeline Corporation ("Pembina" or the "Company") is dated February 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".

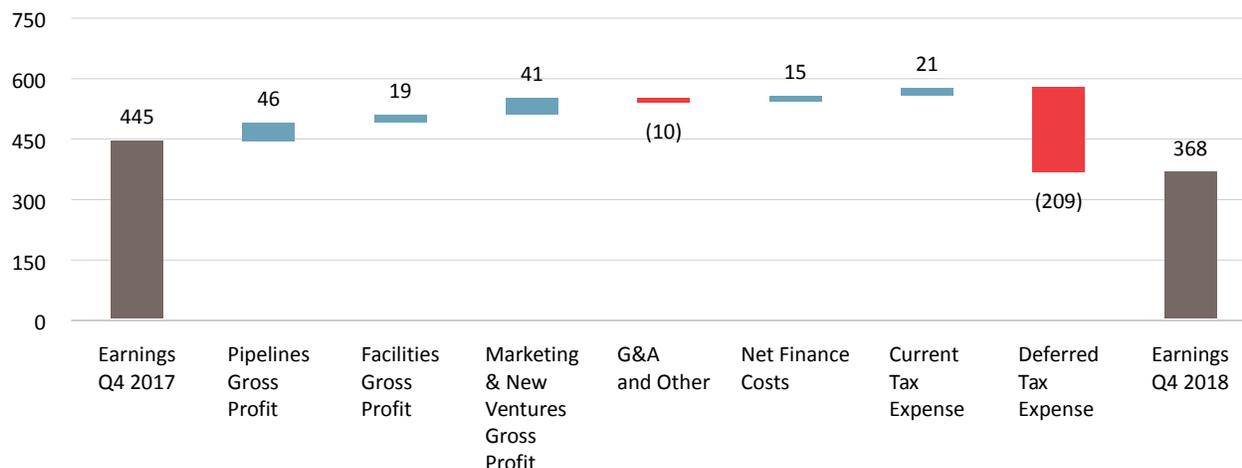
<sup>(4)</sup> Total revenue volumes. Revenue volumes are physical volumes plus volumes recognized from take-or-pay commitments. Volumes are stated in mboe/d, with natural gas volumes converted to mboe/d from MMcf/d at a 6:1 ratio. Volumes for 2017 have been restated to reflect the Corporate Reorganization.

<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

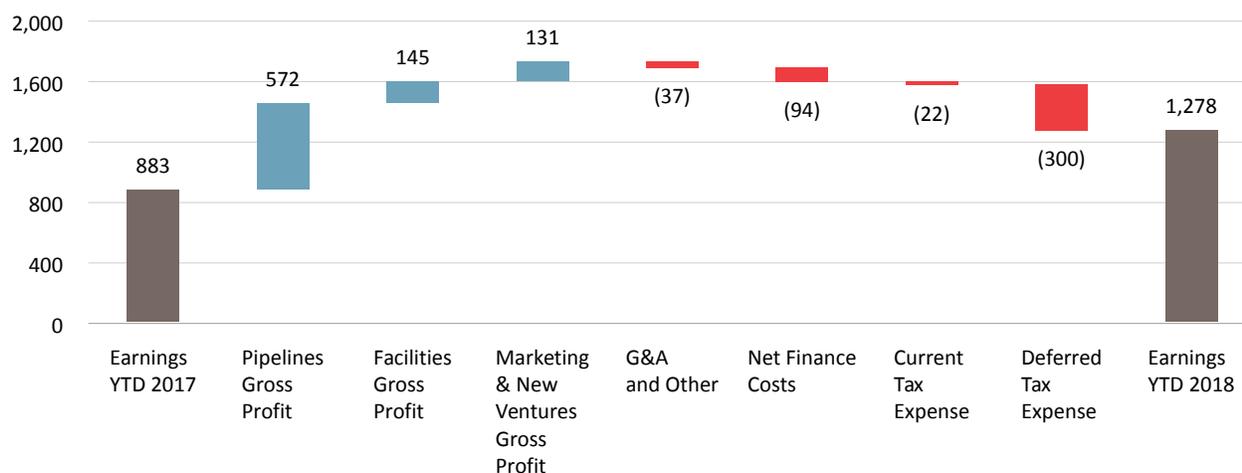
### Three Months Ended December 31, 2018

(\$ 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		12 Months Ended December 31	
	(unaudited)			
(\$ millions, except where noted)	2018	2017 <sup>(4)</sup>	2018	2017 <sup>(4)</sup>
<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						12 Months Ended December 31					
	(unaudited)											
	2018			2017 <sup>(1)</sup>			2018			2017 <sup>(1)</sup>		
(\$ millions, except where noted)	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.

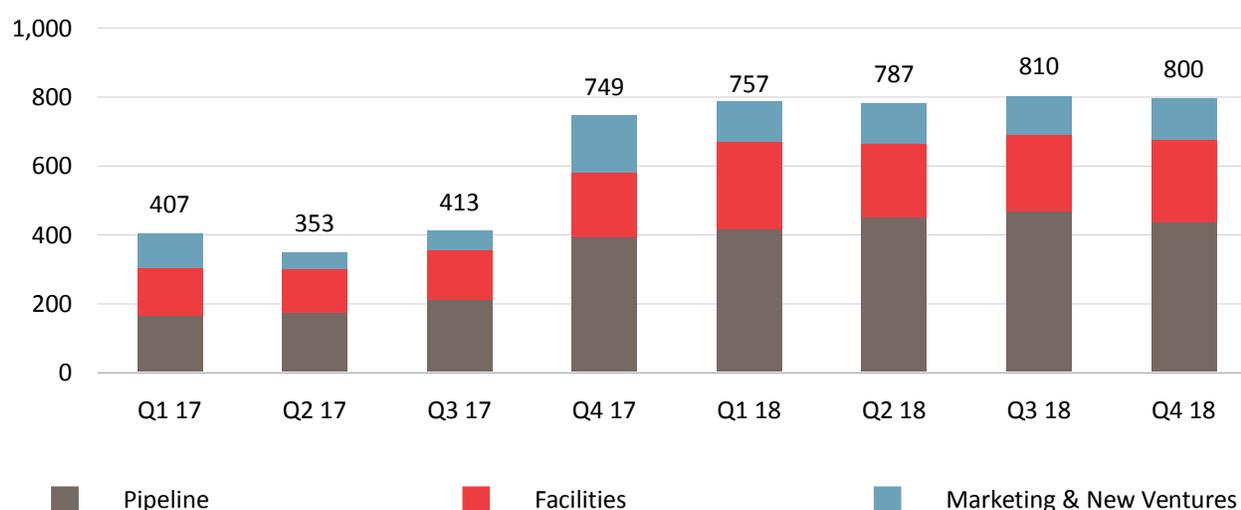
<sup>(2)</sup> Includes Pembina's proportionate share of results from equity accounted investees.

<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			
(\$ millions)	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			
(\$ millions)	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		Pipelines Division		Facilities Division		Marketing & New Ventures Division		Corporate & Inter-Division Eliminations		Total	
(\$ millions)		2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Revenue		403	350	402	293	1,028	1,133	(107)	(60)	1,726	1,716
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		Pipelines Division		Facilities Division		Marketing & New Ventures Division		Corporate & Inter-Division Eliminations		Total	
(\$ millions)		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	5,400
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:

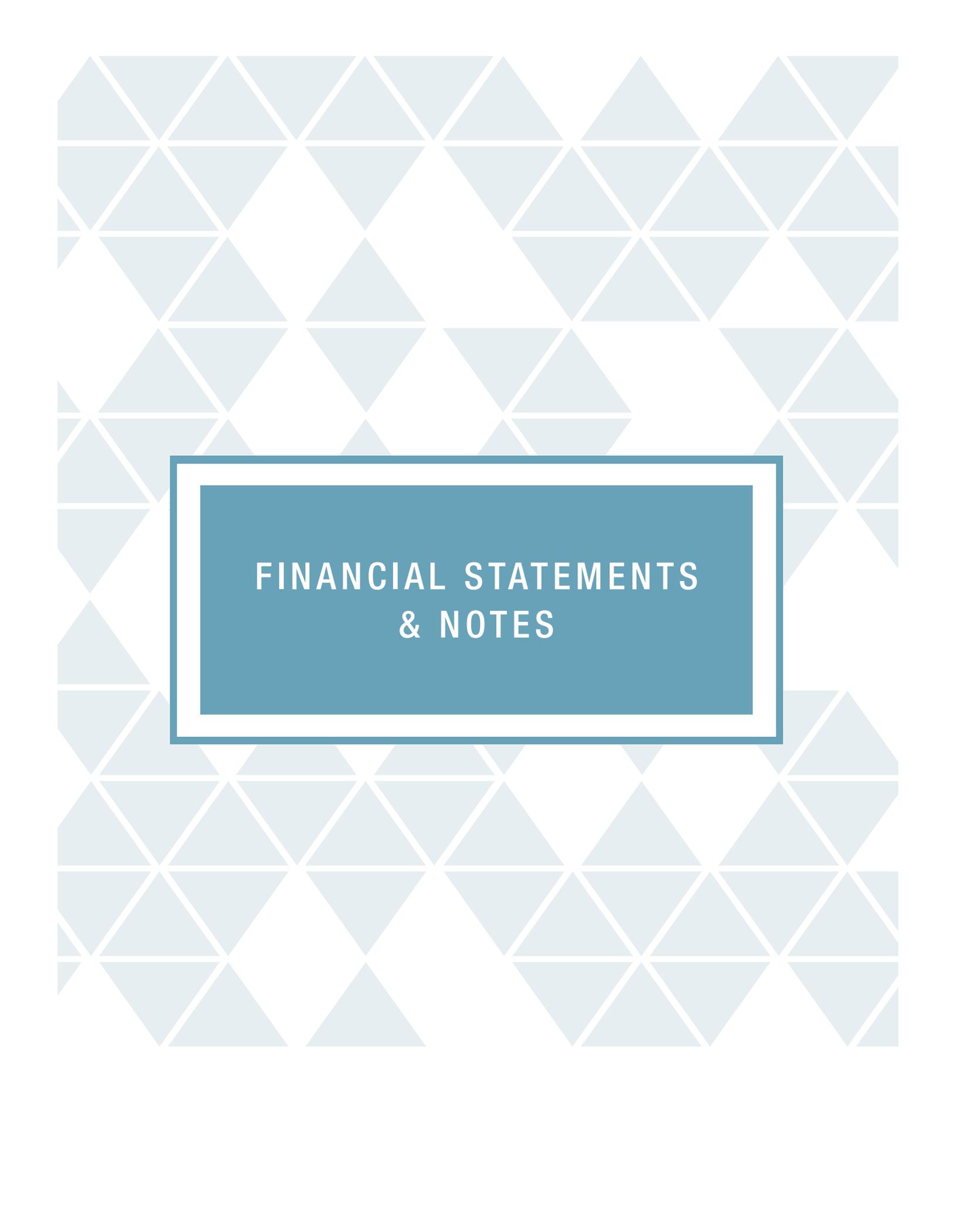
- oil and gas industry exploration and development activity levels and the geographic region of such activity;
- the success of Pembina's operations;
- prevailing commodity prices, interest rates and exchange rates and the ability of Pembina to maintain current credit ratings;
- the availability of capital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



**FINANCIAL STATEMENTS  
& NOTES**

## MANAGEMENT'S REPORT

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

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

### *Management's Assessment of Internal Controls over Financial Reporting*

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

KPMG LLP, the independent auditors, have audited the Company's financial statements and the effectiveness of internal control over financial reporting as of December 31, 2018 in accordance with the standards of the Public Company Accounting Oversight Board (United States). The independent auditors have full and unrestricted access to the Audit Committee to discuss their audit and their related findings.

*"M. H. Dilger"*  
**M. H. Dilger**  
President and Chief Executive Officer

February 21, 2019

*"J. Scott Burrows"*  
**J. Scott Burrows**  
Senior Vice President and Chief Financial Officer

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

### To the Shareholders and the Board of Directors of Pembina Pipeline Corporation

#### Opinion on the Consolidated Financial Statements

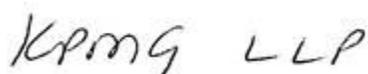
We have audited the accompanying consolidated statements of financial position of Pembina Pipeline Corporation and subsidiaries (the "Company"), as of December 31, 2018 and 2017, the related consolidated statements of earnings and comprehensive income, changes in equity, and cash flows for each of the years then ended, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the financial performance and its cash flows for the years then ended, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 21, 2019 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

#### Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.



