

# Pembina Pipeline Corporation

2016 INVESTOR DAY

TSX: PPL; NYSE: PBA

April 11, 2016

Building Something **Extraordinary**



# Our team presenting today



Agenda	Presenter	Time (approx.)
<b>Introduction + Strategic Overview</b>	Mick Dilger	
<b>Challenges &amp; Opportunities</b>	Panel Discussion	8:30 am – 9:30 am
<b>Market Dynamics</b>	Scott Burrows	
<i>Questions and Answers</i>		9:30 am – 9:40 am
<i>-Short Redwater time-lapse video-</i>		9:40 am – 9:45 am
<i>-Break-</i>		9:45 am – 10:00 am
<b>Crude Oil Value Chain</b>	Paul Murphy	
<b>NGL Value Chain + Extension Opportunity</b>	Stuart Taylor	
<b>Capital Program + Strong Financial Platform</b>	Scott Burrows	10:00 am – 11:10 am
<b>Conclusion</b>	Mick Dilger	
<i>Questions and Answers</i>		11:10 am – 11:30 am
<i>-Lunch-</i>		Served from 11:30 am – 1:00 pm
<i>-One-on-One Meetings-</i>		Commencing 12 noon



**Mick Dilger**

President & Chief Executive Officer



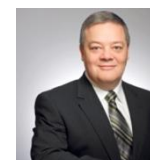
**Scott Burrows**

Vice President, Finance & Chief Financial Officer



**Paul Murphy**

Senior Vice President, Pipeline & Crude Oil Facilities



**Stuart Taylor**

Senior Vice President, NGL & Natural Gas Facilities

# Forward-looking statements and information



This presentation is for information purposes only and is not intended to, and should not be construed to constitute, an offer to sell or the solicitation of an offer to buy, securities of Pembina Pipeline Corporation ("Pembina"). This presentation and its contents should not be construed, under any circumstances, as investment, tax or legal advice. Any person accepting delivery of this presentation acknowledges the need to conduct their own thorough investigation into Pembina and its activities before considering any investment in its securities.

This presentation contains certain forward-looking statements and information that are based on Pembina's expectations, estimates, projections and assumptions in light of its experience and its perception of historical trends as well as current market conditions and perceived business opportunities. In some cases, forward-looking information can be identified by terminology such as "expects", "anticipates", "plans", "estimates", "potential", "will", "continue", "would", "could", "should", "indicate", "schedule" and similar expressions suggesting future events or future performance. In particular, this presentation contains forward-looking statements, including certain financial outlooks, pertaining to financial and business objectives, corporate strategy (capital expenditures, schedules, expected capacity, approval and contracting strategy and expectations with respect to current and potential projects), the timing of regulatory and environmental approvals, financial performance and future financing sources, the stability and sustainability of cash dividends, expansion and diversification opportunities, expectations regarding future commodity market supply,

demand and pricing and supply and demand for hydrocarbon and derivatives services. Undue reliance should not be placed on these forward-looking statements and information as they are based on assumptions made by Pembina as of the date hereof regarding, among other things, industry conditions, the availability and sources of capital, operating costs ongoing utilization and future expansion, the ability to reach required commercial agreements, and the ability to obtain required regulatory approvals. While Pembina believes the expectations and assumptions reflected in these forward-looking statements are reasonable as of the date hereof, there can be no assurance that they will prove to be correct. Forward-looking statements are subject to known and unknown risks and uncertainties which may cause actual performance and financial results to differ materially from the results expressed or implied, including but not limited to: the impact of competitive entities and pricing; reliance on key alliances and agreements; the strength and operations of the oil and natural gas industry and related commodity prices; regulatory environment; fluctuations in operating results; the availability and cost of labour and other materials; the ability to finance projects on advantageous terms; and tax laws and tax treatment.

Additional information on these factors as well as other factors that could impact Pembina's operational and financial results are contained in Pembina's Annual Information Form and Management's Discussion and Analysis, and described in our public filings available in Canada at [www.sedar.com](http://www.sedar.com) and in the United States at [www.sec.gov](http://www.sec.gov). Readers are cautioned that this list of risk

factors should not be construed as exhaustive.

The forward-looking statements contained in this document speak only as of the date of this document. Except as expressly required by applicable securities laws, Pembina and its subsidiaries assume no obligation to update forward-looking statements and information should circumstances or management's expectations, estimates, projections or assumptions change. The forward-looking statements contained in this document are expressly qualified by this cautionary statement. Readers are cautioned that management of Pembina approved the financial outlooks contained herein as of the date of this presentation. The purpose of the financial outlooks contained herein is to give the reader an indication of the value of Pembina's current and anticipated growth projects. Readers should be cautioned that the information contained in the financial outlooks contained herein may not be appropriate for other purposes.

In this presentation, we refer to certain financial measures such as EBITDA, total enterprise value ("TEV") and operating margin that are not determined in accordance with International Financial Reporting Standards ("Canadian GAAP"). For more information about these non-GAAP, additional GAAP and other measures, see the Appendix to this presentation. All financial information is expressed in Canadian dollars unless otherwise specified.



# Introduction + Strategic Overview

Mick Dilger



# Pembina remains well positioned in a rapidly changing world



## Investment highlights

- ✓ **Integrated, strategic and difficult to replicate asset base largely supported by long-term, fee-for-service contracts**
- ✓ **Industry leading record of safe, on-time and on-budget, large-scale operations and project execution for our customers**
- ✓ **Significant near-term secured growth projects coming into service (~\$5 billion by 2017) → generating \$600 – \$950 million of incremental EBITDA<sup>(1)</sup>**
- ✓ **Significant liquidity (\$2.5 billion) plus proven access to capital creates a strong foundation for today's environment**
- ✓ **Visibility to large-scale growth opportunities across businesses and longer-term value chain extension potential**
- ✓ **Significant shareholder value creation over the long-term → proven track record of growing dividends and cash flow on per share basis**



**Pembina's strategy has delivered stable and attractive results in both positive and negative economies**

<sup>(1)</sup> Based on approximately \$5 billion of committed capital projects with in-service dates between 2016 and end of 2017. Upper end of range depending on utilization above take-or-pay levels and commodity prices. See "Non-GAAP, additional GAAP and other measures." & "Forward-looking statements and information."

For our stakeholders to view us as being the leader in the Canadian energy infrastructure sector

## Our "Stand":

1. Ensure no harm to people or the environment
2. We are the "first choice" by customers to cost effectively and reliably connect them to markets
3. We provide sustainable industry-leading returns to our shareholders
4. We have a trustworthy, respectful, collaborative and fair work culture making us the "employer of choice"
5. We set the standard for harmonious relationships with all of our stakeholders

This is the "Purpose" of Pembina

# We remain confident in our strategy



## Financial Objective (Stand-Item #3)

We provide sustainable industry-leading returns to our shareholders

### Strategy:

*Preserve value* by providing safe, cost-effective, reliable services

*Diversify our asset base* along the hydrocarbon value chain to provide integrated service offerings 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

*Maintain a strong balance sheet* with prudent financial management in all business decisions



Strategy drives long-term thinking resulting in stable and growing returns

# Pembina's 'guard rails' through 2018



## Overview

## Current Positioning

1

Maintain target of 80% fee-for-service contribution to EBITDA

On-track for 80% - 85% fee-for-service EBITDA

2

Maintain 'strong' BBB credit rating

Financial metrics remain within BBB range with both agencies recently confirming Pembina's ratings

3

Target 75% credit exposure from investment grade and secured counterparties

Currently ~80%<sup>(1,2)</sup> of credit exposure is from investment grade (including split ratings) and secured counterparties

4

Target <100% payout of fee-for-service distributable cash flow by 2018

Supported by 2016 and 2017 fee-for-service assets going into service

5

Deliver on current sector leading secured growth

Sharp focus on on-time & on-budget project execution and strategic acquisitions & developments to secure core area

Pembina's 'guard rails' determine how we evaluate possible strategic directions

<sup>(1)</sup> Based on gross 60-day exposure. Counterparty ratings are representative of the counterparties current rating as of March 2016. Non-investment grade exposure that is secured with letters of credit from investment grade banks is considered investment grade.

<sup>(2)</sup> Split rated denotes a counterparty that has an investment grade rating by one rating agency and a non-investment grade rating by another rating agency. See "Non-GAAP, additional GAAP and other measures." & "Forward-looking statements and information."



# Pembina's strategic investment criteria



- 1 Mitigate risk even if the results have modest returns
- 2 Longevity (capture long-life economic hydrocarbon reserves)
- 3 Ensure competitive advantage
- 4 Exploit scale / resource intensity
- 5 Ensure technical competency exists
- 6 Integration with the existing value chain
- 7 Maintain or enhance customer profitability
- 8 Manage foreseeable risks
- 9 Maintain or enhance reputation
- 10 Enhance business, customer and geographic diversification

How Pembina ranks opportunities to ensure projects meet our strategy

# Actionable short-term and longer-term strategies

All are subject to Pembina's Guard Rails and Strategic Investment Criteria



## Short-term strategy

### Execute

Target: cost savings of 5 percent on \$5 billion → up to \$250 million of savings<sup>(1)</sup>

### Exploit

Fully exploit existing and under construction asset base for up to \$350 million of incremental EBITDA<sup>(2)</sup>

### Acquire

Consistent focus on 'in-strategy' acquisition opportunities

## Longer-term strategy

### Deploy

Target projects/platforms with significant ongoing capital deployment opportunities

### Extend

Seek value chain extension opportunities, new emerging growth platforms, and expansions

### Export

Target projects/platforms which improve producer netback value

Short and long-term strategies in place to maximize ongoing shareholder value

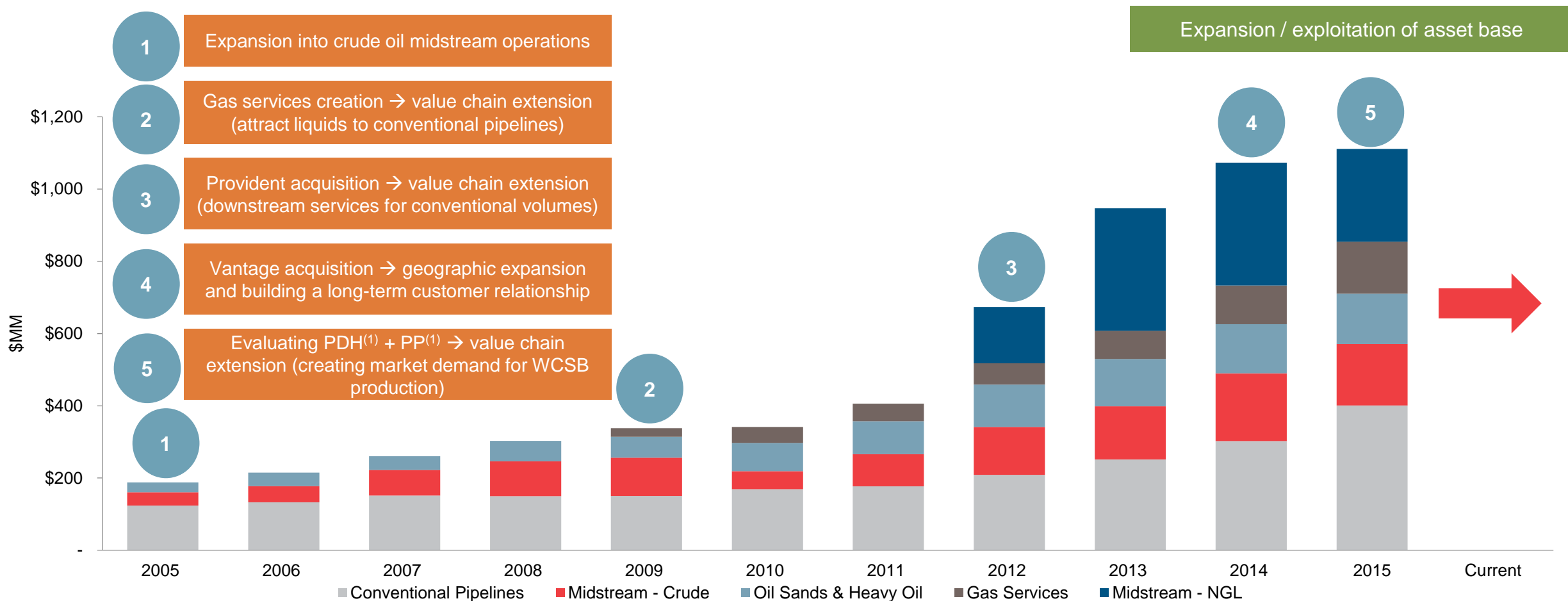
<sup>(1)</sup> Assuming 5% capital expenditure savings on the remaining approximately \$5 billion associated with Pembina's secured capital program.

