

2019

# Sustainability Data Update

Pembina Pipeline Corporation



Pembina publishes a biennial sustainability report which allows us the opportunity to share key performance metrics with our customers, investors, communities and employees. Our inaugural report published in 2018 established a strong foundation and was an important first step in our sustainability reporting journey.

The 2018 Sustainability Report included data for the years 2015 to 2017. The tables below include updates for our 2018 performance and should be read together with the 2018 Sustainability Report<sup>1</sup>.

## HEALTH AND SAFETY

### Health and Safety Performance<sup>2</sup>

	2015	2016	2017	2018
<b>Employee</b>				
Fatalities (#)	0	0	0	0
Total recordable injury frequency (TRIF) <sup>3</sup>	0.29	0.14	0.19	0.25
Motor vehicle incident frequency (MVI) <sup>4</sup>	0.76	0.83	1.36	0.46
<b>Industry Average<sup>5</sup></b>				
Fatalities (#)	0	0	0	0
Total recordable injury frequency (TRIF)	0.43	0.37	0.43	0.49
Motor vehicle incident frequency (MVI)	1.62	1.26	1.37	1.07

	2015	2016	2017	2018
<b>Third-Party Contractor</b>				
Fatalities (#)	0	1 <sup>6</sup>	0	0
Total recordable injury frequency (TRIF)	1.05	1.02	1.14	1.60
Motor vehicle incident frequency (MVI)	1.62	1.41	1.82	1.28

## ASSET INTEGRITY

### Asset Integrity Spending

\$ million	2015	2016	2017	2018
Pipeline repairs & in-line inspections	80	67	48	47
Geotechnical	47	22	26	27
Facility integrity	5	7	8	3
<b>Total</b>	<b>132</b>	<b>96</b>	<b>82</b>	<b>77</b>

### Integrity Digs and In-Line Inspections

	2015	2016	2017	2018
Integrity digs completed (#)	687	543	296	284
In-line inspections completed (#)	108	76	91	88
In-line inspection coverage length (km)	5,040	1,570	3,440	3,328

### Preventing Third-party Damage<sup>7</sup>

	2015	2016	2017	2018
One-Calls per km (average #)	0.65	1.37	1.45	1.26

### Incidents (Spills, Releases and Significant Failures)<sup>7</sup>

	2015	2016	2017	2018
Reported significant failures (#) <sup>8</sup>	2	1	0	0
Reportable spills (#)	6	9	7	5
Released substances from reportable spills (m <sup>3</sup> )	28	32	4	8
Reportable spill intensity (m <sup>3</sup> spilled/ mboe delivered)	0.0515	0.0577	0.0066	0.0096

## GHG EMISSIONS <sup>7,9,10,11,12</sup>

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### Direct GHG Emissions<sup>13</sup>

	2015	2016	2017	2018
<b>Direct GHG Emissions (tCO<sub>2</sub>e)</b>				
Pipelines	37,201	34,576	38,879	29,397
Facilities	643,257	760,570	973,216	1,111,932
Total	680,458	795,146	1,012,095	1,141,329
<b>Direct GHG Emissions Intensity (tCO<sub>2</sub>e/BOE)</b>				
Pipelines	0.0090	0.0077	0.0100	0.0076
Facilities	0.0047	0.0055	0.0063	0.0053
Total	0.0048	0.0055	0.0064	0.0054

### Indirect GHG Emissions<sup>14</sup>

	2015	2016	2017	2018
<b>Indirect GHG Emissions (tCO<sub>2</sub>e)</b>				
Pipelines	270,796	311,776	311,979	452,971
Facilities	519,415	588,502	643,586	691,074
Total	790,211	900,278	955,565	1,144,045
<b>Indirect GHG Emissions Intensity (tCO<sub>2</sub>e/BOE)</b>				
Pipelines	0.00067	0.00075	0.00069	0.00073
Facilities	0.0038	0.0042	0.0042	0.0033
Total	0.0015	0.0016	0.0016	0.0014

## LAND USE AND BIODIVERSITY

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### Land Use and Biodiversity

	2015	2016	2017	2018
High-risk assessments completed as part of historic liability program (%)	48	94	100	100
High-risk well sites receiving reclamation certificate as part of wellsite reclamation program (%)	0 <sup>15</sup>	29	34	46