Chartered Professional Accountants

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

Calgary, Canada  
February 21, 2019

## **REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

### **To the Shareholders and the Board of Directors of Pembina Pipeline Corporation**

#### **Opinion on Internal Control over Financial Reporting**

We have audited Pembina Pipeline Corporation's and subsidiaries' (the "Company") internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated statements of financial position of the Company as of December 31, 2018 and 2017, the related consolidated statements of earnings and comprehensive income, changes in equity, and cash flows for each of the years then ended, and the related notes (collectively, the consolidated financial statements), and our report dated February 21, 2019 expressed an unqualified opinion on those consolidated financial statements.

#### **Basis for Opinion**

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting included in Management's Discussion and Analysis. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

#### **Definition and Limitations of Internal Control over Financial Reporting**

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

KPMG LLP

Chartered Professional Accountants

Calgary, Canada

February 21, 2019

## CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

As at December 31 (\$ millions)	Note	2018	2017
<b>Assets</b>			
<b>Current assets</b>			
Cash and cash equivalents		157	321
Trade receivables and other	7	604	529
Inventory		198	168
Derivative financial instruments	24	54	4
		<b>1,013</b>	1,022
<b>Non-current assets</b>			
Property, plant and equipment	8	14,730	13,546
Investments in equity accounted investees	10	6,368	6,229
Intangible assets and goodwill	9	4,409	4,714
Advances to related parties	28	135	42
Other assets		9	13
		<b>25,651</b>	24,544
<b>Total Assets</b>		<b>26,664</b>	25,566
<b>Liabilities and Equity</b>			
<b>Current liabilities</b>			
Trade payables and accrued liabilities	12	803	677
Loans and borrowings	13	480	163
Dividends payable		97	91
Convertible debentures	14	—	93
Contract liabilities	3,18	37	44
Derivative financial instruments	24	6	79
Taxes payable		67	3
		<b>1,490</b>	1,150
<b>Non-current liabilities</b>			
Loans and borrowings	13	7,057	7,300
Decommissioning provision	15	569	546
Contract liabilities	3,18	131	113
Employee benefits, share-based payments and other		74	66
Taxes payable		15	22
Deferred tax liabilities	11	2,774	2,376
Other liabilities		150	152
		<b>10,770</b>	10,575
<b>Total Liabilities</b>		<b>12,260</b>	11,725
<b>Equity</b>			
Attributable to shareholders		14,344	13,781
Attributable to non-controlling interest	6	60	60
<b>Total Equity</b>		<b>14,404</b>	13,841
<b>Total Liabilities and Equity</b>		<b>26,664</b>	25,566
<b>Commitments, Contingencies and Guarantees</b>	29		

See accompanying notes to the consolidated financial statements

Approved on behalf of the Board of Directors:

"Gordon J. Kerr"  
Gordon J. Kerr  
Director

"Randall J. Findlay"  
Randall J. Findlay  
Director

## CONSOLIDATED STATEMENTS OF EARNINGS AND COMPREHENSIVE INCOME

For the years ended December 31			
<i>(\$ millions, except per share amounts)</i>	Note	2018	2017
Revenue	3,18	7,351	5,400
Cost of sales		5,457	3,971
(Gain) loss on commodity-related derivative financial instruments		(22)	71
Share of profit from equity accounted investees	10	411	116
<b>Gross profit</b>		<b>2,327</b>	<b>1,474</b>
General and administrative		279	236
Other expense		27	28
<b>Results from operating activities</b>		<b>2,021</b>	<b>1,210</b>
Net finance costs	19	279	185
<b>Earnings before income tax</b>		<b>1,742</b>	<b>1,025</b>
Current tax expense	11	70	48
Deferred tax expense	11	394	94
Income tax expense		464	142
<b>Earnings attributable to shareholders</b>		<b>1,278</b>	<b>883</b>
<b>Other comprehensive (loss) income</b>			
Exchange gain on translation of foreign operations		330	1
Remeasurements of defined benefit liability, net of tax	22	(6)	3
<b>Total comprehensive income attributable to shareholders</b>		<b>1,602</b>	<b>887</b>
<b>Earnings attributable to common shareholders, net of preferred share dividends</b>		<b>1,157</b>	<b>803</b>
<b>Earnings per common share – basic (dollars)</b>	21	<b>2.28</b>	1.87
<b>Earnings per common share – diluted (dollars)</b>	21	<b>2.28</b>	1.86
<b>Weighted average number of common shares (millions)</b>			
Basic	21	505	426
Diluted	21	509	432

See accompanying notes to the consolidated financial statements

## CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(\$ millions)	Attributable to Shareholders of the Company							
	Note	Common share capital	Preferred share capital	Deficit	Accumulated other comprehensive (loss) income	Total	Non-controlling interest	Total Equity
December 31, 2017	3	13,447	2,424	(2,083)	(7)	13,781	60	13,841
<b>Total comprehensive income</b>								
Earnings		—	—	1,278	—	1,278	—	1,278
<b>Other comprehensive income</b>								
Exchange gain on translation of foreign operations		—	—	—	330	330	—	330
Remeasurements of defined benefit liability, net of tax		—	—	—	(6)	(6)	—	(6)
Total comprehensive income		—	—	1,278	324	1,602	—	1,602
<b>Transactions with shareholders of the Company</b>								
Preferred shares issue costs	16	—	(1)	—	—	(1)	—	(1)
Debenture conversions	16	140	—	—	—	140	—	140
Share-based payment transactions	16	75	—	—	—	75	—	75
Dividends declared – common	16	—	—	(1,131)	—	(1,131)	—	(1,131)
Dividends declared – preferred	16	—	—	(122)	—	(122)	—	(122)
Total transactions with shareholders of the Company		215	(1)	(1,253)	—	(1,039)	—	(1,039)
<b>December 31, 2018</b>		<b>13,662</b>	<b>2,423</b>	<b>(2,058)</b>	<b>317</b>	<b>14,344</b>	<b>60</b>	<b>14,404</b>
December 31, 2016		8,808	1,509	(2,010)	(11)	8,296	—	8,296
<b>Total comprehensive income</b>								
Earnings	3	—	—	883	—	883	—	883
<b>Other comprehensive income</b>								
Exchange loss on translation of foreign operations		—	—	—	1	1	—	1
Remeasurements of defined benefit liability, net of tax		—	—	—	3	3	—	3
Total comprehensive income		—	—	883	4	887	—	887
<b>Transactions with shareholders of the Company</b>								
Common shares issued, net of issue costs	16	4,356	—	—	—	4,356	—	4,356
Preferred shares issued, net of issue costs	16	—	915	—	—	915	—	915
Dividend reinvestment plan	16	148	—	—	—	148	—	148
Debenture conversions	16	73	—	—	—	73	—	73
Share-based payment transactions	16	62	—	—	—	62	—	62
Dividends declared – common	16	—	—	(873)	—	(873)	—	(873)
Dividends declared – preferred	16	—	—	(83)	—	(83)	—	(83)
Total transactions with shareholders of the Company		4,639	915	(956)	—	4,598	—	4,598
Non-controlling interest recognized on Acquisition	6	—	—	—	—	—	60	60
<b>December 31, 2017</b>		<b>13,447</b>	<b>2,424</b>	<b>(2,083)</b>	<b>(7)</b>	<b>13,781</b>	<b>60</b>	<b>13,841</b>

See accompanying notes to the consolidated financial statements

## CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended December 31			
(\$ millions)	Note	2018	2017
<b>Cash provided by (used in)</b>			
<b>Operating activities</b>			
Earnings	3	1,278	883
Adjustments for:			
Share of profit from equity accounted investees	10	(411)	(116)
Distributions from equity accounted investees	10	622	157
Depreciation and amortization	8,9	417	382
Unrealized gain on commodity-related derivative financial instruments		(73)	(23)
Net finance costs	19	279	185
Net interest paid	19	(259)	(153)
Income tax expense	11	464	142
Taxes paid		(26)	(30)
Share-based compensation expense	23	63	73
Share-based compensation payment		(32)	(22)
Loss on asset disposal		19	12
Net change in contract liabilities		11	41
Other		(13)	—
Change in non-cash operating working capital		(83)	(18)
<b>Cash flow from operating activities</b>	3	<b>2,256</b>	<b>1,513</b>
<b>Financing activities</b>			
Bank borrowings and issuance of debt		1,366	2,542
Repayment of loans and borrowings		(1,998)	(1,279)
Issuance of preferred shares	16	—	400
Issuance of medium term notes	13	700	1,200
Issue costs and financing fees		(8)	(23)
Exercise of stock options		61	46
Dividends paid (net of shares issued under the dividend reinvestment plan)		(1,247)	(781)
<b>Cash flow (used in) from financing activities</b>		<b>(1,126)</b>	<b>2,105</b>
<b>Investing activities</b>			
Capital expenditures		(1,226)	(1,839)
Contributions to equity accounted investees	10	(58)	(7)
Acquisitions		—	(1,338)
Interest paid during construction	19	(35)	(63)
Recovery of assets or proceeds from sale		5	2
Advances to related parties		(84)	(23)
Changes in non-cash investing working capital and other		87	(64)
<b>Cash flow used in investing activities</b>		<b>(1,311)</b>	<b>(3,332)</b>
Change in cash and cash equivalents		(181)	286
Effect of movement in exchange rates on cash held		17	—
Cash and cash equivalents, beginning of year		321	35
<b>Cash and cash equivalents, end of year</b>		<b>157</b>	<b>321</b>

See accompanying notes to the consolidated financial statements

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 1. REPORTING ENTITY

Pembina Pipeline Corporation ("Pembina" or the "Company") is a Calgary-based, leading transportation and midstream service provider serving North America's energy industry. The consolidated financial statements include the accounts of the Company, its subsidiary companies, partnerships and any investments in associates and joint arrangements as at and for the year ended December 31, 2018.

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, storage 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.

### 2. BASIS OF PREPARATION

#### a. Basis of measurement and statement of compliance

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

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

These consolidated financial statements were authorized for issue by Pembina's Board of Directors on February 21, 2019.

#### b. Functional and presentation currency

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

#### c. Use of estimates and judgments

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

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

The following judgment and estimation uncertainties are those management considers material to the 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.

### 3. CHANGES IN ACCOUNTING POLICIES

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

Year ended December 31, 2017 (\$ millions)	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

Year ended December 31, 2017 (\$ millions)	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 customers 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.

## **4. SIGNIFICANT ACCOUNTING POLICIES**

The accounting policies as set out below have been applied consistently to all periods presented in these consolidated financial statements.

### **a. Basis of consolidation**

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

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

The Company elects on a transaction-by-transaction basis whether to measure non-controlling interest at its fair value, or at its proportionate share of the recognized amount of the identifiable net assets, at the acquisition date.

Non-controlling interests represent equity interests in subsidiaries owned by outside parties. The share of net assets of subsidiaries attributable to non-controlling interests is presented as a separate component of equity. Their share of net income and other comprehensive income is also recognized in this separate component of equity. Changes in the Company's ownership interest in subsidiaries that do not result in a loss of control are accounted for as equity transactions. Adjustments to non-controlling interests are based on a proportionate amount of the net assets of the subsidiary. No adjustments are made to goodwill and no gain or loss is recognized in earnings.

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

#### **ii) Subsidiaries**

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

#### **iii) Joint arrangements**

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

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

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

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

#### **iv) Transactions eliminated on consolidation**

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

#### **v) Foreign currency**

Transactions in foreign currencies are translated to the Company's functional currency at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the reporting date are retranslated to the Company's functional currency at the exchange rate at that date. The foreign currency gain or loss on monetary items is the difference between amortized cost in the functional currency at the beginning of the period, adjusted for effective interest and payments during the period, and the amortized cost in foreign currency translated at the exchange rate at the end of the reporting period.

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

Gains and losses arising from translation of foreign subsidiaries or investments in equity accounted investees with a functional currency other than the Company's Canadian dollar reporting currency are reflected in other comprehensive income. Asset and liability accounts are translated at the period-end exchange rates while revenues, expenses, gains and losses are translated at the exchange rates in effect at the time of the transaction.

#### **b. Cash and cash equivalents**

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

#### **c. Inventories**

Inventories are measured at the lower of cost and net realizable value and consist primarily of crude oil, NGL and spare parts. The cost of inventories is determined using the weighted average costing method and includes direct purchase costs and when applicable, costs of production, extraction, fractionation, and transportation. Net realizable value is the estimated selling price

in the ordinary course of business less the estimated selling costs. All changes in the value of the inventories are reflected in earnings.