<sup>(2)</sup> Based on approximately \$5 billion of committed capital projects with in-service dates between 2016 and end of 2017. Reaching this EBITDA level depends on utilization above take-or-pay levels and commodity prices. See "Non-GAAP, additional GAAP and other measures." & "Forward-looking statements and information."

# A proven history of strategic expansions along the value chain



Pembina's operating margin (\$MM)



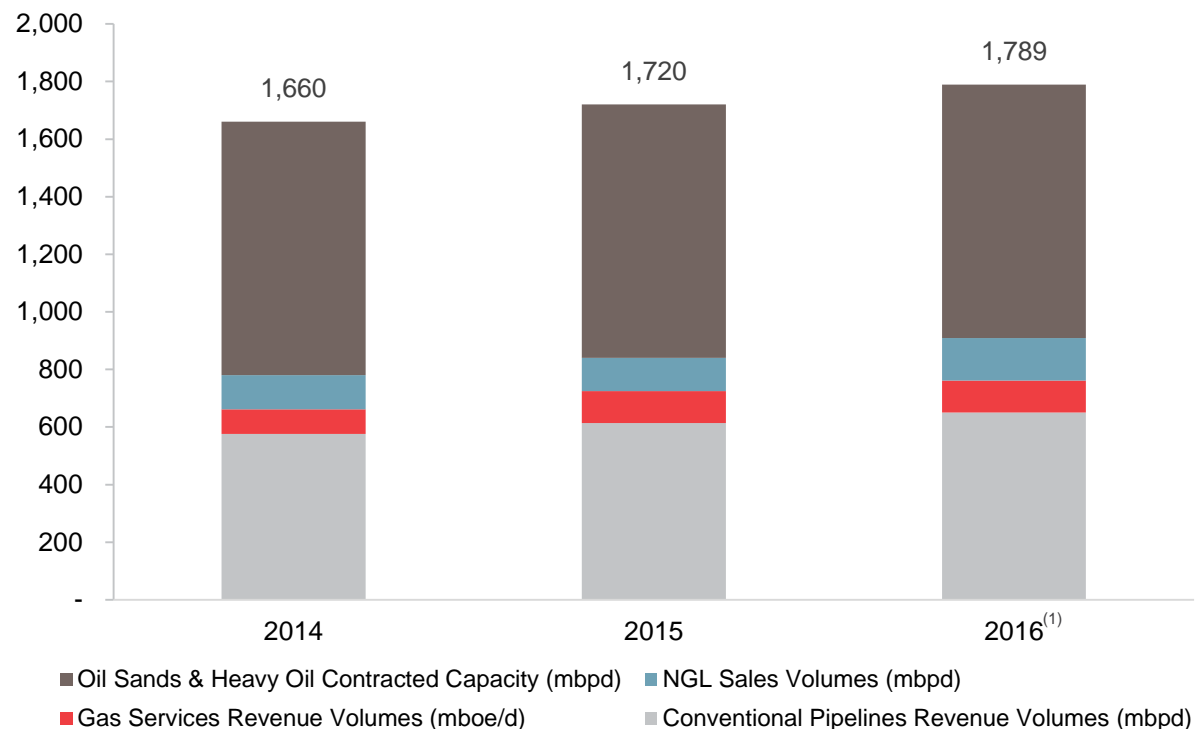
Pembina has driven significant shareholder value through expansions in, and along, the value chain

<sup>(1)</sup> On April 11<sup>th</sup>, 2016, Pembina announced a joint feasibility study to evaluate the development of an integrated propane dehydrogenation ("PDH") and polypropylene ("PP") facility. See "Non-GAAP, additional GAAP and other measures." & "Forward-looking statements and information."

# Our strategy continues to work well

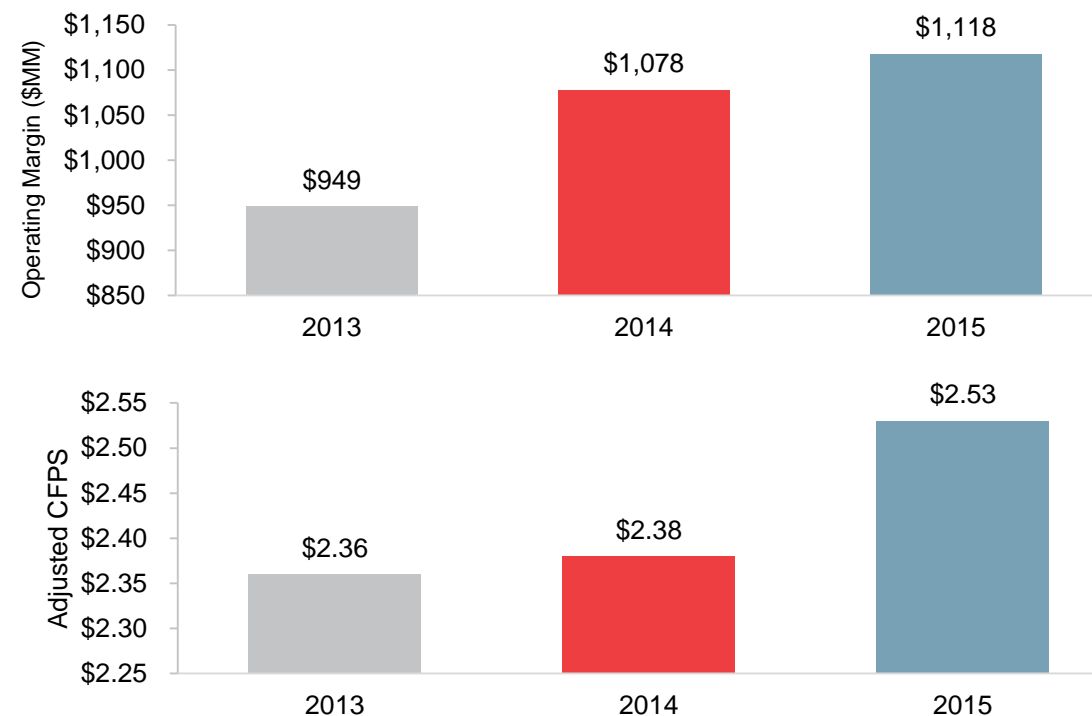


## Volumes continue to increase...



Record volumes across the value chain → in spite of significant declines in underlying commodity prices

## As does financial performance



Commissioning numerous large-scale fee-for-service assets continues to increase the resilience of Pembina's business

In spite of a challenging macro backdrop, Pembina had a very successful 2015

<sup>(1)</sup> 2016 volumes as of the end of February.  
See "Non-GAAP, additional GAAP and other measures."



# Challenges & Opportunities

Panel Discussion



# How's Pembina's strategy holding up? Any changes required?

(Frequently asked questions over the past 12 months)



1

Are your customers profitable in this commodity pricing environment?

2

Are volumes on your pipeline systems / gas plants declining?

3

What is your direct exposure to volatility in commodity prices?

4

What is your customer credit exposure profile?

5

Can you execute on such a large portfolio of secured growth projects?

6

Can you continue to grow? What are your thoughts on M&A?

7

You have a large capital program remaining. Do you have the access to capital to fund it?

8

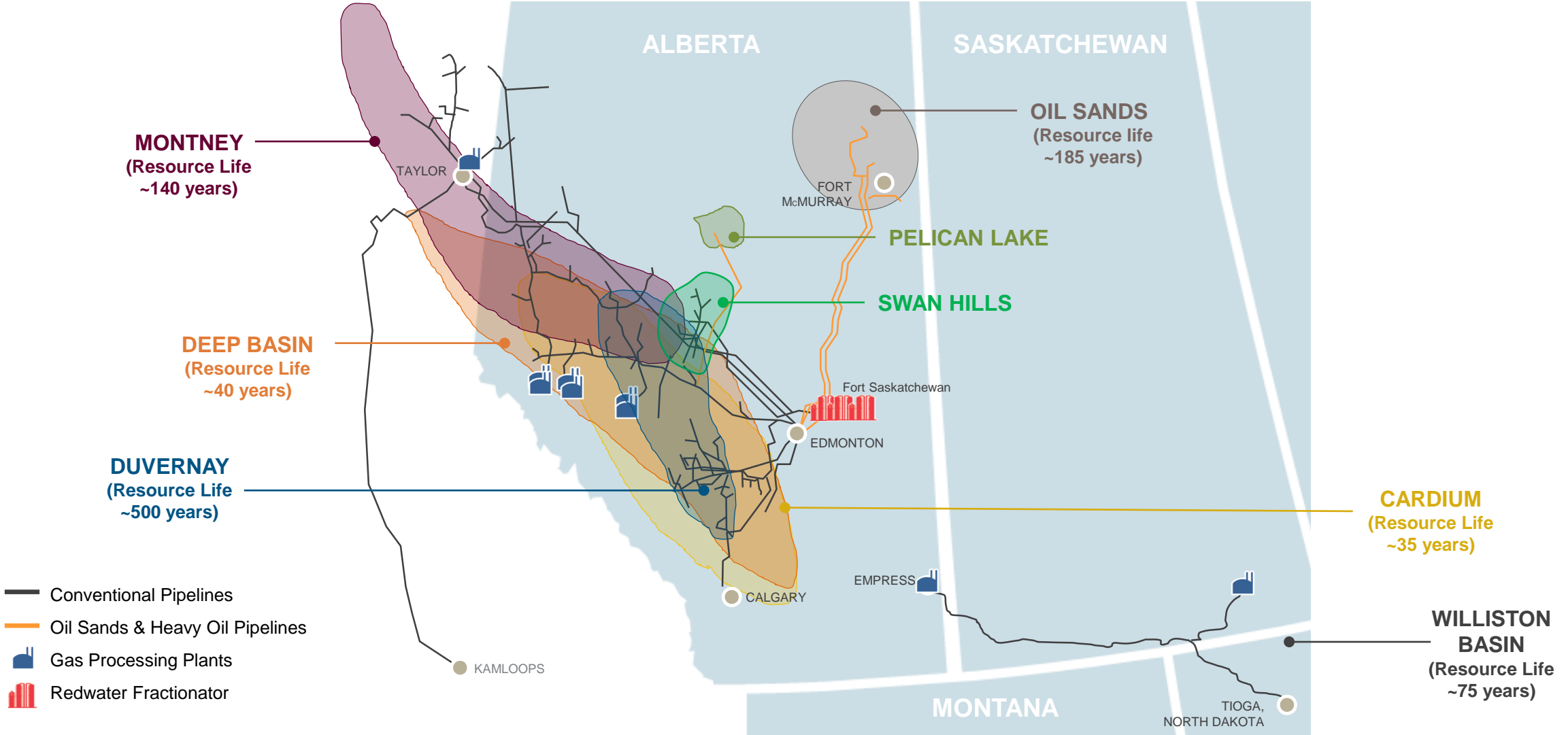
How is your balance sheet?

9

What is the latest update on the Phase III project?

In summary → how are you managing in this sharp downturn in energy markets?