## ABORIGINAL AND TRIBAL RELATIONS

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### Environmental Technician Program Performance<sup>16</sup>

	2015	2016	2017	2018
Program Technicians trained	7	59	20	2
Program Technicians subsequently employed by band-owned businesses	2	18	41	18
Communities represented in program	2	13	15	7
Pembina projects with Technicians	1	3	5	11

### Aboriginal and Tribal Contracting and Procurement Performance

	2015	2016	2017	2018
Aboriginal and Tribal communities engaged for services	Formal tracking of Aboriginal and Tribal contracts began in 2016	28	37	36
Aboriginal and Tribal suppliers utilized		68	112	91

## COMMUNITY INVESTMENT

### Community Investment

	2015	2016	2017	2018
Value to communities (\$ millions)	5.0	6.6	6.9	11.4
Hours volunteered (#)	559	3,286	4,049	5,562
Hours per employee (#)	0.4	2.4	2.5	2.9

## WORKFORCE

### Workforce Overview<sup>2,17</sup>

	2015	2016	2017	2018
Permanent employees	1,245	1,329	1,528	1,942
Invoicing contractors <sup>18</sup>	426	417	539	690
Fixed-term employees	78	58	75	95
New hire permanent employees	231	157	287	471

### Workforce Composition <sup>2</sup>

Permanent Employees	2015	2016	2017	2018	2018 % of Workforce	Market Availability
Men	896	965	1,101	1,378	71%	69.7%
Women	349	364	427	564	29%	30.3%
Aboriginal peoples	53	57	65	78	4%	4.4%
Persons with disabilities	14	15	14	16	0.8%	8.2%
Visible minorities	130	126	145	220	11.3%	17.8%

## FINANCIAL PERFORMANCE <sup>7,19</sup>

### Company Financial Snapshot

	2015	2016	2017	2018
TSX common share trading price (\$/share) <sup>17</sup>	30.15	41.96	45.51	40.51
TSX 52-week trading range (\$/share)	43.66 - 27.75	42.73 - 32.32	46.17 - 39.04	38.49 - 47.52
Market capitalization <sup>17,20</sup> (\$ millions)	12,286	18,260	21,688	20,580
Total enterprise value <sup>17,21</sup> (\$ millions)	15,450	22,245	32,410	30,120
Common share dividend paid (\$/share)	1.79	1.89	2.02	2.23
Yield <sup>17</sup>	6.07%	4.58%	4.75%	5.63%
Corporate credit rating <sup>21</sup>	BBB/BBB	BBB/BBB	BBB/BBB	BBB/BBB

### Capital Expenditures and Acquisitions

	2015	2016	2017	2018
Capital expenditures	1,811	1,745	1,839	1,226
Acquisitions	-	566	6,400	-
<b>Total</b>	<b>1,811</b>	<b>2,311</b>	<b>8,239</b>	<b>1,226</b>

### Economic Value Generated, Distributed and Retained<sup>7</sup>

	2015	2016	2017	2018
Net revenue <sup>22</sup>	1,507	1,764	2,238	2,836
<b>Total Economic Value Generated<sup>23</sup></b>	<b>1,507</b>	<b>1,764</b>	<b>2,238</b>	<b>2,836</b>
Operating and general and administrative expenses <sup>24</sup>	276	251	263	323
Employee wages and benefits	254	299	350	420
Payments to governments <sup>25</sup>	80	100	94	123
Payments to providers of capital <sup>26</sup>	433	576	1,029	1,561
Community Investments	3	4	4	8
<b>Total Economic Value Distributed</b>	<b>1,046</b>	<b>1,230</b>	<b>1,740</b>	<b>2,435</b>
<b>Total Economic Value Retained</b>	<b>461</b>	<b>534</b>	<b>506</b>	<b>402</b>

## Definitions

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"km" means kilometres.

"m<sup>3</sup>" means metres cubed.

"mmboe" means millions of barrels of oil equivalent.

"tCO<sub>2</sub>e" means tons of carbon dioxide equivalent.

For additional definitions of terms and acronyms used in the above tables refer to Pembina's 2018 Sustainability Report.

## Footnotes:

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<sup>1</sup> Unless otherwise noted, the data reflects all Pembina majority-owned and operated assets. Assets which are jointly-owned and which Pembina does not operate are excluded. Except where specifically noted, the assets assumed by way of the acquisition of Veresen Inc., which closed on October 1, 2017, are also excluded from the reported data.