#### **d. Financial instruments**

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

##### **i) Non-derivative financial assets**

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

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

The Company classifies non-derivative financial assets into the following categories:

##### *Financial assets at amortized cost*

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

##### *Financial assets at fair value through other comprehensive income*

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

##### *Financial assets at fair value through earnings*

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

##### **ii) Non-derivative financial liabilities**

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

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

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

The Company records a modification or exchange of an existing liability as a derecognition of the financial liability if the terms are substantially different, resulting in a difference of more than 10 percent when comparing the present value of the

remaining cash flows of the existing liability to the present value of the discounted cash flow under the new terms using the original effective interest rate.

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

The Company's non-derivative financial liabilities are comprised of the following: bank overdrafts, trade payables and accrued liabilities, taxes payable, dividends payable, loans and borrowings including finance lease obligations, other liabilities and the liability component of convertible debentures.

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

### **iii) Common share capital**

Common shares are classified as equity. Incremental costs directly attributable to the issue of common shares and share options are recognized as a deduction from equity, net of any tax effects.

### **iv) Preferred share capital**

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

### **v) Compound financial instruments**

The Company's convertible debentures are compound financial instruments consisting of a financial liability and an embedded conversion feature. In accordance with IFRS 9, the embedded derivatives are required to be separated from the host contracts and accounted for as stand-alone instruments.

Debentures containing a cash conversion option allow Pembina to pay cash to the converting holder of the debentures, at the option of the Company. As such, the conversion feature is presented as a financial derivative liability within long-term derivative financial instruments. Debentures without a cash conversion option are settled in shares on conversion, and therefore the conversion feature is presented within equity, in accordance with its contractual substance.

On initial recognition and at each reporting date, the embedded conversion feature is measured at fair value using an option pricing model. Subsequent to initial recognition, any unrealized gains or losses arising from fair value changes are recognized through earnings in the statement of earnings and comprehensive income at each reporting date. If the conversion feature is included in equity, it is not remeasured subsequent to initial recognition. On initial recognition, the debt component, net of issue costs, is recorded as a financial liability and accounted for at amortized cost. Subsequent to initial recognition, the debt component is accreted to the face value of the debentures using the effective interest rate method. Upon conversion, the corresponding portions of the debt and equity are removed from those captions and transferred to share capital.

### **vi) Derivative financial instruments**

The Company holds derivative financial instruments to manage its interest rate, commodity, power costs and foreign exchange risk exposures as well as a cash conversion features on convertible debentures and a redemption liability. Embedded derivatives are separated from the host contract and accounted for separately if the economic characteristics and risks of the host contract and the embedded derivative meet the definition of a derivative, and the combined instrument is not measured at fair value through earnings. Derivatives are recognized initially at fair value with attributable transaction costs recognized in earnings as incurred. Subsequent to initial recognition, derivatives are measured at fair value and changes in non-commodity-

related derivatives are recognized immediately in earnings as part of net finance costs and changes in commodity-related derivatives are recognized immediately in earnings.

#### **e. Property, plant and equipment**

##### **i) Recognition and measurement**

Items of property, plant and equipment are measured initially at cost, unless they are acquired as part of a business combination in which case they are initially measured at fair value. Thereafter, property, plant and equipment are recorded net of accumulated depreciation and accumulated impairment losses.

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

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

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

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

##### **ii) Subsequent costs**

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

##### **iii) Depreciation**

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

Depreciation is recognized in earnings on a straight line or declining balance basis, which most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset.

Leased assets are depreciated over the shorter of the lease term and their useful lives unless it is reasonably certain that the Company will obtain ownership by the end of the lease term.

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

#### **f. Intangible assets**

##### **i) Goodwill**

Goodwill that arises upon acquisitions is included in intangible assets and goodwill. See Note 4(a)(i) for the policy on measurement of goodwill at initial recognition.

### *Subsequent measurement*

Goodwill is measured at cost less accumulated impairment losses.

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

### **ii) Other intangible assets**

Other intangible assets acquired individually by the Company are initially recognized and measured at cost, unless they are acquired as part of a business combination in which case they are initially measured at fair value. Thereafter, intangible assets with finite useful lives are recorded net of accumulated amortization and accumulated impairment losses.

### **iii) Subsequent expenditures**

Subsequent expenditures are capitalized only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditures are recognized in earnings as incurred.

### **iv) Amortization**

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

Amortization is recognized in earnings over the estimated useful lives of intangible assets, other than goodwill, from the date that they are available for use.

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

### **g. Leases**

At inception of an arrangement, the Company determines whether such an arrangement is or contains a lease. A specific asset is the subject of a lease if fulfilment of the arrangement is dependent on the use of that specified asset. An arrangement conveys the right to use the asset if the arrangement conveys to a lessee the right to control the use of the underlying asset.

At inception or upon reassessment of the arrangement, the Company separates payments and other consideration required by such an arrangement into those for the lease and those for other elements on the basis of their relative fair values.

Leases which the Company assumes substantially all the risks and rewards of ownership are classified as finance leases. The leased asset is initially recognized at an amount equal to the lower of its fair value and the present value of the minimum lease payments. Subsequent to initial recognition, the asset is accounted for in accordance with the accounting policy applicable to that asset.

Minimum lease payments made under finance leases are apportioned between the finance cost and the reduction of the outstanding liability. The finance cost is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

Other leases are operating leases and are not recognized in the Company's consolidated statement of financial position.

Payments made under lessee operating leases are recognized in earnings on a straight-line basis over the term of the lease. Lease incentives received are deferred and recognized over the term of the lease.

Payments received under lessor operating leases are recognized in earnings in accordance with the benefit received by the customer.

## **h. Impairment**

### **i) Non-derivative financial assets**

Impairment of financial assets carried at amortized cost is assessed using the lifetime expected credit loss of the financial asset at initial recognition and throughout the life of the financial asset, except for advances to related parties and other assets for which credit risk has not increased significantly since initial recognition, which are assessed at the twelve month expected credit loss of the financial asset at the reporting date.

The Company uses a loss allowance matrix to determine the impairment loss allowance for trade receivables. In determining the loss allowance matrix, the Company uses historical trends of the probability of default, timing of recoveries and the amount of loss incurred, adjusted for management's judgment as to whether current economic and credit conditions are such that the actual losses are likely to be greater or less than suggested by historical trends.

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

### **ii) Non-financial assets**

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

For goodwill and intangible assets that have indefinite useful lives or that are not yet available for use, the recoverable amount is estimated annually in connection with the annual goodwill impairment test. An impairment loss is recognized if the carrying amount of an asset or its related CGU exceeds its estimated recoverable amount.

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset, CGU or group of CGUs. For the purpose of impairment testing, assets that cannot be tested individually are grouped together into CGUs, the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets. CGUs may incorporate integrated assets from multiple operating segments. For the purpose of goodwill impairment testing, CGUs are aggregated so that the level at which impairment testing is performed reflects the lowest level at which goodwill is monitored for internal purposes. Goodwill acquired in a business combination is allocated to CGUs or groups of CGUs that are expected to benefit from the synergies of the combination.

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

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

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

Goodwill that forms part of the carrying amount of an investment in an equity accounted investee is not recognized separately, and therefore is not tested for impairment separately. Instead, the entire amount of the investment is tested for impairment as a single asset when there is objective evidence that the equity accounted investee may be impaired, unless the

equity accounted investee does not generate cash flows that are largely independent of those from other assets of the entity in which case it is combined in a CGU with the related assets.

#### **i. Employee benefits**

##### **i) Defined contribution plans**

A defined contribution plan is a post-employment benefit plan under which an entity pays fixed contributions into a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution pension plans are recognized as an employee benefit expense in earnings in the periods during which services are rendered by employees. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in future payments is available. Contributions to a defined contribution plan due more than twelve months after the end of the period in which the employees render the service are discounted to their present value.

##### **ii) Defined benefit pension plans**

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

The calculation is performed, at a minimum, every three years by a qualified actuary using the actuarial cost method. When the calculation results in a benefit to the Company, the recognized asset is limited to the present value of economic benefits available in the form of future expenses payable from the plan, any future refunds from the plan or reductions in future contributions to the plan. In order to calculate the present value of economic benefits, consideration is given to any minimum funding requirements that apply to any plan in the Company. An economic benefit is available to the Company if it is realizable during the life of the plan or on settlement of the plan liabilities.

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

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

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

##### **iii) Short-term employee benefits**

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

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

##### **iv) Share-based payment transactions**

For equity settled share-based payment plans, the fair value of the share-based payment at grant date is recognized as an expense, with a corresponding increase in equity, over the period that the employees unconditionally become entitled to the awards. The amount recognized as an expense is adjusted to reflect the number of awards for which the related service and

non-market vesting conditions are expected to be met, such that the amount ultimately recognized as an expense is based on the number of awards that meet the related service conditions at the vesting date.

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

#### **j. Provisions**

A provision is recognized if, as a result of a past event, the Company has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. Provisions are remeasured at each reporting date based on the best estimate of the settlement amount. The unwinding of the discount rate is recognized as accretion in finance costs.

#### **i) Decommissioning provision**

The Company's activities give rise to certain dismantling, decommissioning, environmental reclamation and remediation obligations at the end of an asset's economic life. A provision is made for the estimated cost of site restoration and capitalized in the relevant asset category.

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

#### **k. Revenue**

Accounting policies related to revenue from contracts with customers are disclosed in Note 3 Changes in Accounting Policies.

#### **l. Finance income and finance costs**

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

Finance costs comprise interest expense on loans and borrowings and convertible debentures, accretion on provisions, losses on disposal of available for sale financial assets, losses on non-commodity-related derivatives, impairment losses recognized on financial assets (other than trade and other receivables) and foreign exchange losses.

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

#### **m. Income tax**

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

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

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

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

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

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

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realized simultaneously.

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

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

#### **n. Earnings per common share**

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

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

#### **o. Segment reporting**

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

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

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

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. In addition, cash flow from operating activities will be higher, and cash flow from financing activities will be lower 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.

## **5. DETERMINATION OF FAIR VALUES**

A number of the Company's accounting policies and disclosures require the determination of fair value, for both financial and non-financial assets and liabilities. Fair values have been determined for measurement and/or disclosure purposes based on the following methods. When applicable, further information about the assumptions made in determining fair values is disclosed in the notes specific to that asset or liability.

### **i) Property, plant and equipment**

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

### **ii) Intangible assets**

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

The fair value of other intangible assets is based on the discounted cash flows expected to be derived from the use and eventual sale of the assets.

### **iii) Derivatives**

Fair value of derivatives are estimated by reference to independent monthly forward prices, interest rate yield curves, currency rates and quoted market prices per share at the period ends.

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

#### **iv) Non-derivative financial assets and liabilities**

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

#### **v) Share-based compensation transactions**

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

The fair value of the long-term share unit award incentive plan and associated distribution units are measured based on the volume-weighted average price for 20 days ending at the reporting date of the Company's shares.

#### **vi) Finance lease assets**

The fair value of finance lease assets is based on market values at the inception date.

## 6. ACQUISITION

On October 2, 2017, Pembina acquired all the issued and outstanding shares of Veresen Inc. ("Veresen") by way of a plan of arrangement (the "Arrangement") for total consideration of \$6.4 billion comprised of \$1.5 billion in cash and 99.466 million common shares valued at \$4.4 billion and series 15, 17 and 19 preferred shares valued at \$522 million. In accordance with the Arrangement, Veresen was amalgamated with Pembina and the outstanding Veresen preferred shares were exchanged for Pembina preferred shares with the same terms and conditions.

The acquisition was accounted for as a business combination using the acquisition method where the acquired tangible and intangible assets and assumed liabilities were recorded at their estimated fair values at the date of acquisition. The purchase price equation was based on assessed fair values as follows:

<i>(\$ millions)</i>	October 2, 2017
<b>Purchase Price Consideration</b>	
Common shares	4,356
Cash	1,522
Preferred shares	522
	<b>6,400</b>
<hr/>	
Current assets	303
Investments in jointly controlled businesses	6,115
Property, plant and equipment	612
Intangible assets & other long term assets	175
Goodwill	1,781
Current liabilities	(192)
Long term debt	(993)
Deferred tax liabilities	(1,210)
Decommissioning provision	(10)
Other long term liabilities	(121)
Non-controlling interest	(60)
	<b>6,400</b>

The determination of fair values and the purchase price equation was based upon an independent valuation. The primary drivers that generated goodwill were synergies and business opportunities from the integration of Pembina and Veresen. Upon closing of the Acquisition, Pembina repaid Veresen's revolving credit facility of \$152 million. The recognition of goodwill is not expected to be deductible for tax purposes. The Company recognized \$25 million in acquisition-related expenses in 2017. All acquisition-related expenses were expensed as incurred and included in other expenses in the Consolidated Statement of Earnings and Comprehensive Income.