# 1 Our business operates in prolific geology

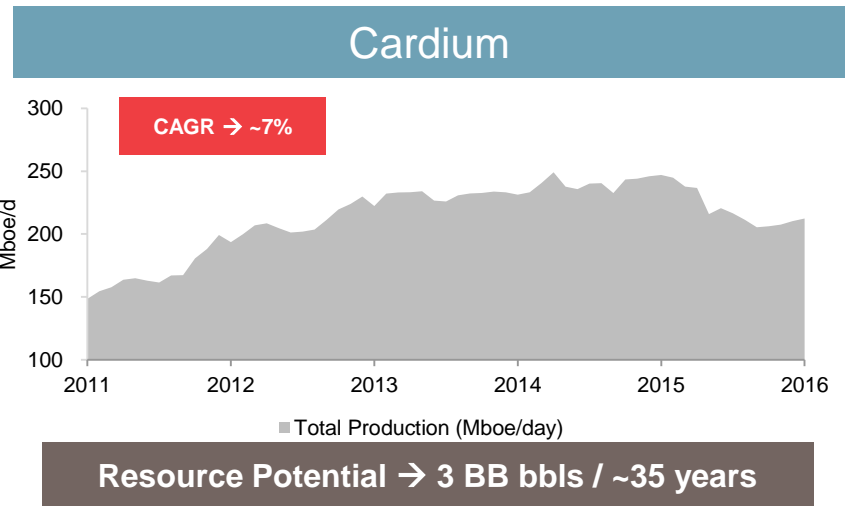
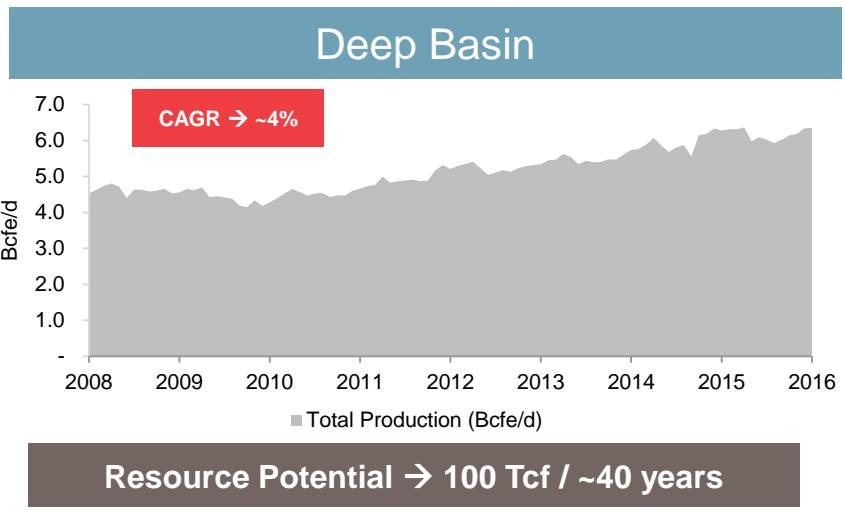
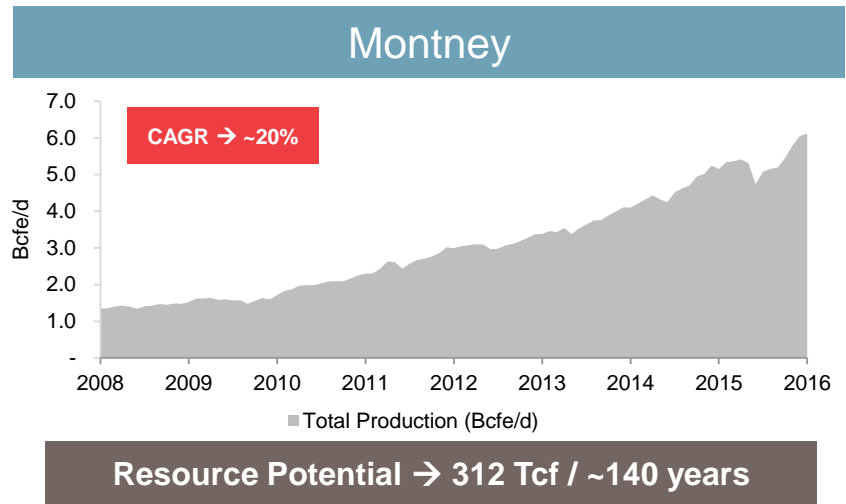
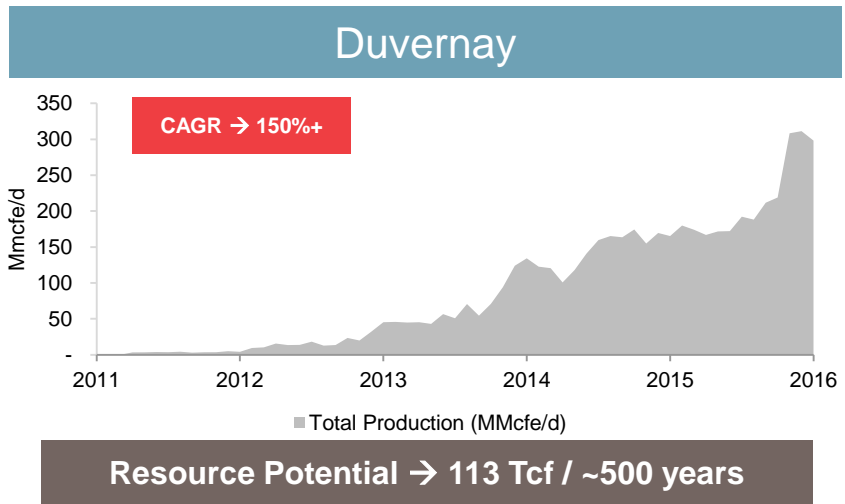
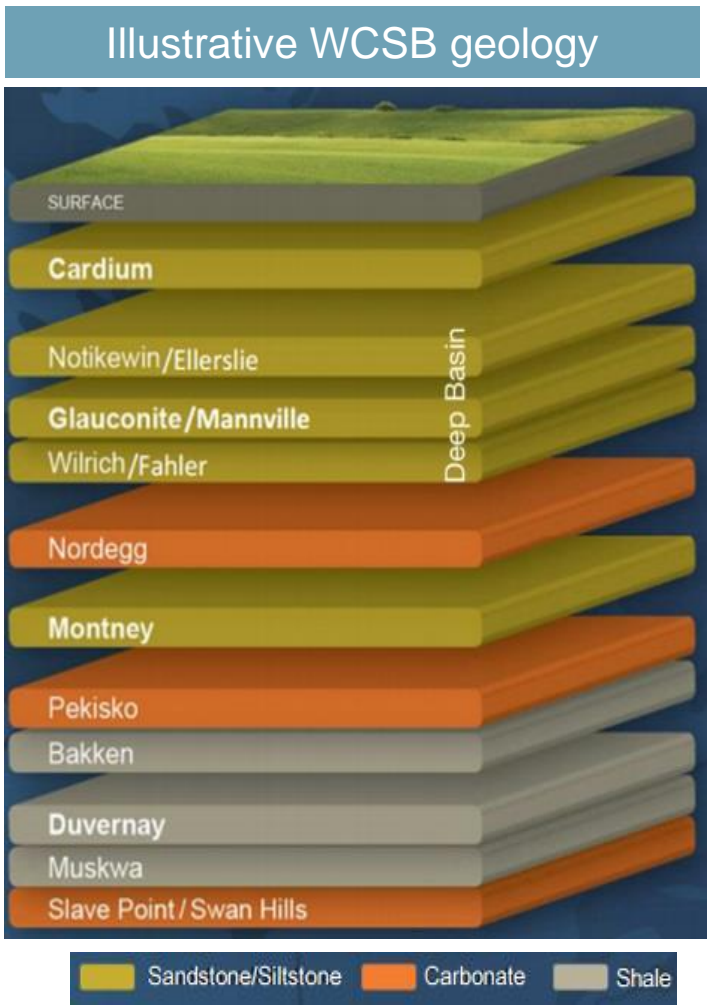


Strong franchise areas create competitive advantages supported by long-life, economic hydrocarbon reserves

Map for illustrative purposes only.  
See "Forward-looking statements and information."

1

# Customer considerations → development of the WCSB continues for key areas

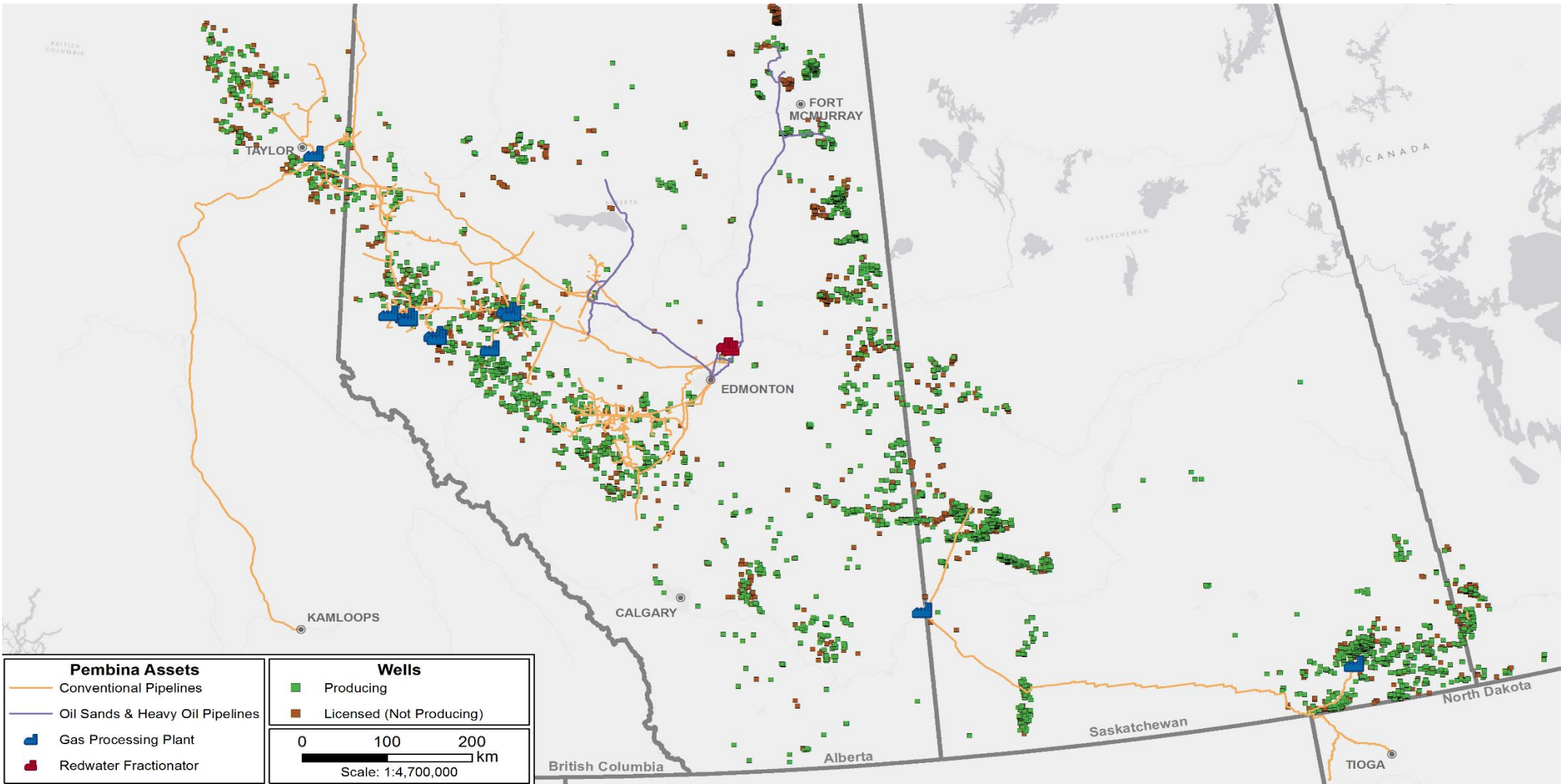


WCSB multi-zone geology provides world-scale resource potential



1

# Customer considerations → newly drilled or licensed wells in the WCSB



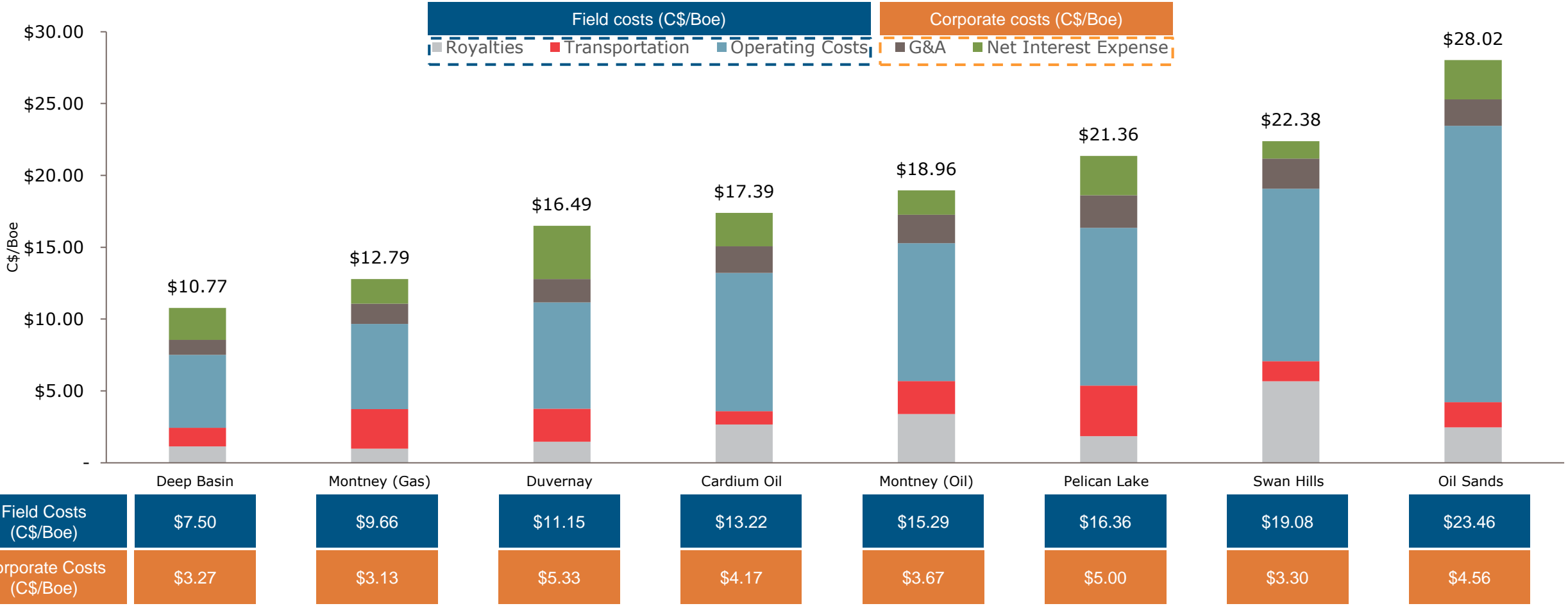
Producers continue to drill cautiously and invest given supportive geology

Source: GeoScout. Map illustrates newly spud or licensed wells from March 1, 2015 to January 1, 2016.