<sup>2</sup> Workforce data for 2018 is inclusive of certain assets which Pembina assumed by way of the acquisition of Veresen Inc., which closed on October 1, 2017 including Alliance Pipeline, Jordan Cove, Alberta Ethane Gathering System, and Veresen Midstream Limited Partnership.

<sup>3</sup> Total recordable injury frequency (TRIV) is defined as the number of recordable injuries per 200,000 hours of work.

<sup>4</sup> Motor vehicle incident frequency (MVI) is the number of preventable incidents per 1,000,000 kms driven.

<sup>5</sup> Industry Average based on employee data from member companies reported by the Canadian Energy Pipeline Association (CEPA).

<sup>6</sup> On April 27, 2016, a prime contractor was fatally injured while working at the Williams' Redwater Olefinic facility located in Redwater, Alberta. Press release: <http://www.pembina.com/media-centre/news-releases/news-details/?nid=135327>.

<sup>7</sup> Prior periods (2015 – 2017) have been restated from data reported in Pembina's 2018 Sustainability Report.

<sup>8</sup> Pembina uses CEPA's definition of a significant failure incident – a failure incident that includes one or more of the following: caused a serious injury or fatality, caused a liquid release of greater than 8 m<sup>3</sup> (50 US barrels), produced an unintentional ignition or fire, or occurred as a rupture.

<sup>9</sup> Pembina participates in the following applicable regulated emission reporting programs: Canadian Greenhouse Gas Emissions Reporting Program; Alberta Carbon Competitiveness Incentive Regulations; British Columbia Greenhouse Gas Emission Reporting Regulation; and the Canadian National Pollutant Release Inventory Reporting Program.

<sup>10</sup> The reported emissions are based on direct emission sources primarily using metered fuel volumes or invoiced volumes; however, in instances where metering data is not available, calculated emissions from sources were determined using industry and regulatory accepted methods.

<sup>11</sup> The revisions are the result of changes to Pembina's calculation methodology, including revisions to the underlying carbon factors and the classification of assets between the Pipelines and Facilities Divisions.

<sup>12</sup> GHG emissions data includes: i) emissions related to the Alberta Ethane Gathering System (AEGS), acquired from Veresen Inc in October 2017; and ii) emissions related to the Younger NGL Extraction Facility beginning in April 2018 when Pembina became operator of the facility.

<sup>13</sup> Direct GHG Emissions (e.g. Scope 1) sources in the reported data include emissions from operational stationary combustion equipment, fugitive component leaks, as well as flaring and venting activities at gas processing facilities, and vented emissions from storage tanks.

<sup>14</sup> Indirect GHG Emissions (e.g. Scope 2 and 3) sources in the reported data include the electrical consumption used to power natural gas and NGL processing plants and pipeline systems. Sources of indirect emissions, such as those from office buildings, fleet use and employee travel (e.g. in vehicles other than fleet vehicles or air travel) are currently not included in this report.

<sup>15</sup> Reclamation certificate reviews delayed by regulator until 2016.

<sup>16</sup> Previously referred to as the "Environmental Trainee Program".

<sup>17</sup> At December 31 each year.

<sup>18</sup> Represents invoicing contractors as of the date listed. These numbers fluctuate throughout the year based on business requirements.

<sup>19</sup>This report refers to the terms net revenue and adjusted earnings before interest, taxes, depreciation and amortization (Adjusted EBITDA), which do not have any standardized meaning under IFRS ("Non-GAAP Measures"). Please refer to "Non-GAAP Measures" in the 2018 Sustainability Report and the Company's other disclosure including the quarterly and annual Management's Discussion and Analysis available on SEDAR or at [www.pembina.com](http://www.pembina.com). This report also refers to certain other terms commonly used to satisfy sustainability reporting requirements. These terms are not necessarily used by Pembina in the management of the business.

<sup>20</sup> Market capitalization includes common shares. Total enterprise value includes common shares, convertible debentures, preferred shares and senior debt less cash.

<sup>21</sup> DBRS and S&P.