Revenue generated by the Veresen business for the period from the Acquisition date of October 2, 2017 to December 31, 2017 was \$15 million. Net earnings for the same period were \$111 million. If the acquisition had occurred on January 1, 2017, management estimates that consolidated revenue would have increased an additional \$44 million and consolidated gross profit for the year would have increased an additional \$247 million. In determining these amounts, management assumed that the fair value adjustments that arose on the date of acquisition would have been the same if the acquisition had occurred on January 1, 2017.

During the twelve months ended December 31, 2018 Goodwill and Deferred tax liabilities in the purchase price equation were adjusted by \$7 million, to reflect a reduction of tax losses available for future deduction.

## 7. TRADE RECEIVABLES AND OTHER

As at December 31 (\$ millions)	2018	2017
Trade receivables from customers	178	178
Other receivables	411	335
Prepayments	16	17
Impairment loss allowance	(1)	(1)
<b>Total trade receivables and other</b>	<b>604</b>	<b>529</b>

## 8. PROPERTY, PLANT AND EQUIPMENT

(\$ millions)	Land and Land Rights	Pipelines	Facilities and Equipment	Cavern Storage and Other	Assets Under Construction	Total
<b>Cost</b>						
Balance at December 31, 2016	218	4,253	5,514	1,089	1,965	13,039
Additions and transfers	70	1,895	1,230	133	(1,428)	1,900
Acquisition (Note 6)	41	448	—	—	123	612
Change in decommissioning provision	—	63	(21)	—	—	42
Disposals and other	—	(9)	(8)	1	(1)	(17)
Balance at December 31, 2017	329	6,650	6,715	1,223	659	15,576
Additions and transfers	12	531	469	231	291	1,534
Change in decommissioning provision	—	(10)	5	19	—	14
Disposals and other	(1)	(7)	(30)	5	(11)	(44)
Balance at December 31, 2018	<b>340</b>	<b>7,164</b>	<b>7,159</b>	<b>1,478</b>	<b>939</b>	<b>17,080</b>
<b>Depreciation</b>						
Balance at December 31, 2016	7	966	575	160	—	1,708
Depreciation	2	136	148	48	—	334
Disposals and other	—	(6)	(2)	(4)	—	(12)
Balance at December 31, 2017	9	1,096	721	204	—	2,030
Depreciation	3	142	164	55	—	364
Disposals and other	—	(17)	(18)	(9)	—	(44)
Balance at December 31, 2018	<b>12</b>	<b>1,221</b>	<b>867</b>	<b>250</b>	<b>—</b>	<b>2,350</b>
<b>Carrying amounts</b>						
Balance at December 31, 2017	320	5,554	5,994	1,019	659	13,546
Balance at December 31, 2018	<b>328</b>	<b>5,943</b>	<b>6,292</b>	<b>1,228</b>	<b>939</b>	<b>14,730</b>

### Property, plant and equipment under construction

Costs of assets under construction at December 31, 2018 totaled \$939 million (2017: \$659 million) including capitalized borrowing costs.

For the year ended December 31, 2018, included in additions and transfers are capitalized borrowing costs related to the construction of new pipelines or facilities amounting to \$35 million (2017: \$63 million), with capitalization rates ranging from 3.86 percent to 4.01 percent (2017: 3.87 percent to 4.39 percent).

### Depreciation

Pipeline assets are depreciated using the straight line method over four to 75 years with the majority of assets depreciated over 40 years. Facilities and equipment are depreciated using the straight line method over four to 75 years with the majority of assets depreciated over 40 years. Other assets are depreciated using the straight line method over three to 40 years with the majority of assets depreciated over 40 years. These rates are established to depreciate remaining net book value over the shorter of their useful lives or economic lives.

## 9. INTANGIBLE ASSETS AND GOODWILL

(\$ millions)	Intangible Assets					Total Goodwill & Intangible Assets
	Goodwill	Purchase and Sale Contracts and Other	Customer Relationships	Purchase Option	Total	
<b>Cost</b>						
Balance at December 31, 2016	2,097	212	488	277	977	3,074
Acquisition (Note 6)	1,774	—	151	—	151	1,925
Additions and other	—	4	(1)	—	3	3
Balance at December 31, 2017	3,871	216	638	277	1,131	5,002
Additions and other	7	11	1	—	12	19
Transfers	—	—	—	(277)	(277)	(277)
Balance at December 31, 2018	<b>3,878</b>	<b>227</b>	<b>639</b>	<b>—</b>	<b>866</b>	<b>4,744</b>
<b>Amortization</b>						
Balance at December 31, 2016	—	127	113	—	240	240
Amortization	—	18	30	—	48	48
Balance at December 31, 2017	—	145	143	—	288	288
Amortization	—	19	28	—	47	47
Balance at December 31, 2018	—	<b>164</b>	<b>171</b>	—	<b>335</b>	<b>335</b>
<b>Carrying amounts</b>						
Balance at December 31, 2017	3,871	71	495	277	843	4,714
Balance at December 31, 2018	<b>3,878</b>	<b>63</b>	<b>468</b>	<b>—</b>	<b>531</b>	<b>4,409</b>

Intangible assets with a finite useful life are amortized using the straight line method over two to 60 years.

The purchase option attributable to the Facilities Division of \$277 million to assume an additional interest in the Younger Facilities was reclassified to property, plant and equipment on exercise of the option effective April 1, 2018.

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

As at December 31 (\$ millions)	2018			2017 <sup>(1)</sup>		
	Goodwill	Intangible Assets	Total	Goodwill	Intangible Assets	Total
Pipelines Division	<b>1,897</b>	<b>278</b>	<b>2,175</b>	1,891	290	2,181
Facilities Division	<b>541</b>	<b>102</b>	<b>643</b>	540	380	920
Marketing & New Ventures Division	<b>1,440</b>	<b>131</b>	<b>1,571</b>	1,440	153	1,593
Corporate	—	<b>20</b>	<b>20</b>	—	20	20
	<b>3,878</b>	<b>531</b>	<b>4,409</b>	3,871	843	4,714

<sup>(1)</sup> The allocation of goodwill and intangible assets have been restated with comparative operating segments.

### Goodwill Impairment Testing

For the purpose of impairment testing, goodwill is allocated to the Company's operating segments which represents the lowest level within the Company at which the goodwill is monitored for management purposes. As a result of the change in operating segments effective January 1, 2018 as discussed in Note 20, goodwill has been reallocated accordingly. Consistent with the prior year, impairment testing for goodwill was performed as at September 30, 2018. The recoverable amounts were based on their value in use and were determined to be higher than their carrying amounts.

The recoverable amount was determined using the value-in-use model by discounting the future cash flows generated from the continuing use of each operating segment. The calculation of the value in use is based on the following key assumptions:

- Cash flows are projected based on past experience, actual operating results and five years (2017: four years) of the business plan approved by management.

- Long-term growth: cash flows for periods up to 75 years (2017: 75 years) were extrapolated using a constant medium-term inflation, except where contracted, long-term cash flows indicated that no inflation should be applied or a specific reduction in cash flows was more appropriate.
- Pre-tax discount rates were applied in determining the recoverable amount of operating segments. Discount rates were estimated based on past experience, the risk free rate and average cost of debt, targeted debt to equity ratio, in addition to estimates of the specific operating segment's equity risk premium, size premium, projection risk, betas and tax rate.

The following summarizes the key assumptions used in the impairment test:

2018 (Percent)	Operating Segments		
	Pipelines Division	Facilities Division	Marketing & New Ventures Division
Pre-tax discount rate	7.60	7.47	13.08
Adjusted inflation rate	1.22	1.61	1.80
Incremental increase in discount rate that would result in carrying value equal to recoverable amount			
Increase in pre-tax discount rate	3.60	4.87	4.75

## 10. INVESTMENTS IN EQUITY ACCOUNTED INVESTEEES

(\$ millions)	Ownership Interest at December 31	2017	Share of Profit from Equity Investments		Investment in Equity Accounted Investees at December 31	
			12 Months Ended December 31	2017	2018	2017
Alliance	50%	50%	160	40	2,799	2,776
Aux Sable	42.7% - 50%	42.7% - 50%	102	22	480	449
Ruby Pipeline <sup>(1)</sup>	50% <sup>(1)</sup>	50% <sup>(1)</sup>	118	29	1,648	1,516
Veresen Midstream	45.3%	46.3%	26	22	1,324	1,365
Other	50% - 75%	50% - 75%	5	3	117	123
			411	116	6,368	6,229

<sup>(1)</sup> Ownership interest in Ruby is presented as a 50 percent proportionate share with the benefit of a preferred distribution structure. Share of profit from equity accounted investees for Ruby is equal to the preferred interest distribution.

Investments in equity accounted investees include the unamortized excess of the purchase price over the underlying net book value of the investee's assets and liabilities at the purchase date, which is comprised of \$98 million (2017: \$90 million) Goodwill, \$3.0 billion (2017: \$3.1 billion) in property, plant and equipment and intangibles and \$52 million in long-term debt (2017: \$87 million).

The Company has US\$2.6 billion in Investments in Equity Accounted Investees that is held by entities whose functional currency is the US dollar. The resulting foreign exchange gain for the year ended December 31, 2018 of \$295 million (2017: \$16 million) has been included in Other Comprehensive Income.

Distributions received from equity investments for the year ended December 31, 2018 were \$622 million (2017: \$157 million) and are included in Operating Activities in the Consolidated Statement of Cash Flows. Distributions from Alliance are subject to satisfying certain financing conditions including a minimum debt service coverage ratio requirement.

Contributions made to investments in equity accounted investees for the year ended December 31, 2018 were \$58 million (2017: \$7 million) and are included in Investing activities in the Consolidated Statement of Cash Flows.

Summarized combined financial information of equity accounted investees (presented at 100 percent) is as follows:

For the years ended December 31 ( <i>\$ millions</i> )	2018	2017
<b>Net Income and Comprehensive Income</b>		
Revenue	3,605	870
Cost of sales	(1,566)	(377)
General and administrative expense	(171)	(69)
Depreciation and amortization	(511)	(131)
Finance costs and other	(308)	(80)
Net Income and Comprehensive Income	1,049	213
Net income and Comprehensive Income attributable to Pembina	411	116

As at December 31 ( <i>\$ millions</i> )	2018	2017
<b>Balance Sheet</b>		
Current assets	838	763
Non-current assets	11,667	11,420
Current liabilities	908	957
Non-current liabilities	5,262	4,978

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 net), beginning March 30, 2018, until a final bullet payment of US\$141 million (US\$70 million net) is payable on the amended maturity date.

On April 20, 2018 Veresen Midstream 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.

## 11. INCOME TAXES

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

(\$ millions)	Balance at December 31, 2017	Recognized in Earnings	Recognized in Other Comprehensive Income	Acquisition	Equity	Other	Balance at December 31, 2018
<b>Deferred income tax assets</b>							
Derivative financial instruments	11	(29)	—	—	—	—	(18)
Employee benefits	7	—	2	—	—	—	9
Share-based payments	21	5	—	—	—	—	26
Provisions	153	3	—	—	—	—	156
Benefit of loss carryforwards	180	(33)	—	(7)	—	13	153
Other deductible temporary differences	56	16	—	—	(4)	—	68
<b>Deferred income tax liabilities</b>							
Property, plant and equipment	(1,361)	(299)	—	—	—	—	(1,660)
Intangible assets	(198)	80	—	—	—	—	(118)
Investments in equity accounted investees	(1,173)	(89)	—	—	—	—	(1,262)
Taxable limited partnership income deferral	(56)	(66)	—	—	—	—	(122)
Other taxable temporary differences	(16)	18	—	—	—	(8)	(6)
<b>Total deferred tax liabilities</b>	<b>(2,376)</b>	<b>(394)</b>	<b>2</b>	<b>(7)</b>	<b>(4)</b>	<b>5</b>	<b>(2,774)</b>

(\$ millions)	Balance at December 31, 2016	Recognized in Earnings	Recognized in Other Comprehensive Income	Acquisition	Equity	Other	Balance at December 31, 2017
<b>Deferred income tax assets</b>							
Derivative financial instruments	20	(9)	—	—	—	—	11
Employee benefits	8	—	(1)	—	—	—	7
Share-based payments	12	9	—	—	—	—	21
Provisions	133	12	—	8	—	—	153
Benefit of loss carryforwards	90	(57)	—	137	—	10	180
Other deductible temporary differences	41	12	—	11	(3)	(5)	56
<b>Deferred income tax liabilities</b>							
Property, plant and equipment	(1,193)	(243)	—	75	—	—	(1,361)
Intangible assets	(150)	(6)	—	(42)	—	—	(198)
Investments in equity accounted investees	(6)	190	—	(1,357)	—	—	(1,173)
Taxable limited partnership income deferral	(25)	4	—	(35)	—	—	(56)
Other taxable temporary differences	(10)	(6)	—	—	—	—	(16)
<b>Total deferred tax liabilities</b>	<b>(1,080)</b>	<b>(94)</b>	<b>(1)</b>	<b>(1,203)</b>	<b>(3)</b>	<b>5</b>	<b>(2,376)</b>

The Company's consolidated statutory tax rate for the year ended December 31, 2018 was 27 percent (2017: 27 percent).