# 1 Customer considerations → cash costs of 'Pembina' plays



Indicative cash operating cost analysis by play type (Q4 2015) (C\$/Boe)<sup>(1)</sup>



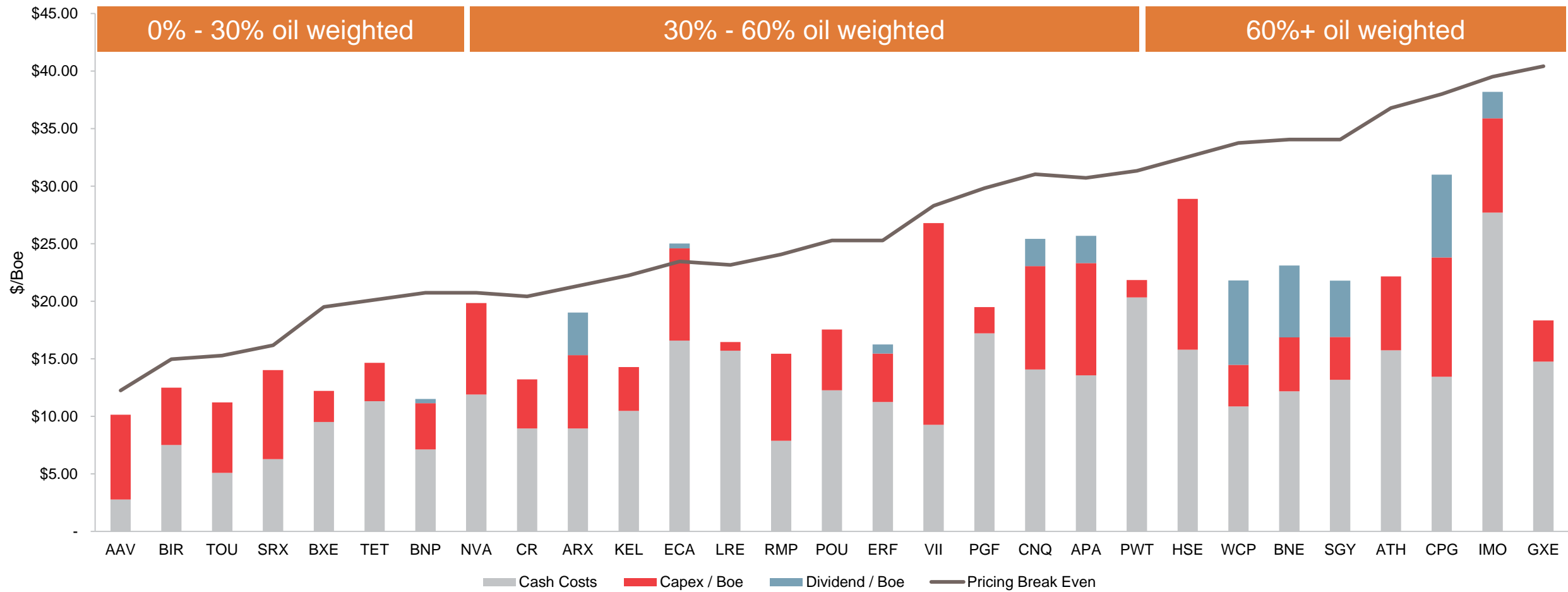
Low cash operating costs support the resiliency of key resource plays Pembina provides service to

<sup>(1)</sup> Based on Q4 2015 disclosure of CIBC World Markets research coverage group. Figures based on average indicative operating costs before hedging. Source: CIBC World Markets.

# 1 Customer considerations → cash costs of 'Pembina' customers



Illustrative cash costs vs. revenues at forward strip pricing by customer<sup>(1)</sup>



Pembina's customers continue to pull multiple levers to manage balance sheet and capital requirements

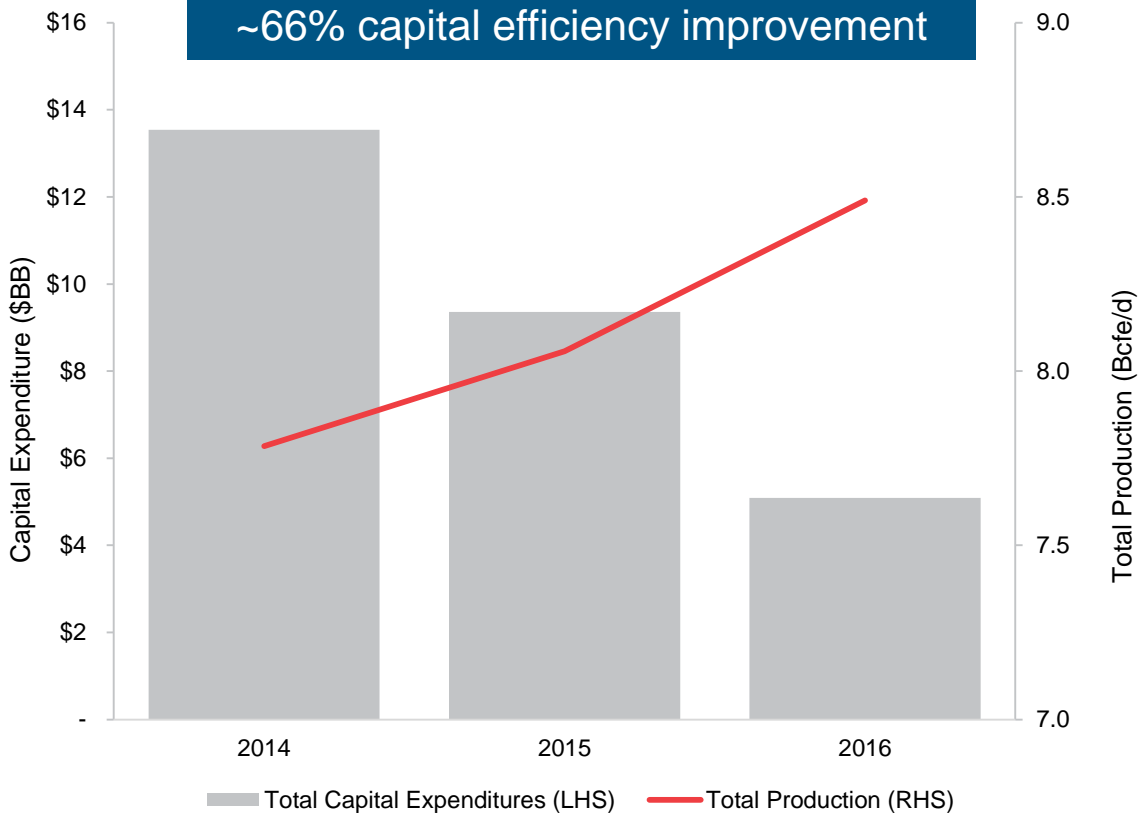
<sup>(1)</sup> Forward pricing based as of February 2016 (WTI US\$36.09, NYMEX natural gas US\$2.20/MMcf, CAD/USD \$0.72).  
Source: Bloomberg, Peters & Co. All producer data as of February 2016.

# 1 Customer considerations → driving capital efficiency



## Gas weighted producers

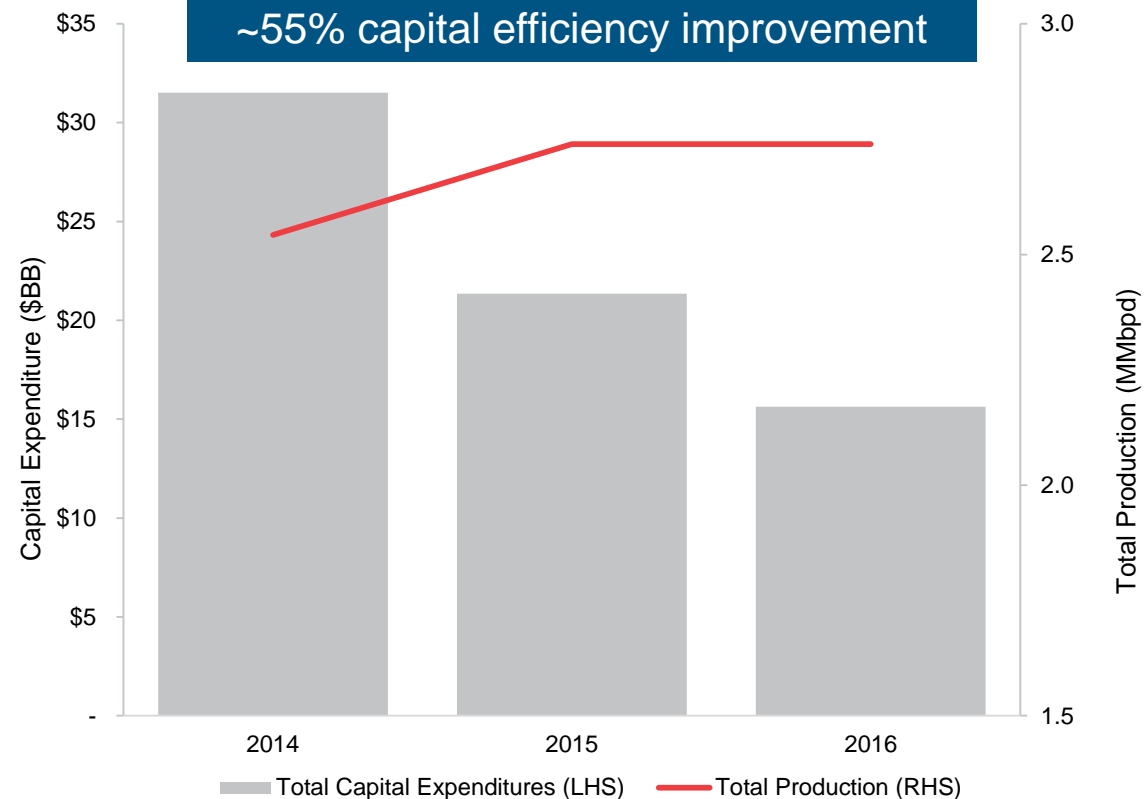
~66% capital efficiency improvement



Total production growth from ~7.8 bcf/d to ~8.5 bcf/d

## Oil weighted producers

~55% capital efficiency improvement



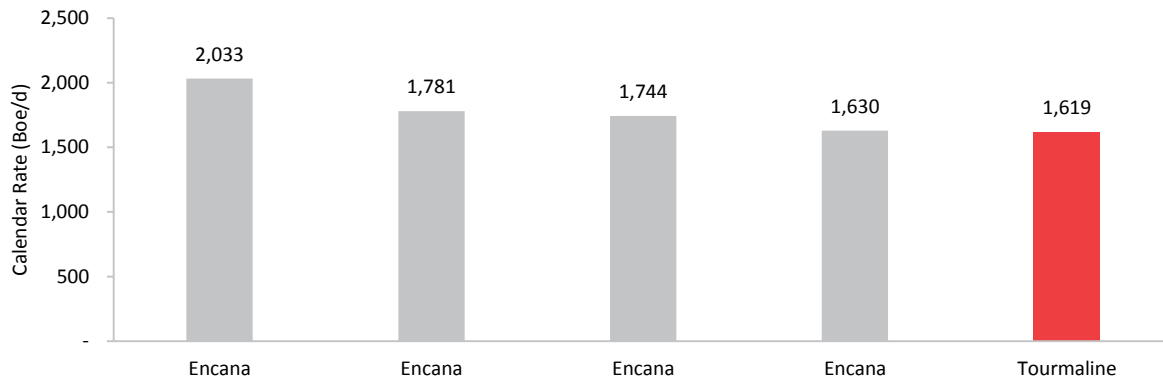
Total production growth from ~2.5 mmbpd to ~2.7 mmbpd

Production continues to increase despite significantly reduced capital expenditures

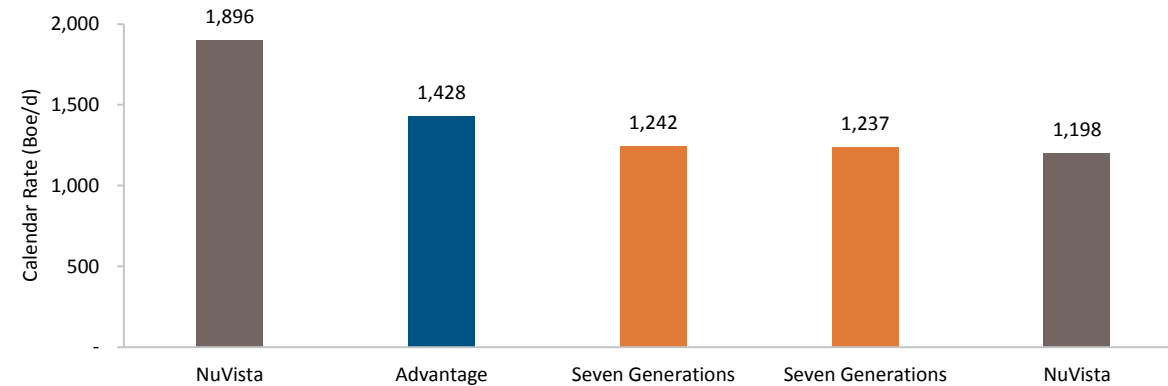
# 1 Customer considerations → best wells in 2015, by area