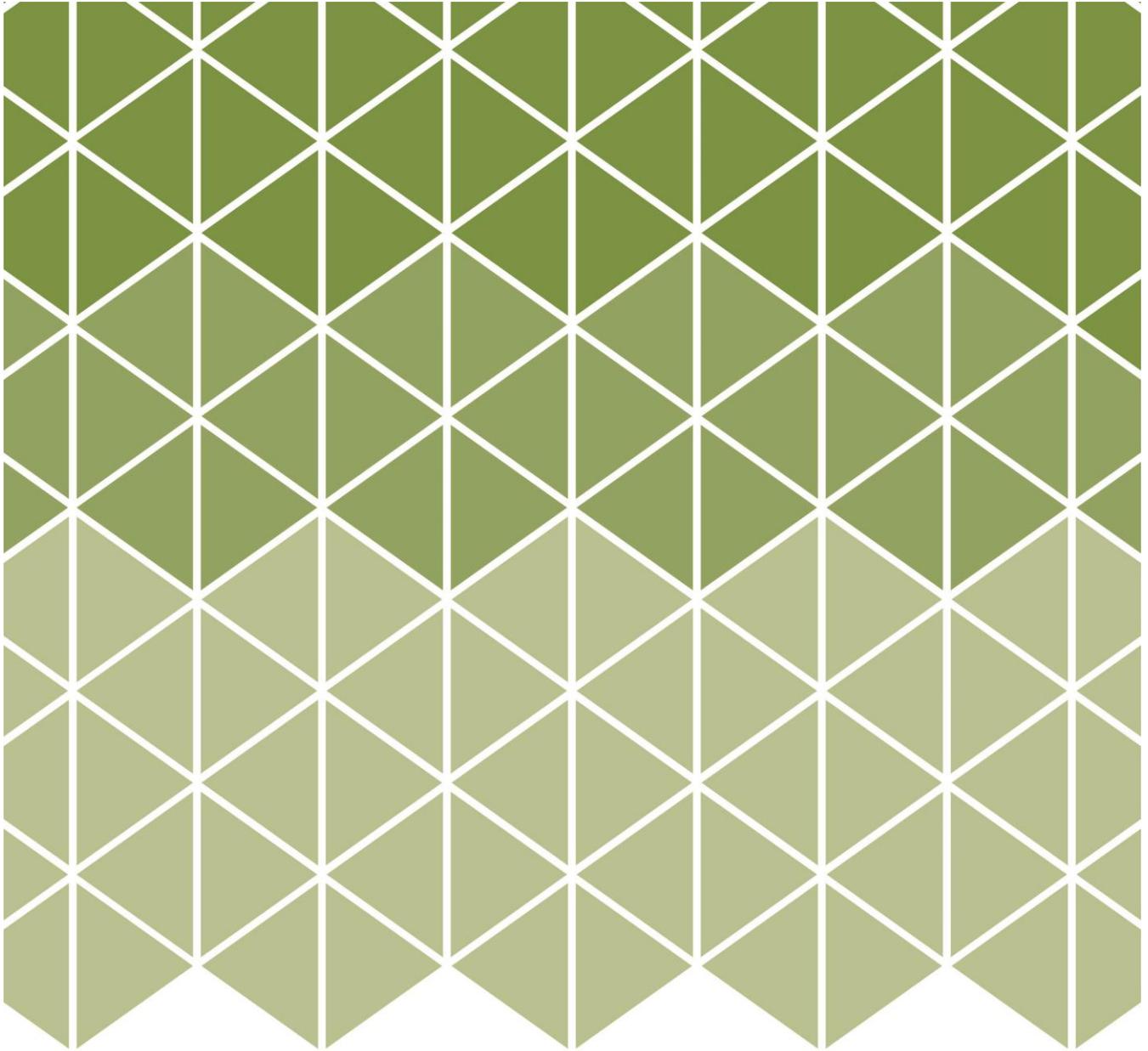
<sup>22</sup> Net Revenue represents revenue less cost of sales.

<sup>23</sup> Economic Value Generated is equivalent to Net Revenue. See "Non-GAAP Measures" in the 2018 Sustainability Report and the Company's other disclosure including the quarterly and annual Management's Discussion and Analysis available on SEDAR or at [www.pembina.com](http://www.pembina.com).

<sup>24</sup> Operating expenses plus general and administrative expenses less personnel expenses.

<sup>25</sup> Current income taxes plus property taxes.

<sup>26</sup> Dividends paid plus net finance costs plus interest paid during construction.



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