## Reconciliation of effective tax rate

For the years ended December 31 ( <i>\$ millions, except as noted</i> )	2018	2017
Earnings before income tax	1,742	1,025
Statutory tax rate	27%	27%
Income tax at statutory rate	470	277
Tax rate changes on deferred income tax balances	(1)	1
Changes in estimate and other	(6)	18
U.S. Tax Reform	—	(166)
Permanent items	1	12
Income tax expense	464	142

The Company's estimate of impact of U.S. Tax Reform may be adjusted in the future based on anticipated regulations or guidance from the US Treasury and the Internal Revenue Service.

## Income tax expense

For the years ended December 31 ( <i>\$ millions</i> )	2018	2017
<b>Current tax expense</b>	<b>70</b>	<b>48</b>
<b>Deferred tax expense</b>		
Origination and reversal of temporary differences	378	286
Tax rate changes on deferred tax balances	(1)	(191)
Decrease (increase) in tax loss carry forward	17	(1)
Total deferred tax expense	394	94
Total income tax expense	464	142

## Deferred tax items recovered directly in equity

For the years ended December 31 ( <i>\$ millions</i> )	2018	2017
Share issue costs	(4)	(3)
Other comprehensive income (loss)	2	(1)
Deferred tax items recovered directly in equity	(2)	(4)

The Company has temporary differences associated with its investments in subsidiaries. At December 31, 2018, the Company has not recorded a deferred tax asset or liability for these temporary differences (2017: nil) as the Company controls the timing of the reversal and it is not probable that the temporary differences will reverse in the foreseeable future.

At December 31, 2018, the Company had US\$221 million (2017: US\$261 million) of U.S. tax losses that will expire after 2030 and \$349 million (2017: \$394 million) of Canadian tax losses that will expire after 2035. The Company has determined that it is probable that future taxable profits will be sufficient to utilize these losses.

## 12. TRADE PAYABLES AND ACCRUED LIABILITIES

As at December 31 ( <i>\$ millions</i> )	2018	2017
Trade payables	519	465
Other payables & accrued liabilities	284	212
<b>Total current trade and accrued liabilities</b>	<b>803</b>	<b>677</b>

### 13. LOANS AND BORROWINGS

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

#### Carrying value, terms and conditions, and debt maturity schedule

(\$ millions)	Authorized at December 31, 2018	Nominal interest rate	Year of maturity	Carrying value	
				December 31, 2018	December 31, 2017
Senior unsecured credit facilities <sup>(1)</sup>	3,520	3.2 <sup>(2)</sup>	Various <sup>(1)</sup>	1,305	1,778
Senior unsecured notes – series A	73	5.565	2020	76	—
Senior unsecured notes – series C	200	5.58	2021	199	199
Senior unsecured notes – series D	267	5.91	2019	267	266
Alberta Ethane Gathering System LP senior notes	—	5.565	2020	—	77
Senior unsecured medium-term notes series 1	250	4.89	2021	250	249
Senior unsecured medium-term notes series 2	450	3.77	2022	449	449
Senior unsecured medium-term notes series 3	450	4.75	2043	446	446
Senior unsecured medium-term notes series 4	600	4.81	2044	596	596
Senior unsecured medium-term notes series 5	450	3.54	2025	448	448
Senior unsecured medium-term notes series 6	500	4.24	2027	498	498
Senior unsecured medium-term notes series 7	500	3.71	2026	498	497
Senior unsecured medium-term notes series 8	650	2.99	2024	646	645
Senior unsecured medium-term notes series 9	550	4.74	2047	541	541
Senior unsecured medium-term notes series 10	400	4.02	2028	398	—
Senior unsecured medium-term notes series 11	300	4.75	2048	298	—
Senior unsecured medium-term notes 1A	—	4.00	2018	—	152
Senior unsecured medium-term notes 3A	50	5.05	2022	50	52
Senior unsecured medium-term notes 4A	200	3.06	2019	205	207
Senior unsecured medium-term notes 5A	350	3.43	2021	353	354
Finance lease liabilities and other	—			14	9
<b>Total interest bearing liabilities</b>				<b>7,537</b>	<b>7,463</b>
Less current portion				(480)	(163)
<b>Total non-current</b>				<b>7,057</b>	<b>7,300</b>

<sup>(1)</sup> Pembina's unsecured credit facilities include a \$2.5 billion revolving facility that matures May 2023, \$1.0 billion non-revolving term loan facility that matures March 2021 and a \$20 million operating facility that matures May 2019, which is typically renewed on an annual basis.

<sup>(2)</sup> The nominal interest rate is the weighted average of all drawn credit facilities based on the Company's credit rating at December 31, 2018. Borrowings under the credit facilities bear interest at prime, Bankers' Acceptance, or LIBOR rates, plus applicable margins.

On March 9, 2018, Pembina extended its revolving unsecured credit facility (the "Revolver") to May 31, 2023. Concurrently, Pembina entered into a \$1 billion non-revolving term loan facility (the "Term Loan") for an initial three year term that is pre-payable at the Company's option. The other terms and conditions of the Term Loan, including financial covenants, are substantially similar to Pembina's Revolver.

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.

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 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.

All facilities are governed by specific debt covenants which Pembina was in compliance with at December 31, 2018 (2017: in compliance).

For more information about the Company's exposure to interest rate, foreign currency and liquidity risk, see Note 24 *Financial Instruments*.

#### 14. CONVERTIBLE DEBENTURES

<i>(\$ millions, except as noted)</i>	<b>Series F – 5.75%</b>
Conversion price ( <i>dollars per share</i> )	<b>\$29.53</b>
Interest payable semi-annually in arrears on:	June 30 and December 31
Maturity Date	December 31, 2018
Balance at December 31, 2016	143
Conversions and redemptions	(52)
Unwinding of discount rate	1
Deferred financing fee (net of amortization)	1
Balance at December 31, 2017	93
Conversions and redemptions	(93)
Repayment at maturity	(2)
Unwinding of discount rate	1
Deferred financing fee (net of amortization)	1
Balance at December 31, 2018	—

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.

#### 15. DECOMMISSIONING PROVISION

<i>(\$ millions)</i>	<b>2018</b>	2017
Balance at January 1	<b>551</b>	496
Unwinding of discount rate	<b>12</b>	12
Change in rates	—	43
Acquisition	—	10
Additions	<b>18</b>	33
Change in estimates and other	<b>(8)</b>	(43)
Total	<b>573</b>	551
Less current portion (included in accrued liabilities)	<b>(4)</b>	(5)
Balance at December 31	<b>569</b>	546

The Company applied a 1.8 percent inflation rate per annum (2017: 1.8 percent) and a risk-free rate of 2.3 percent (2017: 2.3 percent) to calculate the present value of the decommissioning provision. Changes in the measurement of the decommissioning provision are added to, or deducted from, the cost of the related asset in property, plant and equipment. When a re-measurement reduction of the decommissioning provision is in excess of the carrying amount of the related asset, the amount is credited to depreciation expense. For the year ended December 31, 2018, \$4 million was credited to depreciation expense (2017: \$4 million).

The decommissioning provision reflects the discounted cash flows expected to be incurred to decommission the Company's pipeline systems, gas processing and fractionation plants, and storage and terminalling hubs, including the addition of environmental reclamation and remediation costs in the current year.

The undiscounted cash flows at the time of decommissioning are calculated using an estimated timing of economic outflows ranging from one to 83 years, with the majority estimated at 50 years. The estimated economic lives of the underlying assets form the basis for determining the timing of economic outflows.

## 16. SHARE CAPITAL

Pembina is authorized to issue an unlimited number of common shares, without par value, Class A Preferred Shares, issuable in series, not to exceed 20 percent of the number of issued and outstanding common shares at the time of issuance of any Class A Preferred Shares and an unlimited number of Class B Preferred Shares. The holders of the common shares are entitled to receive notice of, attend and vote at any meeting of the shareholders of the Company, receive dividends declared and share in the remaining property of the Company upon distribution of the assets of the Company among its shareholders for the purpose of winding-up its affairs.

Pembina has adopted a shareholder rights plan ("Plan") as a mechanism designed to assist the board in ensuring the fair and equal treatment of all shareholders in the face of an actual or contemplated unsolicited bid to take control of the Company. Take-over bids may be structured in such a way as to be coercive or discriminatory in effect, or may be initiated at a time when it will be difficult for the board to prepare an adequate response. Such offers may result in shareholders receiving unequal or unfair treatment, or not realizing the full or maximum value of their investment in Pembina. The Plan discourages the making of any such offers by creating the potential of significant dilution to any offeror who does so. The Plan was reconfirmed at Pembina's 2016 meeting of shareholders and must be reconfirmed at every third annual meeting thereafter. Accordingly, the Plan, with such amendments as the Board of Directors determines to be necessary or advisable, and as may otherwise be required by law, is expected to be placed before Shareholders for approval at Pembina's 2019 annual meeting. A copy of the agreement relating to the current Plan has been filed on Pembina's SEDAR and EDGAR profiles.

### Common Share Capital

<i>(\$ millions, except as noted)</i>	Number of Common Shares <i>(millions)</i>	Common Share Capital
Balance at December 31, 2016	397	8,808
Issued, net of issue costs	99	4,356
Dividend reinvestment plan	4	148
Debenture conversions	2	73
Share-based payment transactions	1	62
Balance at December 31, 2017	503	13,447
Debenture conversions	3	140
Share-based payment transactions	2	75
Balance at December 31, 2018	<b>508</b>	<b>13,662</b>

### Preferred Share Capital

<i>(\$ millions, except as noted)</i>	Number of Preferred Shares <i>(millions)</i>	Preferred Share Capital
Balance at December 31, 2016	62	1,509
Class A, Series 15 Preferred shares issued, net of issue costs	8	178
Class A, Series 17 Preferred shares issued, net of issue costs	6	141
Class A, Series 19 Preferred shares issued, net of issue costs	8	203
Class A, Series 21 Preferred shares issued, net of issue costs	16	393
Balance at December 31, 2017	100	2,424
Preferred Shares issued, net of issue costs	—	(1)
Balance at December 31, 2018	<b>100</b>	<b>2,423</b>

On December 1, 2018, none of the 10 million Cumulative Redeemable Rate Reset Class A Preferred Series 1 shares outstanding were converted into Cumulative Redeemable Floating Rate Class A Preferred Series 2 shares.

On December 7, 2017, Pembina issued 16 million cumulative redeemable minimum rate reset class A Series 21 Preferred Shares for aggregate gross proceeds of \$400 million. The holders of Series 21 Preferred Shares are entitled to receive fixed cumulative dividends at an annual rate of \$1.225 per share, if, as and when declared by the Board of Directors. The dividend

rate will reset on March 1, 2023 and every fifth year thereafter at a rate equal to the sum of the then five-year Government of Canada bond yield plus 3.26 percent, provided that, in any event, such rate shall not be less than 4.90 percent. The Series 21 Preferred Shares are redeemable by the Company at its option on March 1, 2023 and every fifth year thereafter at a price of \$25.00 per share plus accrued and unpaid dividends.

Holders of the Series 21 Preferred Shares have the right to convert their shares into cumulative redeemable floating rate Class A Preferred Shares, Series 22 ("Series 22 Preferred Shares"), subject to certain conditions, on March 1, 2023 and every fifth year thereafter. Holders of Series 22 Preferred Shares will be entitled to receive a cumulative quarterly floating dividend at a rate equal to the sum of the then 90-day government of Canada bond yield plus 3.26 percent, if, as and when declared by the Board of Directors.