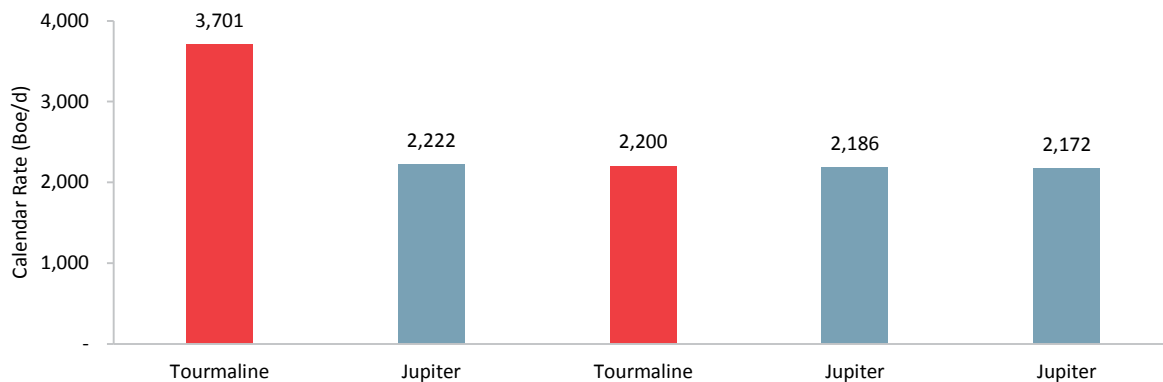
### Top 5 British Columbia Montney wells drilled in 2015



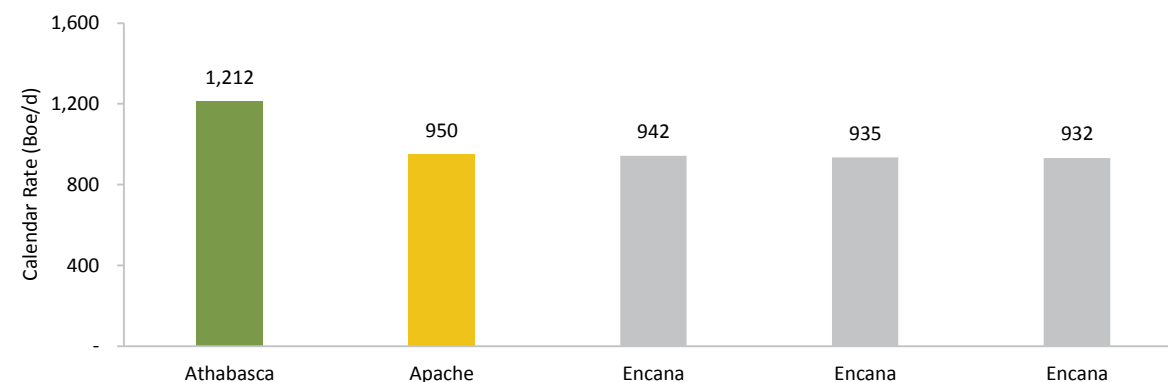
### Top 5 Alberta Montney wells drilled in 2015



### Top 5 Deep Basin wells drilled in 2015

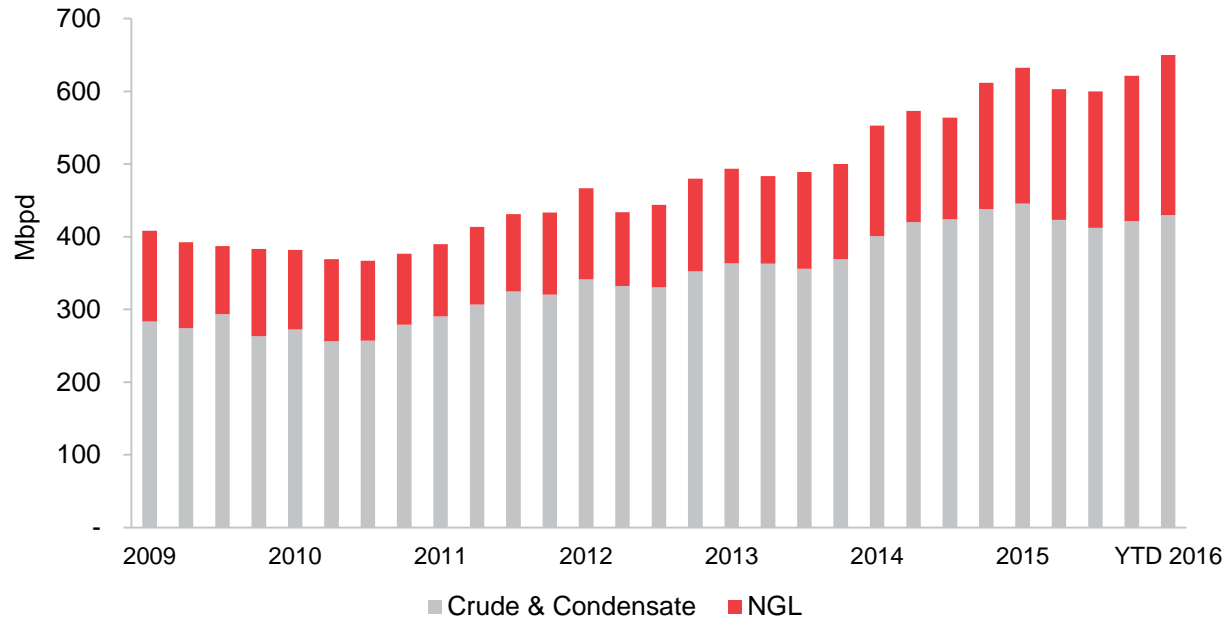


### Top 5 Duvernay wells drilled in 2015

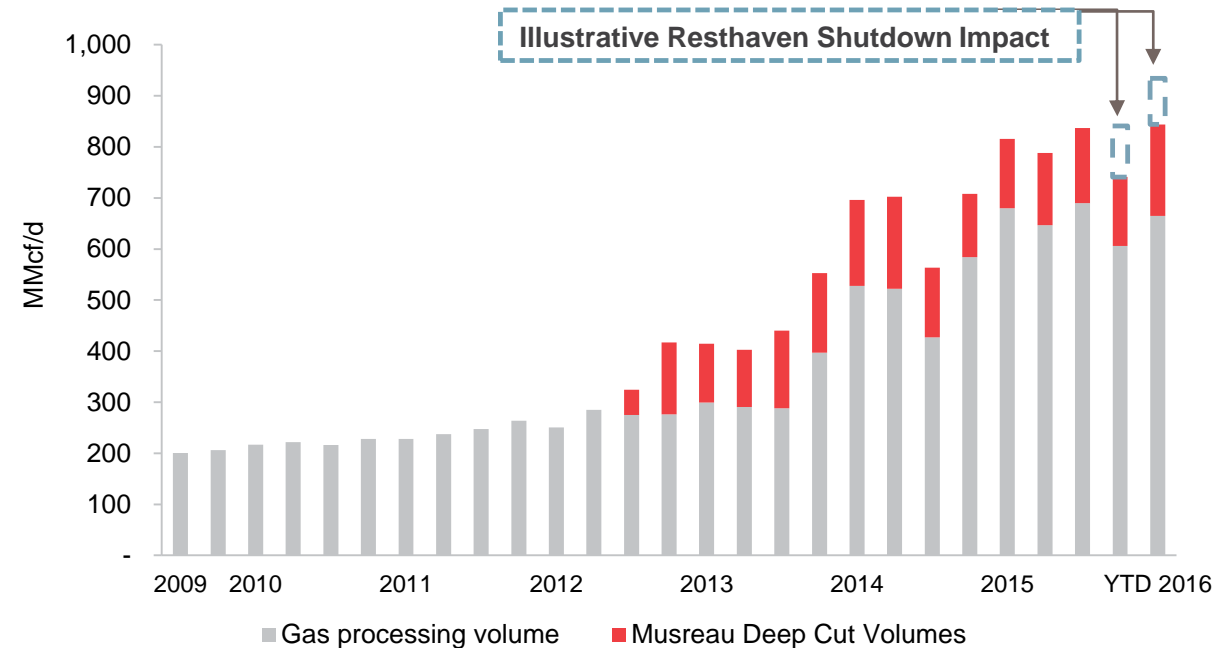


Tourmaline
Encana
Jupiter
NuVista
Advantage
Seven Generations
Athabasca
Apache

Pembina's customers continue to see acceptable drilling results resulting in stable + growing volumes

Conventional Pipelines physical volumes<sup>(1)</sup>

- Conventional Pipelines physical volumes remain strong in 2016
- Average YTD 2016 physical volumes are 650 mbpd<sup>(1)</sup>

Gas Services physical volumes<sup>(1,2)</sup>

- Gas Services physical volumes remain strong in 2016
  - Average YTD 2016 physical volumes over 900 MMcf/d<sup>(1)</sup>

Pembina's physical volumes have grown as expansions have come into service

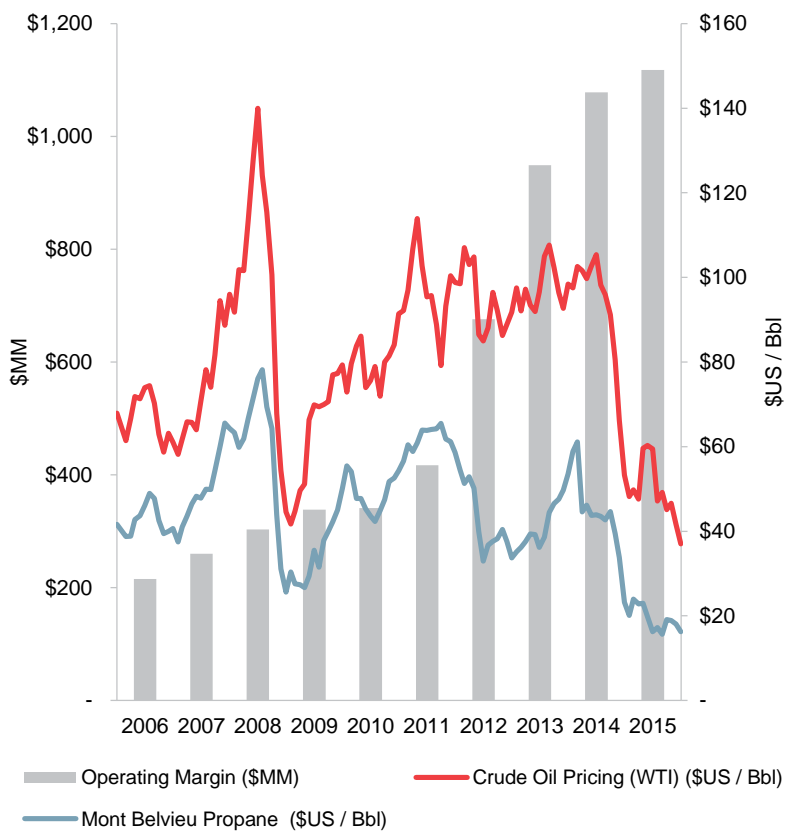
<sup>(1)</sup> Year-to-date physical volumes as of February 2016. Physical volumes may vary as compared to reported revenue volumes.

<sup>(2)</sup> Musreau deep cut volumes are not included in Pembina's reported Revenue Volumes, as those volumes are counted when they are processed through the shallow cut portion of the plant. Deep cut volumes are highlighted here as a more representative indication of total physical volumes in Pembina's Gas Services business. See "Non-GAAP, additional GAAP and other measures." & "Forward-looking statements and information."