On October 2, 2017, in connection with the Acquisition, the outstanding preferred shares of Veresen have been exchanged for Pembina Class A Series 15, 17 and 19 Preferred Shares with the same terms and conditions as the shares previously issued by Veresen. Dividends on the Series 15, 17 and 19 Preferred Shares will continue to be paid on the last business day of March, June, September and December in each year, if, as and when declared by the Board of Directors.

### Dividends

The following dividends were declared by the Company:

For the years ended December 31 (\$ millions)	2018	2017
Common shares		
Common shares \$2.24 per qualifying share (2017: \$2.04)	1,131	873
Preferred shares		
\$1.062500 per qualifying Series 1 preferred share (2017: \$1.062500)	11	11
\$1.175000 per qualifying Series 3 preferred share (2017: \$1.175000)	7	7
\$1.250000 per qualifying Series 5 preferred share (2017: \$1.250000)	12	12
\$1.125000 per qualifying Series 7 preferred share (2017: \$1.125000)	11	11
\$1.187500 per qualifying Series 9 preferred share (2017: \$1.187500)	11	11
\$1.437500 per qualifying Series 11 preferred share (2017: \$1.437500)	10	10
\$1.437500 per qualifying Series 13 preferred share (2017: \$1.437500)	14	14
\$1.116000 per qualifying Series 15 preferred share (2017: \$0.279000)	9	2
\$1.250000 per qualifying Series 17 preferred share (2017: \$0.312500)	8	2
\$1.250000 per qualifying Series 19 preferred share (2017: \$0.312500)	10	3
\$1.200650 per qualifying Series 21 preferred share (2017: nil)	19	—
	122	83

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), effective for the dividend paid on June 15, 2018.

On January 7, 2019, Pembina announced that its Board of Directors had declared a dividend of \$0.19 per qualifying common share (\$2.28 annually) in the total amount of \$97 million, payable on February 15, 2019 to shareholders of record on January 25, 2019. Pembina's Board of Directors also declared quarterly dividends for the Company's preferred shares as outlined in the following table:

Series	Record Date	Payable Date	Per Share Amount	Dividend Amount (\$ millions)
Series 1	February 1, 2019	March 1, 2019	\$0.306625	3
Series 3	February 1, 2019	March 1, 2019	\$0.293750	2
Series 5	February 1, 2019	March 1, 2019	\$0.312500	3
Series 7	February 1, 2019	March 1, 2019	\$0.281250	3
Series 9	February 1, 2019	March 1, 2019	\$0.296875	2
Series 11	February 1, 2019	March 1, 2019	\$0.359375	2
Series 13	February 1, 2019	March 1, 2019	\$0.359375	4
Series 15	March 15, 2019	April 1, 2019	\$0.279000	2
Series 17	March 15, 2019	April 1, 2019	\$0.312500	2
Series 19	March 15, 2019	April 1, 2019	\$0.312500	3
Series 21	February 1, 2019	March 1, 2019	\$0.306250	5

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.

On February 6, 2019, Pembina announced that its Board of Directors had declared a dividend of \$0.19 per qualifying common share (\$2.28 annually) in the total amount of \$97 million, payable on March 15, 2019 to shareholders of record on February 25, 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 received 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. Prior to its suspension in 2017 DRIP proceeds were \$148 million.

#### 17. PERSONNEL EXPENSES

For the years ended December 31 (\$ millions)	2018	2017
Salaries and wages	254	194
Share-based compensation expense (Note 23)	63	73
Short-term incentive plan	59	45
Pension plan expense	23	20
Health, savings plan and other benefits	21	18
	<b>420</b>	<b>350</b>

## 18. REVENUE FROM CONTRACTS WITH CUSTOMERS

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

### a. Revenue disaggregation

For the years ended December 31 (\$ millions)	2018				2017			
	Pipelines Division	Facilities Division	Marketing & New Ventures Division	Total	Pipelines Division	Facilities Division	Marketing & New Ventures Division	Total
Take-or-Pay <sup>(1)</sup>	979	582	—	1,561	681	534	—	1,215
Fee-for-Service <sup>(1)</sup>	424	103	—	527	324	58	2	384
Product Sales <sup>(2)</sup>	—	464	4,721	5,185	—	208	3,531	3,739
<b>Revenue from contracts with customers</b>	<b>1,403</b>	<b>1,149</b>	<b>4,721</b>	<b>7,273</b>	<b>1,005</b>	<b>800</b>	<b>3,533</b>	<b>5,338</b>
Lease and other revenue	61	17	—	78	62	—	—	62
<b>Total external revenue</b>	<b>1,464</b>	<b>1,166</b>	<b>4,721</b>	<b>7,351</b>	<b>1,067</b>	<b>800</b>	<b>3,533</b>	<b>5,400</b>

<sup>(1)</sup> Revenue recognized over time.

<sup>(2)</sup> Revenue recognized at a point in time.

### b. Contract balances

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

(\$ millions)	2018	2017
Balance at January 1	157	81
Additions (net in the period)	38	99
Revenue recognized from contract liabilities <sup>(1)</sup>	(27)	(23)
Closing balance	168	157
Less current portion <sup>(2)</sup>	(37)	(44)
<b>Balance at December 31</b>	<b>131</b>	<b>113</b>

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

<sup>(2)</sup> As at December 31, 2018, the balance includes \$9 million of cash collected under take-or-pay contracts which will be recognized in revenue by December 31, 2019 as the customer chooses to ship, process, or otherwise forego the associated service (December 31, 2017: \$8 million).

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

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

### c. Revenue allocated to remaining performance obligations

Pembina expects to recognize revenue in future periods that includes current unsatisfied remaining performance obligations totaling \$10.6 billion. Over the next five years, this remaining performance obligation will be recognized annually ranging from \$1.1 billion declining to \$962 million. Subsequently, up to 2042, Pembina will recognize from \$1.0 billion to \$7 million per year.

In preparing the above figures, the Company has taken the practical expedient to exclude contracts that are being accounted for using the practical expedient to recognize revenue in an amount equal to the Company's right to invoice, as well as the practical expedient to exclude contracts that have original expected durations of one year or less.

Variable consideration relating to flow through costs are not included in the amounts presented. These flow through costs do not impact net income or cash flow, and due to the long-term nature of the contracts there is significant uncertainty in estimating these amounts. In addition, the Company excludes contracted revenue amounts for assets not yet in-service unless both board of directors approval and regulatory approval for the asset has been obtained.

## 19. NET FINANCE COSTS

For the years ended December 31		
(\$ millions)	2018	2017
Interest expense on financial liabilities measured at amortized cost:		
Loans and borrowings	268	162
Convertible debentures	6	9
Unwinding of discount rate	12	12
Gain in fair value of non-commodity-related derivative financial instruments	(4)	(8)
Loss on revaluation of conversion feature of convertible debentures	—	13
Foreign exchange gain and other	(3)	(3)
<b>Net finance costs</b>	<b>279</b>	<b>185</b>

Net interest paid of \$294 million (2017: \$216 million) includes interest paid during construction and capitalized of \$35 million (2017: \$63 million).

## 20. OPERATING SEGMENTS

Effective January 1, 2018, Pembina's operating segments are organized by three Divisions: Pipelines, Facilities and Marketing & New Ventures.

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

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

The Facilities segment includes processing and fractionation facilities and related infrastructure that provide Pembina's customers with natural gas and NGL services and are highly integrated with the Company's other businesses.

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

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

For the year ended December 31, 2018 (\$ millions)	Pipelines Division <sup>(1)</sup>	Facilities Division	Marketing & New Ventures Division <sup>(2)</sup>	Corporate & Inter-Division Eliminations	Total
Revenue from external customers	1,464	1,166	4,721	—	7,351
Inter-Division revenue	124	302	—	(426)	—
<b>Total revenue<sup>(3)</sup></b>	<b>1,588</b>	<b>1,468</b>	<b>4,721</b>	<b>(426)</b>	<b>7,351</b>
Operating expenses	396	313	—	(158)	551
Cost of goods sold, including product purchases	—	462	4,335	(282)	4,515
Realized loss on commodity-related derivative financial instruments	—	—	51	—	51
Share of profit from equity accounted investees	279	30	102	—	411
Depreciation and amortization included in operations	216	149	26	—	391
Unrealized gain on commodity-related derivative financial instruments	—	—	(73)	—	(73)
<b>Gross profit</b>	<b>1,255</b>	<b>574</b>	<b>484</b>	<b>14</b>	<b>2,327</b>
Depreciation included in general and administrative	—	—	—	26	26
Other general and administrative	26	17	41	169	253
Other expense	—	5	12	10	27
<b>Reportable segment results from operating activities</b>	<b>1,229</b>	<b>552</b>	<b>431</b>	<b>(191)</b>	<b>2,021</b>
Net finance costs	9	6	16	248	279
<b>Reportable segment earnings (loss) before tax</b>	<b>1,220</b>	<b>546</b>	<b>415</b>	<b>(439)</b>	<b>1,742</b>
Capital expenditures	711	348	134	33	1,226
Contributions to equity accounted investees	—	58	—	—	58

<sup>(1)</sup> Pipelines Division transportation revenue includes \$25 million associated with U.S. pipeline sales.

<sup>(2)</sup> Marketing & New Ventures Division includes revenue of \$240 million associated with U.S. midstream sales.

<sup>(3)</sup> During the period, one customer accounted for 10 percent of total revenues, with \$792 million reported throughout all segments.

For the year ended December 31, 2017 <sup>(1)</sup> (\$ millions)	Pipelines Division <sup>(2)</sup>	Facilities Division	Marketing & New Ventures Division <sup>(3)</sup>	Corporate & Inter-Division Eliminations	Total
Revenue from external customers	1,067	800	3,533	—	5,400
Inter-Division revenue	69	169	—	(238)	—
<b>Total revenue<sup>(4)</sup></b>	<b>1,136</b>	<b>969</b>	<b>3,533</b>	<b>(238)</b>	<b>5,400</b>
Operating expenses	330	227	—	(107)	450
Cost of goods sold, including product purchases	—	197	3,105	(140)	3,162
Realized loss on commodity-related derivative financial instruments	1	—	93	—	94
Share of profit from equity accounted investees	72	22	22	—	116
Depreciation and amortization included in operations	195	138	26	—	359
Unrealized gain on commodity-related derivative financial instruments	(1)	—	(22)	—	(23)
<b>Gross profit</b>	<b>683</b>	<b>429</b>	<b>353</b>	<b>9</b>	<b>1,474</b>
Depreciation included in general and administrative	—	—	—	23	23
Other general and administrative	20	23	19	151	213
Other (income) expense	(6)	11	1	22	28
<b>Reportable segment results from operating activities</b>	<b>669</b>	<b>395</b>	<b>333</b>	<b>(187)</b>	<b>1,210</b>
Net finance costs	10	12	7	156	185
<b>Reportable segment earnings (loss) before tax</b>	<b>659</b>	<b>383</b>	<b>326</b>	<b>(343)</b>	<b>1,025</b>
Capital expenditures	1,328	440	57	14	1,839
Contributions to equity accounted investees	—	1	6	—	7

<sup>(1)</sup> Restated with comparative segments.

<sup>(2)</sup> Pipelines Division transportation revenue includes \$22 million associated with U.S. pipeline sales.

<sup>(3)</sup> Marketing & New Ventures Division includes revenue of \$215 million associated with U.S. midstream sales.

<sup>(4)</sup> During the period, no one customer accounted for 10 percent or more of total revenue.

## 21. EARNINGS PER COMMON SHARE

### Basic earnings per common share

The calculation of basic earnings per common share at December 31, 2018 was based on the earnings attributable to common shareholders of \$1.2 billion (2017: \$797 million) and a weighted average number of common shares outstanding of 505 million (2017: 426 million).

### Diluted earnings per common share

The calculation of diluted earnings per common share at December 31, 2018 was based on earnings attributable to common shareholders of \$1.2 billion (2017: \$803 million), and weighted average number of common shares outstanding after adjustment for the effects of all dilutive potential common shares of 509 million (2017: 432 million).

### Earnings attributable to common shareholders

For the years ended December 31 ( <i>\$ millions</i> )	2018	2017
Earnings	1,278	883
Dividends on preferred shares	(122)	(83)
Cumulative dividends on preferred shares, not yet declared	(3)	(3)
<b>Basic earnings attributable to common shareholders</b>	<b>1,153</b>	<b>797</b>
Effect of after-tax interest on debentures to earnings	4	6
<b>Diluted earnings attributable to common shareholders</b>	<b>1,157</b>	<b>803</b>

### Weighted average number of common shares

( <i>In millions of shares, except as noted</i> )	2018	2017
Issued common shares at January 1	503	397
Effect of shares issued on Acquisition	—	25
Effect of shares issued on exercise of options	1	—
Effect of conversion of convertible debentures	1	1
Effect of shares issued under dividend reinvestment plan	—	3
<b>Basic weighted average number of common shares at December 31</b>	<b>505</b>	<b>426</b>
Dilutive effect of debentures converted	2	4
Dilutive effect of share options on issue	2	2
<b>Diluted weighted average number of common shares at December 31</b>	<b>509</b>	<b>432</b>
<b>Basic earnings per common share (dollars)</b>	<b>2.28</b>	<b>1.87</b>
<b>Diluted earnings per common share (dollars)</b>	<b>2.28</b>	<b>1.86</b>

The average market value of the Company's shares for purposes of calculating the dilutive effect of share options was based on quoted market prices for the period during which the options were outstanding.

## 22. PENSION PLAN

As at December 31 ( <i>\$ millions</i> )	2018	2017
Registered defined benefit net obligation	19	10
Supplemental defined benefit net obligation	12	11
Other accrued benefit obligations	—	1
<b>Net employee benefit obligations</b>	<b>31</b>	<b>22</b>

The Company maintains a defined contribution plan and non-contributory defined benefit pension plans covering its employees. On April 1, 2018, Pembina exercised its option to assume an additional interest in the Younger extraction and fractionation facilities ("Younger Facilities"). Accordingly, Pembina also assumed the Bargaining Unit Pension Plan for

Employees at the Younger Plant ("Younger Plan") with the net obligation of \$6 million. The Company contributes five to 10 percent of an employee's earnings to the defined contribution plan until the employee's age plus years of service equals 50, at which time they become eligible for the defined benefit plans. The Company recognized \$8 million in expense for the defined contribution plan during the year (2017: \$7 million). The defined benefit plans include a funded registered plan for all eligible employees and an unfunded supplemental retirement plan for those employees affected by the Canada Revenue Agency maximum pension limits. The defined benefit plans are administered by separate pension funds that are legally separated from the Company. Benefits under the plans are based on the length of service and the annual average best three years of earnings during the last ten years of service of the employee. Benefits paid out of the plans are not indexed. The Company measures its accrued benefit obligations and the fair value of plan assets for accounting purposes as at December 31 of each year. The most recent actuarial valuation was at December 31, 2016. The defined benefit plans expose the Company to actuarial risks such as longevity risk, interest rate risk, and market (investment) risk.

### Defined benefit obligations

As at December 31 (\$ millions)	2018		2017	
	Registered Plans	Supplemental Plan	Registered Plan	Supplemental Plan
Present value of unfunded obligations	—	12	—	11
Present value of funded obligations	212	—	192	—
Total present value of obligations	212	12	192	11
Fair value of plan assets	193	—	182	—
Recognized liability for defined benefit obligations	(19)	(12)	(10)	(11)

The Company funds the defined benefit obligation plans in accordance with government regulations by contributing to trust funds administered by an independent trustee. The funds are invested primarily in equities and bonds. Defined benefit plan contributions totalled \$19 million for the year ended December 31, 2018 (2017: \$16 million).

The Company has determined that, in accordance with the terms and conditions of the defined benefit plans, and in accordance with statutory requirements of the plans, the present value of refunds or reductions in future contributions is not lower than the balance of the total fair value of the plan assets less the total present value of obligations. As such, no decrease in the defined benefit asset is necessary at December 31, 2018 (2017: nil).

### Registered defined benefit pension plan assets comprise

As at December 31 (Percent)	2018	2017
Equity securities	61	65
Debt	39	35
	100	100

### Movement in the present value of the defined benefit pension obligation

(\$ millions)	2018		2017	
	Registered Plans	Supplemental Plan	Registered Plan	Supplemental Plan
Defined benefits obligations at January 1	192	11	180	10
Benefits paid by the plan	(12)	—	(13)	—
Current service costs	14	1	14	—
Interest expense	7	—	7	—
Transfer from Younger	16	—	—	—
Actuarial losses in other comprehensive income	(5)	—	4	1
Defined benefit obligations at December 31	212	12	192	11

## Movement in the present value of registered defined benefit pension plan assets

<i>(\$ millions)</i>	<b>2018</b>	2017
Fair value of plan assets at January 1	182	164
Contributions paid into the plan	19	16
Benefits paid by the plan	(12)	(13)
Return on plan assets	(13)	8
Transfer from Younger	10	—
Interest income	7	7
Fair value of registered plan assets at December 31	193	182

## Expense recognition in earnings

<i>(\$ millions)</i>	<b>2018</b>	2017
For the years ended December 31		
<b>Registered Plan</b>		
Current service costs	14	14
Interest on obligation	8	7
Expected return on plan assets	(7)	(7)
	15	14

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

<i>(\$ millions)</i>	<b>2018</b>	2017
For the years ended December 31		
<b>Registered Plan</b>		
Operating expenses	8	7
General and administrative expense	7	7
	15	14

Expense recognized for the Supplemental Plan was less than \$1 million for each of the years ended December 31, 2018 and 2017.

## Actuarial gains and losses recognized in other comprehensive income

<i>(\$ millions)</i>	2018			2017		
	Registered Plans	Supplemental Plan	Total	Registered Plan	Supplemental Plan	Total
Balance at January 1	(22)	(1)	(23)	(25)	(1)	(26)
Remeasurements:						—
Financial assumptions	3	—	3	(4)	—	(4)
Experience adjustments	—	—	—	1	—	1
Return on plan assets excluding interest income	(9)	—	(9)	6	—	6
Recognized during the period after tax	(6)	—	(6)	3	—	3
Balance at December 31	(28)	(1)	(29)	(22)	(1)	(23)

Principal actuarial assumptions used:

<i>As at December 31</i>	<b>2018</b>	2017
<i>(weighted average percent)</i>		
Discount rate	3.8%	3.6%
Future pension earning increases	4.0%	4.0%

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

As at December 31 (years)	2018	2017
<b>Longevity at age 65 for current pensioners</b>		
Males	21.7	21.7
Females	24.1	24.1
<b>Longevity at age 65 for current member aged 45</b>		
Males	22.8	22.8
Females	25.1	25.1

The calculation of the defined benefit obligation is sensitive to the discount rate, compensation increases, retirements and termination rates as set out above. An increase or decrease of the estimated discount rate of 3.8 percent by 100 basis points at December 31, 2018 is considered reasonably possible in the next financial year but would not have a material impact on the obligation.

The Company expects to contribute \$20 million to the defined benefit plans in 2019.

### 23. SHARE-BASED PAYMENTS

At December 31, 2018, the Company has the following share-based payment arrangements:

#### Share option plan (equity settled)

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

#### Long-term share unit award incentive plan (cash-settled)

In 2005, the Company established a long-term share unit award incentive plan. Under the share-based compensation plan, awards of restricted ("RSU") and performance ("PSU") share units are made to officers, non-officers and directors. The plan results in participants receiving cash compensation based on the value of the underlying notional shares granted under the plan. Payments are based on a trading value of the Company's common shares plus notional dividends and performance of the Company.

In 2015, the Company also established a deferred share units ("DSU") plan. Under the DSU plan, directors are required to take at least 40 percent of total director compensation, excluding meeting fees, as DSUs. A DSU is a notional share that has the same value as one Pembina common share. Its value changes with Pembina's share price. DSUs do not have voting rights but they accrue dividends as additional DSUs, at the same rate as dividends paid on the Company's common shares. DSUs are paid out when a director retires from the board and are redeemed for cash using the weighted average of trading price of common shares on the Toronto Stock Exchange ("TSX") for the last five trading days before the redemption date, multiplied by the number of DSUs the director holds. As of January 1, 2018 directors no longer receive meeting fees, but their base retainer and committee retainer has been increased.

## Terms and conditions of share option plan and share unit award incentive plan

The terms and conditions relating to the grants of the share option program and the long-term share unit award incentive plans are listed in the tables below:

<b>Grant date share options granted to employees</b> <i>(thousands of options, except as noted)</i>	<b>Number of options</b>	<b>Contractual life of options</b>
March 7, 2017	1,697	7
May 16, 2017	64	7
August 14, 2017	868	7
October 11, 2017	40	7
November 14, 2017	784	7
December 8, 2017	77	7
March 6, 2018	1,993	7
May 14, 2018	310	7
July 10, 2018	424	7
August 15, 2018	961	7
October 10, 2018	94	7
November 13, 2018	939	7
December 31, 2018	34	7

One-third vest on the first anniversary of the grant date, one-third vest on the second anniversary of the grant date and one-third vest on the third anniversary of the grant date.

### Long-term share unit award incentive plan<sup>(1)</sup>

<b>Grant date RSUs, PSUs and DSUs to Officers, Non-Officers<sup>(2)</sup> and Directors</b> <i>(thousands of units, except as noted)</i>	<b>PSUs<sup>(3)</sup></b>	<b>RSUs<sup>(3)</sup></b>	<b>DSUs</b>	<b>Total</b>
January 1, 2017	307	303	32	642
January 1, 2018	404	395	44	843

PSUs vest on the third anniversary of the grant date. RSUs vest one-third on the first anniversary of the grant date, one-third on the second anniversary of the grant date and one-third on the third anniversary of the grant date. Actual units awarded are based on the trading value of the shares and performance of the Company.

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

<sup>(2)</sup> Non-Officers defined as senior selected positions within the Company.

<sup>(3)</sup> Contractual life of 3 years.

## Disclosure of share option plan

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

<i>(thousands of options, except as noted)</i>	Number of Options	Weighted Average Exercise Price (dollars)
Outstanding at December 31, 2016	14,310	\$39.68
Granted	3,530	\$43.28
Exercised	(1,405)	\$33.03
Forfeited	(502)	\$40.58
Expired	(256)	\$47.15
Outstanding at December 31, 2017	15,677	\$40.94
Granted	4,755	\$43.86
Exercised	(1,729)	\$35.34
Forfeited	(523)	\$41.56
Expired	(252)	\$49.2
Outstanding at December 31, 2018	17,928	\$42.12

As of December 31, 2018, the following options are outstanding:

<i>(thousands of options, except as noted)</i> Exercise Price (dollars)	Number outstanding at December 31, 2018	Options Exercisable	Weighted average remaining life
\$26.52 – \$39.14	4,015	2,825	3.65
\$39.15 – \$41.55	4,000	1,690	4.93
\$41.56 – \$43.56	4,216	2,651	4.2
\$43.57 – \$46.00	2,571	285	6.41
\$46.01 – \$52.01	3,126	2,189	3.88
Total	17,928	9,640	4.50

The weighted average market price at the date of exercise for share options exercised in the year ended December 31, 2018 was \$44.97 (2017: \$43.49).

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

### Share options granted

For the years ended December 31 <i>(dollars, except as noted)</i>	2018	2017
Weighted average		
Fair value at grant date	3.86	4.49
Share price at grant date	43.67	43.13
Exercise price	43.86	43.28
Expected volatility (percent)	20.26	23.5
Expected option life (years)	3.67	3.67
Expected annual dividends per option	2.24	2.04
Expected forfeitures (percent)	6.7	6.1
Risk-free interest rate (based on government bonds)(percent)	2.1	1.2

### Disclosure of long-term share unit award incentive plan

The long-term share unit award incentive plans was valued using the volume weighted average price for 20 days ending December 31, 2018 of \$42.89 (2017: \$44.94). Actual payment may differ from amount valued based on market price and company performance.

## Employee expenses

For the years ended December 31 (\$ millions)	2018	2017
Share option plan, equity settled	14	16
Long-term share unit award incentive plan	49	57
Share-based compensation expense	63	73
Total carrying amount of liabilities for cash settled arrangements	96	79
Total intrinsic value of liability for vested benefits	57	36

## 24. FINANCIAL INSTRUMENTS

### Financial risk management

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

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

### Counterparty credit risk

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

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

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

The Company typically has collected its trade receivables in full and at December 31, 2018, 99 percent were current (2017: 96 percent). Management defines current as outstanding accounts receivable under 30 days past due. The Company has a general lien and a continuing and first priority security interest in, and a secured charge on, all of a shipper's petroleum products in its custody.