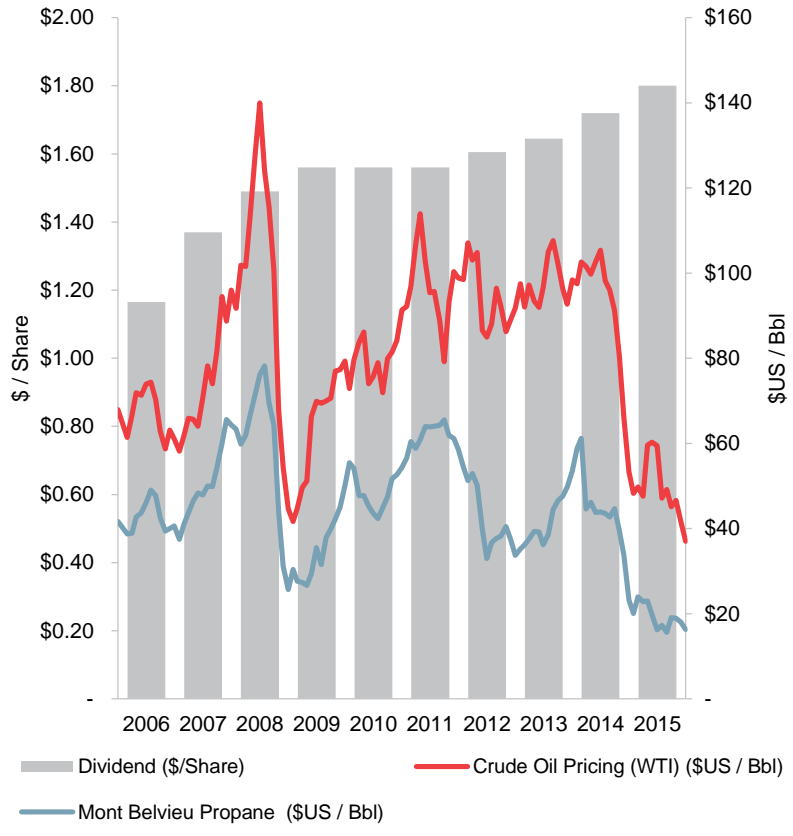
# 3 Commodity price considerations → impact of pricing downturn



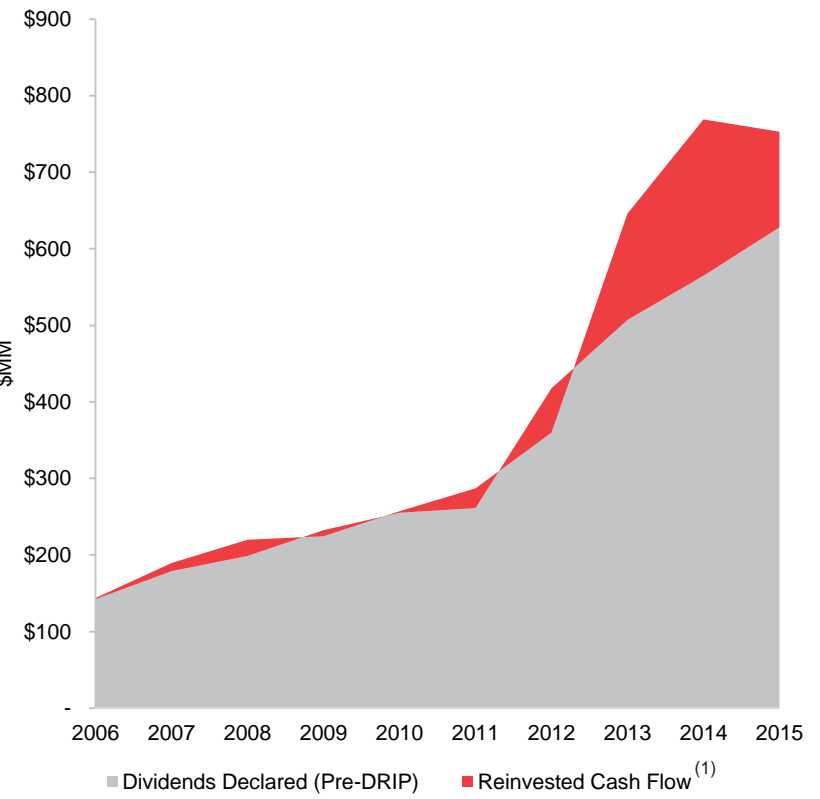
## Sustained financial performance



## Long-term record of dividend growth



## Growing dividends and funding growth



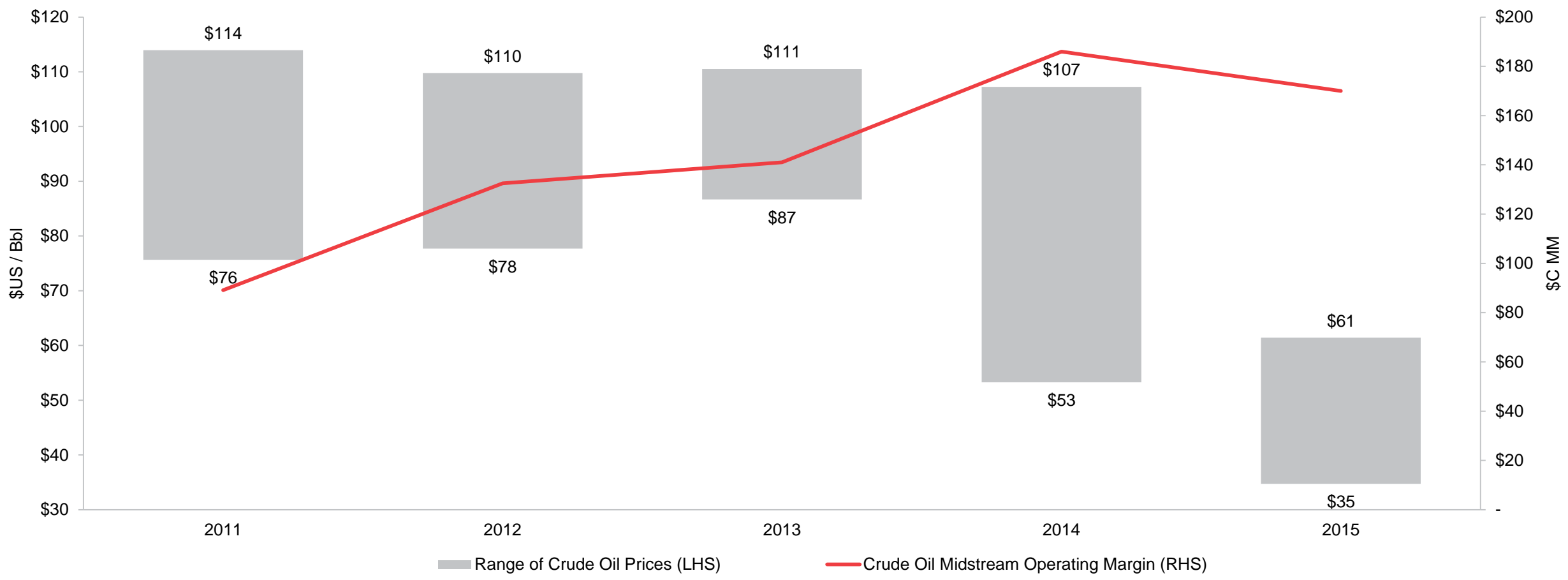
Regardless of commodity price environment, Pembina's business has been resilient

<sup>(1)</sup> Reinvested cash flow defined as cash flow from operations less preferred share dividends.  
Source: Bloomberg. See "Non-GAAP, additional GAAP and other measures."

# Commodity price considerations → crude oil pricing impact on Pembina's Crude Oil Midstream business



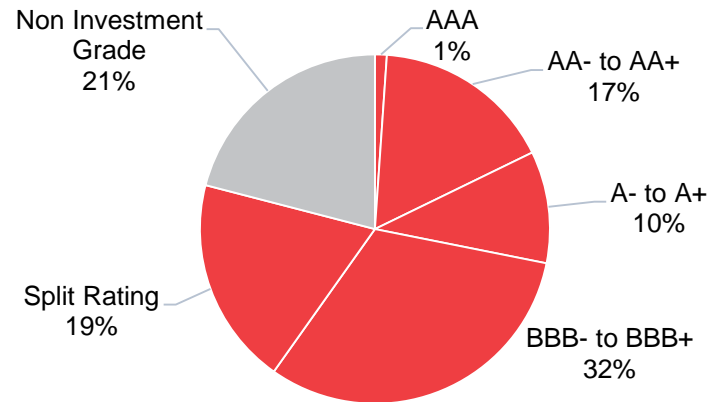
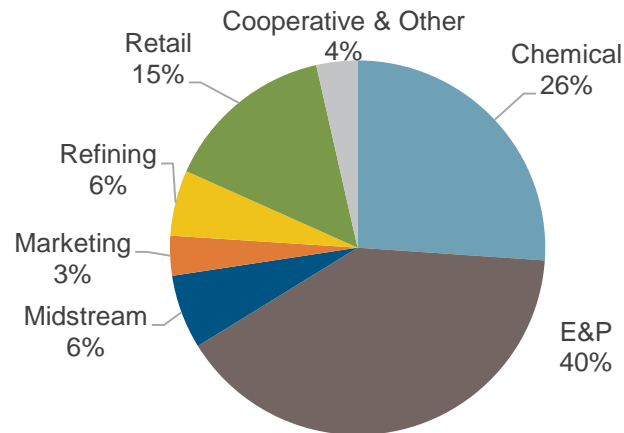
Historical WTI pricing vs. Crude Oil Midstream operating margin



Diversity of Pembina's crude oil midstream opportunity matrix has provided a growing contribution in-spite of commodity price environment

Source: Bloomberg. See "Non-GAAP, additional GAAP and other measures."



60 day credit exposure<sup>(1,3)</sup>Non-investment grade & split rated<sup>(3)</sup> counterparty overview

## Additional credit exposure considerations

- Overall 60 day credit exposure:
  - 60% with investment grade counterparties and 19% with split rated<sup>(3)</sup> counterparties
- Assess all counterparties during on-boarding process and actively monitor credit limits and exposures across the business
- Non-investment grade counterparties may be required to provide one of the following<sup>(2)</sup>:
  - Parental guarantee, letter of credit, pre-payment, cash deposit
- Pembina currently has over 200 counterparties of varying operational scope and financial size
- Non-investment grade and split rated counterparty exposure is diversified among various industries

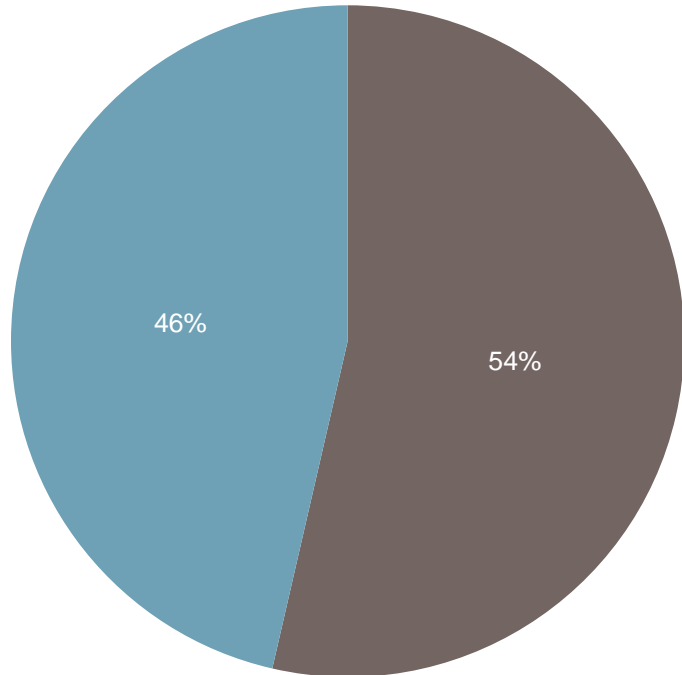
## Low-risk and diverse counterparty exposure

<sup>(1)</sup> Based on gross 60-day exposure. Counterparty ratings are representative of the counterparties current rating as of March 2016. Non-investment grade exposure that is secured with letters of credit from investment grade banks are considered investment grade.

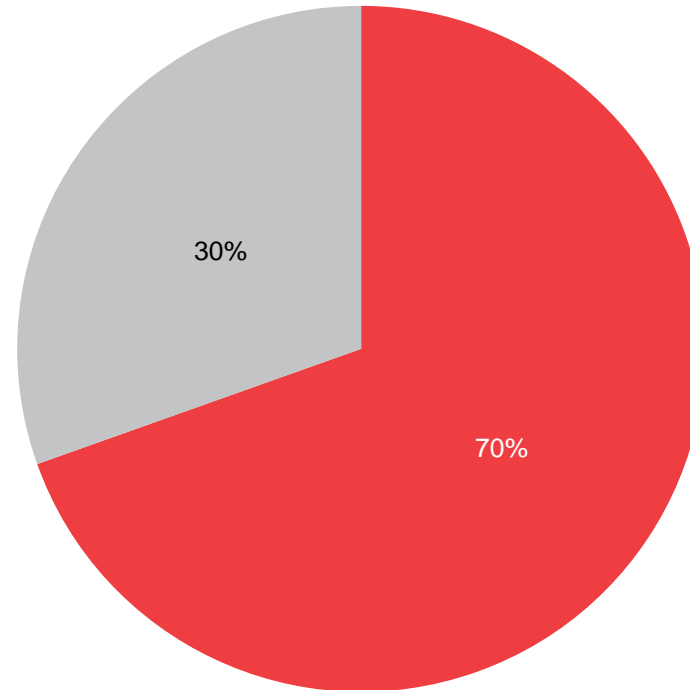
<sup>(2)</sup> Depending on financial materiality, Pembina uses its discretion regarding requirements for non-investment grade counterparties.