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

Past Due	2018	2017
31-60 days past due	2	6
Greater than 61 days	—	—
	2	6

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

Advances to related parties held at amortized cost consists of funds advanced by Pembina to a jointly controlled entity. Expected credit losses are measured using a probability-weighted estimate of credit losses, measured as the present value of all expected cash shortfalls, discounted at the effective interest rate of the financial asset, using reasonable and supportable information about past events, current conditions and forecasts of future economic conditions. Management considers the risk of default relating to the advances to be low due to their priority ranking against other interests, and firm contracted revenues underpinning expected future cash flows from the jointly controlled entity's assets.

At December 31, 2018, the impairment loss allowance amounted to \$1 million (2017: \$1 million). Pembina recognized less than \$1 million in impairment losses on financial assets during 2018 (2017: \$1 million).

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

### Liquidity risk

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

December 31, 2018 (\$ millions)	Outstanding balances due by period					
	Carrying Amount	Expected Cash Flows	Less Than 1 Year	1 - 3 Years	3 - 5 Years	More Than 5 Years
Trade payables and accrued liabilities	803	803	803	—	—	—
Taxes payable	82	82	67	3	4	8
Loans and borrowings	7,537	10,794	724	2,334	1,183	6,553
Dividends payable	97	97	97	—	—	—
Derivative financial liabilities	6	6	6	—	—	—
Finance leases	23	23	9	11	3	—

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

### Market risk

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

*a. Commodity price risk*

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

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

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

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.

*b. Foreign exchange risk*

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

c. *Interest rate risk*

Pembina has floating interest rate debt which subjects the Company to interest rate risk. Pembina responds to this risk under its active risk management program to enter into financial derivative contracts to fix interest rates.

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

As at December 31 (\$ millions)	2018	2017
<b>Carrying Amounts of Financial Liability</b>		
Fixed rate instruments	6,232	5,685
Variable rate instruments <sup>(1)</sup>	1,305	1,778
	<b>7,537</b>	<b>7,463</b>

<sup>(1)</sup> At December 31, 2018, the Company held no positions in financial derivative contracts to fix interest rates (December 31, 2017: \$100 million).

Cash flow sensitivity analysis for variable rate instruments

A change of 100 basis points in interest rates at the reporting date would have (increased) decreased earnings by the amounts shown below. This analysis assumes that all other variables remain constant.

As at December 31 (\$ millions)	2018 ± 100 bp	2017 ± 100 bp
Variable rate instruments	±13	±18
Interest rate swap	±0	±1
Earnings sensitivity (net)	±13	±17

**Fair values**

The fair values of financial assets and liabilities, together with the carrying amounts shown in the Consolidated Statements of Financial Position, are as follows:

As at December 31 (\$ millions)	2018				2017			
	Carrying value	Fair Value <sup>(3)</sup>			Carrying value	Fair Value <sup>(3)</sup>		
		Level 1	Level 2	Level 3		Level 1	Level 2	Level 3
<b>Financial assets carried at fair value</b>								
Derivative financial instruments	54	—	54	—	4	—	4	—
Advances to related parties	58	—	—	58	—	—	—	—
	112	—	54	58	4	—	4	—
<b>Financial assets carried at amortized cost</b>								
Cash and cash equivalents	157	157	—	—	321	321	—	—
Trade receivables and other	604	604	—	—	529	529	—	—
Advances to related parties	77	—	77	—	42	—	42	—
Other assets	9	—	9	—	13	—	13	—
	847	761	86	—	905	850	55	—
<b>Financial liabilities carried at fair value</b>								
Derivative financial instruments <sup>(1)</sup>	6	—	6	—	79	—	79	—
<b>Financial liabilities carried at amortized cost</b>								
Trade payables and accrued liabilities	803	803	—	—	677	677	—	—
Taxes payable <sup>(1)</sup>	82	82	—	—	25	25	—	—
Dividends payable	97	97	—	—	91	91	—	—
Loans and borrowings <sup>(1)</sup>	7,537	—	7,588	—	7,463	—	7,686	—
Convertible debentures <sup>(2)</sup>	—	—	—	—	93	145	—	—
	8,519	982	7,588	—	8,349	938	7,686	—

<sup>(1)</sup> Carrying value of current and non-current balances.

<sup>(2)</sup> Carrying value excludes conversion feature of convertible debentures.

<sup>(3)</sup> The basis for determining fair value is disclosed in Note 5.

## Interest rates used for determining fair value

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

As at December 31 (percent)	2018	2017
Derivatives	2.2 - 2.3	1.4 - 1.8
Loans and borrowings	2.6 - 5.6	2.0 - 4.7

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

## Fair value hierarchy

The fair value of financial instruments carried at fair value is classified according to the following hierarchy based on the amount of observable inputs used to value the instruments.

*Level 1:* Unadjusted quoted prices are available in active markets for identical assets or liabilities as the reporting date. Pembina does not use Level 1 inputs for any of its fair value measurements.

*Level 2:* Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices). Level 2 valuations are based on inputs, including quoted forward prices for commodities, time value and volatility factors, which can be substantially observed or corroborated in the marketplace. Instruments in this category include non-exchange traded derivatives such as over-the-counter physical forwards and options, including those that have prices similar to quoted market prices. Pembina obtains quoted market prices for its inputs from information sources including banks, Bloomberg Terminals and Natural Gas Exchange. The majority of Pembina's significant financial instruments carried at fair value are valued using Level 2 inputs.

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

Advances to related parties carried at fair value consist of funds advances by Pembina to a jointly controlled entity with an equity conversion option. Fair value is measured on a recurring basis using a valuation model that considers the present value of management's best estimate of future cash flows expected to result from the asset under development in the jointly controlled entity, discounted using a risk-adjusted discount rate.

The following table is a summary of the net derivative financial instruments, which is consistent with the gross balances:

As at December 31 (\$ millions)	2018					2017				
	Current Asset	Non-Current Asset	Current Liability	Non-Current Liability	Total	Current Asset	Non-Current Asset	Current Liability	Non-Current Liability	Total
Commodity, power, storage and rail financial instruments	44	—	(2)	—	42	4	—	(31)	—	(27)
Interest rate	—	—	—	—	—	—	—	(2)	—	(2)
Foreign exchange	10	—	(4)	—	6	—	—	—	—	—
Conversion feature of convertible debentures (Note 14)	—	—	—	—	—	—	—	(46)	—	(46)
<b>Net derivative financial instruments</b>	<b>54</b>	<b>—</b>	<b>(6)</b>	<b>—</b>	<b>48</b>	<b>4</b>	<b>—</b>	<b>(79)</b>	<b>—</b>	<b>(75)</b>

## Sensitivity analysis

The following table shows the impact on earnings if the underlying risk variables of the derivative financial instruments changed by a specified amount, with other variables held constant.

As at December 31, 2018		+ Change	- Change
(\$ millions)			
Frac spread related			
Natural gas	(AECO +/- \$0.25 per GJ)	2	(2)
NGL (includes propane, butane and condensate)	(Belvieu/Conway +/- U.S. \$0.10 per gal)	(9)	9
Foreign exchange (US\$ vs. C\$)	(FX rate +/- \$0.10)	13	(13)
Product margin			
Crude oil	(WTI +/- \$2.50 per bbl)	(3)	3
NGL (includes propane, butane and condensate)	(Belvieu/Conway +/- U.S. \$0.10 per gal)	N/A	N/A
Corporate <sup>(1)</sup>			
Interest rates	(Rate +/- 50 basis points)	—	—

<sup>(1)</sup> As at December 31, 2018, there were no outstanding financial derivative contracts related to power and interest rates.

## 25. OPERATING LEASES

### Leases as lessee

The Company leases a number of offices, warehouses, land and rail cars under operating leases. The leases run for a period of one to 16 years, with an option to renew the lease after that date. The Company has sublet office space and rail cars up to 2027 and has contracted sub-lease payments for a minimum of \$85 million over the term. Refer to note 29 for further details regarding operating lease commitments.

### Leases as lessor

Operating lease revenues are receivable as follows:

As at December 31	2018	2017
(\$ millions)		
Less than 1 year	80	62
Between 1 and 5 years	376	246
More than 5 years	899	702
	<b>1,355</b>	<b>1,010</b>

The Company' lease revenues are generated through minimum payments for certain pipeline and terminaling assets that run for a period of 25 to 30 years with options to renew for an additional 10 years. The carrying value of property, plant and equipment under lease at December 31, 2018 is \$614 million (2017: \$484 million). Total revenue earned from minimum lease payments was \$78 million in 2018 (2017: \$62 million).

## 26. CAPITAL MANAGEMENT

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

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

Pembina is subject to certain financial covenants in its credit facility agreements and is in compliance with all financial covenants as of December 31, 2018.

Note 16 of these financial statements shows the change in Share Capital for the year ended December 31, 2018.

## 27. GROUP ENTITIES

### Significant subsidiaries

As at December 31 (percentages)	Ownership Interest	
	2018	2017
Pembina Pipeline	100	100
Pembina Gas Services Limited Partnership	100	100
Pembina Oil Sands Pipeline L.P.	100	100
Pembina Midstream Limited Partnership	100	100
Pembina Infrastructure and Logistics L.P.	100	100
Pembina Holding Canada L.P.	100	100
Pembina U.S. Corporation	100	100

## 28. RELATED PARTIES

The Company enters into transactions with related parties in the normal course of business and on terms equivalent to those that prevail in arm's length transactions. The Company advances funds to support operations and provides services to investments in equity accounted investees. A summary of the significant related party transactions are as follows:

### Equity accounted investees

(\$ millions)	2018	2017
<b>For the years ended December 31:</b>		
Services provided	42	8
Interest income	6	1
<b>As at December 31:</b>		
Advances to related parties <sup>(1)</sup>	135	42
Trade receivables and other	12	5

<sup>(1)</sup> Includes \$58 million (2017: \$13 million) in advances to Canada Kuwait Petrochemical Corporation ("CKPC") convertible to shares at the Company's discretion and \$75 million (2017: \$29 million) in advances to Ruby Pipeline, L.L.C.

### Key management personnel and director compensation

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

### Compensation

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

Key management personnel compensation comprised:

For the years ended December 31 (\$ millions)	2018	2017
Short-term employee benefits	10	8
Share-based compensation and other	13	7
Total compensation of key management	23	15

### Transactions

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

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

### Post-employment benefit plans

Pembina has significant influence over the pension plans for the benefit of their respective employees. No balance payable is outstanding at December 31, 2018 (December 31, 2017: nil).

### Transactions

(\$ millions)		Transaction value year ended December 31	
Post-employment benefit plan	Transaction	2018	2017
Defined benefit plan	Funding	19	16

## 29. COMMITMENTS, CONTINGENCIES AND GUARANTEES

### Commitments

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

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

<sup>(1)</sup> Includes office space, surface land, vehicles and rail car leases.

<sup>(2)</sup> Excluding deferred financing costs. Including interest payments on senior unsecured notes.

<sup>(3)</sup> Excluding significant projects that are awaiting regulatory approval at December 31, 2018 and for which Pembina is not committed to construct.

<sup>(4)</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 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 mbpd 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.

## **Contingencies**

The Company, its subsidiaries and its investments in equity accounted investees are subject to various legal and regulatory proceedings and actions arising in the normal course of business. We represent our interests vigorously in all proceedings in which we are involved. Legal and administrative proceedings involving possible losses are inherently complex, and we apply significant judgment in estimating probable outcomes. While the outcome of such actions and proceedings cannot be predicted with certainty, management believes that the resolutions of such actions and proceedings will not have a material impact on the Company's financial position or results of operations.

## **Guarantees**

The Company has \$69 million (2017: \$26 million) in letters of credit issued to facilitate commercial transactions with third parties and to support regulatory requirements.

The Company has provided guarantees to various third parties in the normal course of conducting business. The guarantees include financial guarantees to counterparties for product purchases and sales, transportation services, utilities, engineering and construction services. The guarantees have not had and are not expected to have a material impact on the Company's financial position, earnings, liquidity or capital resources.

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## STOCK EXCHANGE

Pembina Pipeline Corporation

### Toronto Stock Exchange listing symbols for:

COMMON SHARES PPL

CONVERTIBLE DEBENTURES PPL.DB.F

PREFERRED SHARES PPL.PR.A, PPL.PR.C, PPL.PR.E, PPL.PR.G, PPL.PR.I,  
PPL.PR.K, PPL.PR.M, PPL.PR.O, PPL.PR.Q, PPL.PR.S and PPL.PF.A.

### New York Stock Exchange listing symbol for:

COMMON SHARES PBA

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