<sup>(3)</sup> Split rated denotes a counterparty has an investment grade rating by one rating agency and a non-investment grade rating by the other rating agency.

See "Non-GAAP, additional GAAP and other measures." & "Forward-looking statements and information."

Top 10 counterparty exposure out of total exposure<sup>(1)</sup>

■ Top 10 counterparty exposure ■ Remaining exposure

Top 10 counterparty exposure<sup>(1)</sup>

■ Investment grade ■ Split rated<sup>(3)</sup>

Top 10 counterparty credit ratings<sup>(2)</sup>

Counterparty	Credit rating
Counterparty #1	BBB- / Ba2 (split rated)
Counterparty #2	BBB+ / Baa3
Counterparty #3	AAA / AA+
Counterparty #4	BBB / Ba2 (split rated)
Counterparty #5	BBB+ / A3
Counterparty #6	AA (secured by letter of credit)
Counterparty #7	A- / A2
Counterparty #8	A+ / Aa1
Counterparty #9	BBB / Baa2
Counterparty #10	A- / Baa1

Pembina's largest counterparty exposure is predominantly with investment grade organizations

<sup>(1)</sup> Based on gross 60-day exposure. Counterparty ratings are representative of the counterparties current rating as of March 2016. Non-investment grade exposure that is secured with letters of credit from investment grade banks are considered investment grade.

<sup>(2)</sup> Credit ratings from S&P, Moody's or DBRS (shown as S&P equivalent), as applicable, as of March 2016.

<sup>(3)</sup> Split rated denotes a counterparty has an investment grade rating by one rating agency and a non-investment grade rating by the other rating agency.

See "Non-GAAP, additional GAAP and other measures." & "Forward-looking statements and information."

Project	Capital Cost (\$MM)	Date in-service	Completed on-time	Completed on-budget	Safety metric <sup>(1)</sup>
<b>Heavy Oil &amp; Oil Sands</b>					
Nipisi & Mitsue	\$400	August 2011	Mitsue: ahead of schedule Nipisi: on-time	Under budget by \$40 million	1,100,000+ man hours & 8,400,000+ km travel with 0.17 contractor lost-time injury frequency <sup>(1)</sup>
<b>Conventional</b>					
Phase I Mainline Expansion (LVP/HVP)	\$135	December 2013	On-time	On-budget	320,000+ man hours & 3,200,000+ km travel with zero contractor lost-time injury frequency <sup>(1)</sup>
Simonette - Fox Creek	\$115	August 6, 2014	On-time	On-budget	300,000+ man hours & 2,200,000+ km travel with 1.15 contractor lost-time injury frequency <sup>(1)</sup>
Phase II Mainline Expansion (LVP/HVP)	\$650	April & September 2015	Slightly delayed	On-budget	1,400,000+ man hours & 9,700,000+ km travel with 0.13 contractor lost-time injury frequency <sup>(1)</sup>
<b>Gas Services</b>					
Saturn I	\$200	Late-October 2013	On-time	On-budget	500,000+ man hours & 150,000+ km travel with zero contractor lost-time injury frequency <sup>(1)</sup>
Musreau II	\$97	December 2014	Ahead of schedule	Under budget by \$3 million	200,000+ man hours & 1,800,000+ km travel with zero contractor lost-time injury frequency <sup>(1)</sup>
SEEP	\$110	Late-August 2015	On-time	Under budget by \$10 million	100,000+ man hours & 1,000,000+ km travel with zero contractor lost-time injury frequency <sup>(1)</sup>
Saturn II	\$170	Late-August 2015	On-time	Under budget by \$20 million	500,000+ man hours & 150,000+ km travel with zero contractor lost-time injury frequency <sup>(1)</sup>

**Pembina employees have achieved zero lost time incidents from 2014 to date while working over 5.1 million hours**

<sup>(1)</sup> Project metrics for man hours, kilometers driven and lost-time injuries are based on contractors or sub-contractors only. Pembina employees have achieved zero lost-time injuries consecutively from 2014 to 2015 working over 5.1 million hours. See "Non-GAAP, additional GAAP and other measures." & "Forward-looking statements and information."

- **~\$1.3 billion of strategic, largely fee-for-service assets were placed in service in 2015**
- Throughout 2015, Pembina commissioned numerous large-scale infrastructure projects across our business

## Phase II Expansion

- 108 mbpd expansion of Pembina's conventional pipeline system
- Total investment of ~\$650 million
- Completed on-budget (one quarter late)
- Secured by firm service contracts, largely 75% take-or-pay, with ~40 customers
- LVP portion of Phase II was commissioned in April and HVP portion of Phase II was commissioned in September

## Saturn II

- 200 MMcf/d deep cut gas processing facility with 12,500 bpd of liquids extraction capacity (depending on gas composition)
- Identical to Pembina's Saturn I facility
- Total investment of ~\$150 million
- Completed on-time and under budget by ~\$20 MM
- Commissioned in late August
- Secured by long-term fee-for service contracts, with take-or-pay provisions, by a leading Canadian independent E&P company

## Resthaven Gas Gathering Pipeline

- 28 kilometer 12" gas gathering pipeline that will connect the customer's condensate recovery plant
- Total investment of ~\$75 million (~\$10 million over-budget)
- Secured by a fixed return contract with a private E&P company
- Placed into service in September
- Provides volumes for both the existing Resthaven facility as well as the expansion

## Saskatchewan Ethane Extraction Plant (SEEP)

- ~60 mmcf/d deep cut processing facility with ~4,500 bpd of ethane fractionation capacity (depending on gas composition)
- Total investment of ~\$100 million
- Completed on-time and under budget by ~\$10 MM
- Commissioned in late August
- Production from a large-scale Saskatchewan focused E&P company

**Overall, delivered our projects on-time and on-budget**

## Commissioning update

- Edmonton North Terminal expansion
  - 550 mbbls of additional storage capacity
  - Project completed ahead of schedule and on-budget
- Resthaven Expansion
  - 100 mmcf/d expansion project placed into service
- Musreau III
  - Currently under-going commissioning activities
- RFS II
  - Commissioned second 73 mbpd fractionator at Redwater in March → total fractionation capacity of 155 mbpd
  - First new fractionator build in Alberta in ~20 years
- Corunna Expansion (NGL storage and terminalling facilities)
  - Completed various initiatives including a new brine pond, rail rack upgrades and a new propane truck rack

## Commercial / regulatory updates

- Canadian Diluent Hub ("CDH")
  - Commercial agreements for in excess of 400 mbpd of take-away capacity across multiple pipelines
  - Completed detailed engineering estimate and optimized project scope (\$250 MM)
  - Received regulatory and environmental approval
- Sturgeon Refinery Terminalling project
  - Received regulatory and environmental approval

Approximately \$600 million of capital spending brought into service year-to-date in 2016

## Gas Services

- Super Majors + other well capitalized producers continue to commit significant capital to the development of the Montney and Duvernay resources plays
  - **Large-scale infrastructure solutions (gathering pipelines, processing, stabilization, etc.) required**

## Conventional Pipelines

- Embedded upside option as part of the Phase III Expansion (~**60%** capacity increase possible)
- Further opportunities to extend the reach of Pembina's laterals to **secure additional system volumes**

## NGL Midstream

- Redwater asset base is ideally suited for the development of **additional fee-for-service infrastructure**
- Evaluating opportunities to further **extend the NGL value chain and create local market demand**

## Other LVP Opportunities

- Growth in WCSB production creates opportunities to develop additional storage, terminals and pipeline connectivity → **secures market access and provides optionality for customers**

## M&amp;A

- **Selective, strategic and accretive** opportunities remain an on-going part of Pembina's core strategy

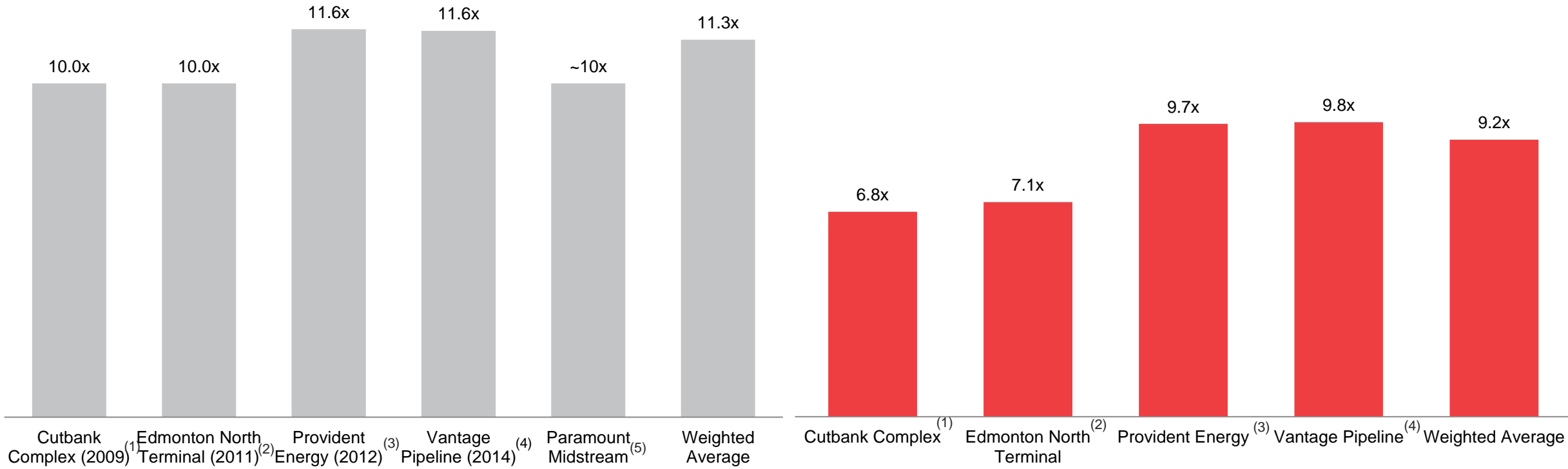
Pembina remains confident in its ability to secure 'next wave' of growth

# 6 Growth considerations → M&A opportunities in all markets



EV / operating margin multiple at acquisition

Current EV / operating margin multiple



*Then.....*



*And now.....*

## History of driving incremental shareholder value from acquisitions

<sup>(1)</sup> Includes the expansion of Musreau Facility (Musreau II and Musreau III).  
<sup>(2)</sup> Includes expansion to the terminalling and storage facilities.

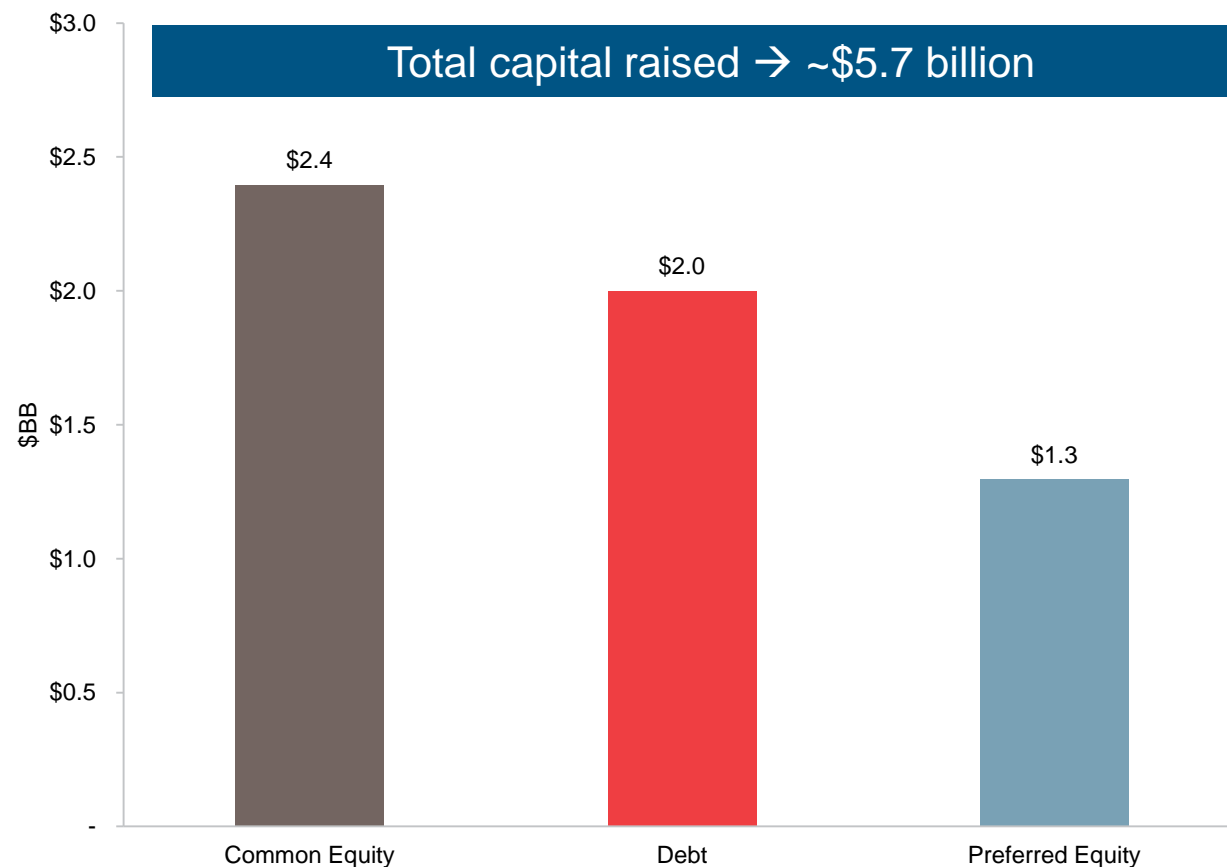
<sup>(3)</sup> Includes fractionator expansions at Redwater (RFS II & RFS III), based on 2013-2015 operating margin.  
<sup>(4)</sup> Includes the Vantage Pipeline system expansion & SEEP.

<sup>(5)</sup> Includes de-bottlenecking initiative capital, based on a 10 year average operating margin. See "Forward-looking statements and information" and "Non-GAAP, additional GAAP and other measures."

### Financing considerations

- ~\$5.7 billion raised since 2013 (inclusive of DRIP proceeds)
- ~\$2.4 billion of common equity raised since 2013
  - DRIP proceeds of ~\$1.0 billion → ~60% average participation
  - Bought deals of \$1.2 billion + (~3.6% average discount)
  - Vantage financing \$266 million (2014)
- \$2.0 billion of debt capital raised since 2013
  - ~4.4% average coupon
  - Tenor of 20+ years
- ~\$1.3 billion of preferred equity raised since 2013
  - ~4.8% average coupon
  - Average reset spread of ~3.3%

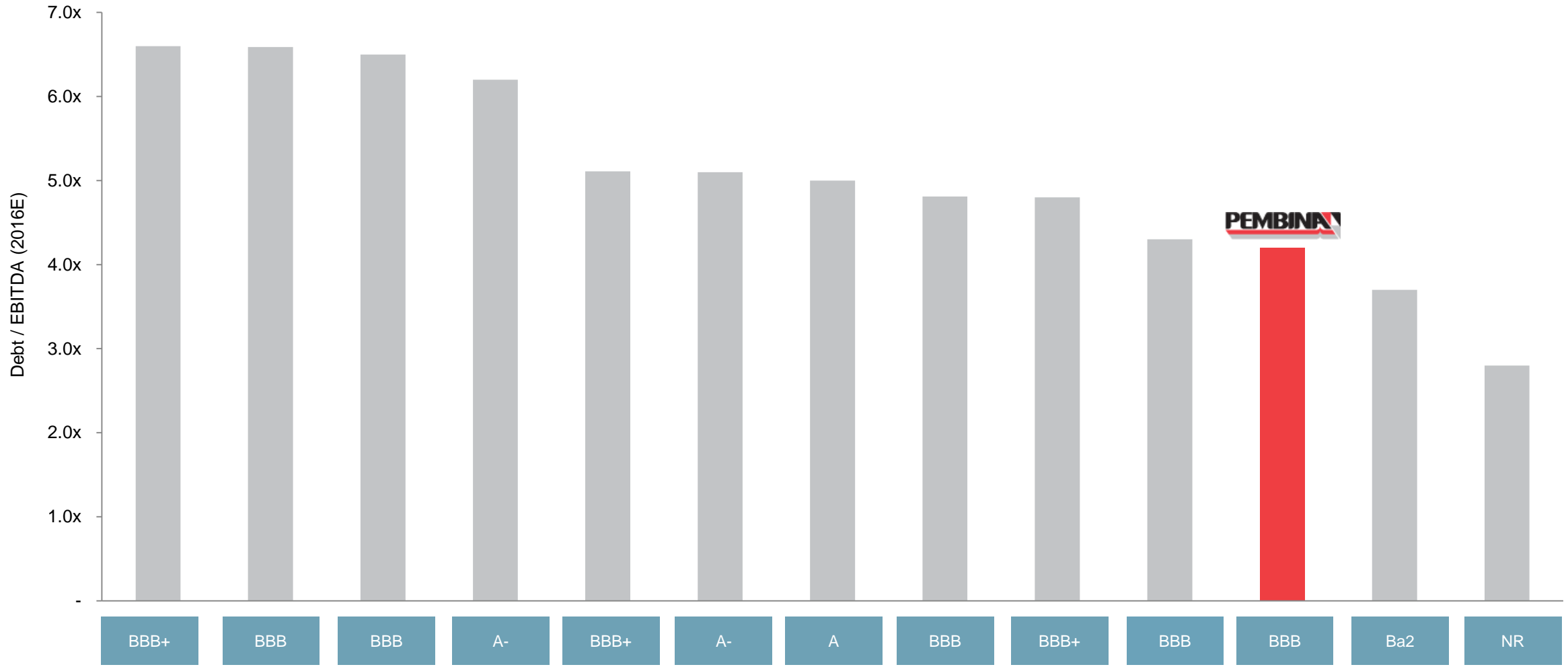
### Total capital raised (2013 – YTD 2016)



As Pembina continues to place its growth projects in-service, external capital requirements will diminish

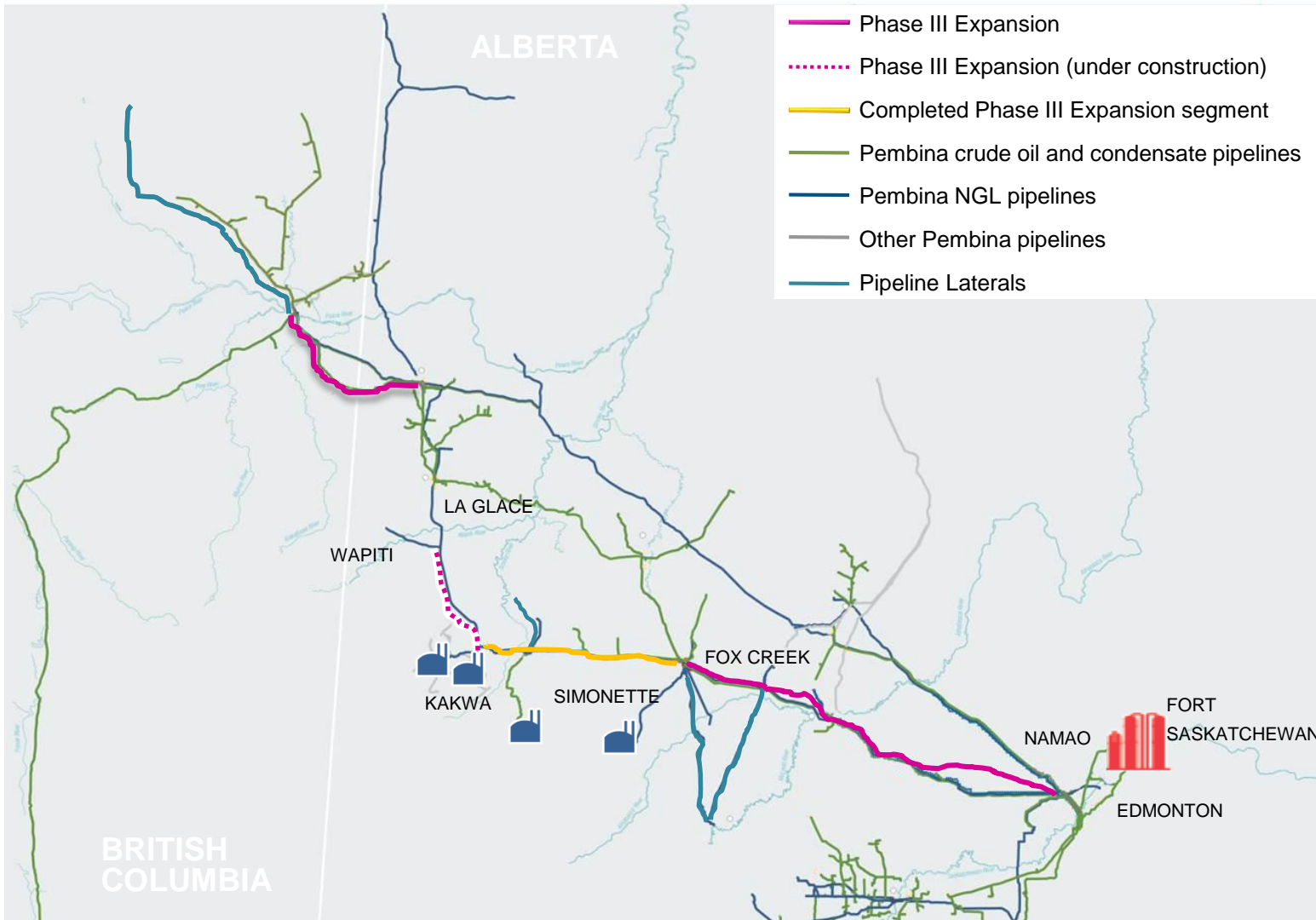


# Balance sheet considerations → peer comparison



**Pembina continues to employ less leverage than its peers**

Source: RBC Capital Markets & Barclays (March 2016). Peers include AltaGas, Canadian Utilities, Emera, Enbridge, Enterprise Product Partners, Fortis, Gibson, Inter Pipeline, Keyera, Plains All American, TransCanada, Veresen. See "Non-GAAP, additional GAAP and other measures." & "Forward-looking statements and information."



### Phase III Expansions

- Capital investment of \$2.44 billion (tracking under budget)
- Initial capacity of 420 mbpd between Fox Creek and Edmonton → ability to increase to over 680 mbpd
- 880 km total of new pipeline with four distinct lines that can separately transport C2+, C3+, condensate and crude oil
- **Fox Creek to Namao regulatory update:**
  - Concluded AER hearing process in 2015 (October to December)
  - Interim stay order granted by the Alberta Court due to concern by third-party relating to a ~10 km portion of the pipeline route
  - Court date set to hear issue (April 21, 2016) → AER decision may be made shortly thereafter
  - Various alternatives are being pursued

Phase III represents Pembina's largest ever growth project which continues to trend under-budget and on-time



# Market Dynamics

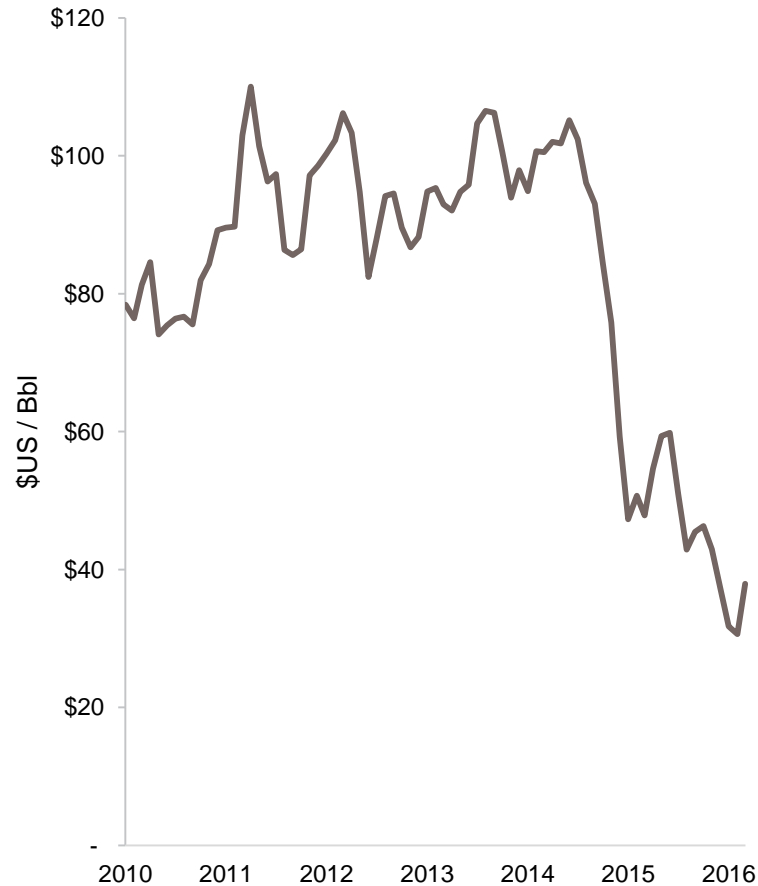
Scott Burrows



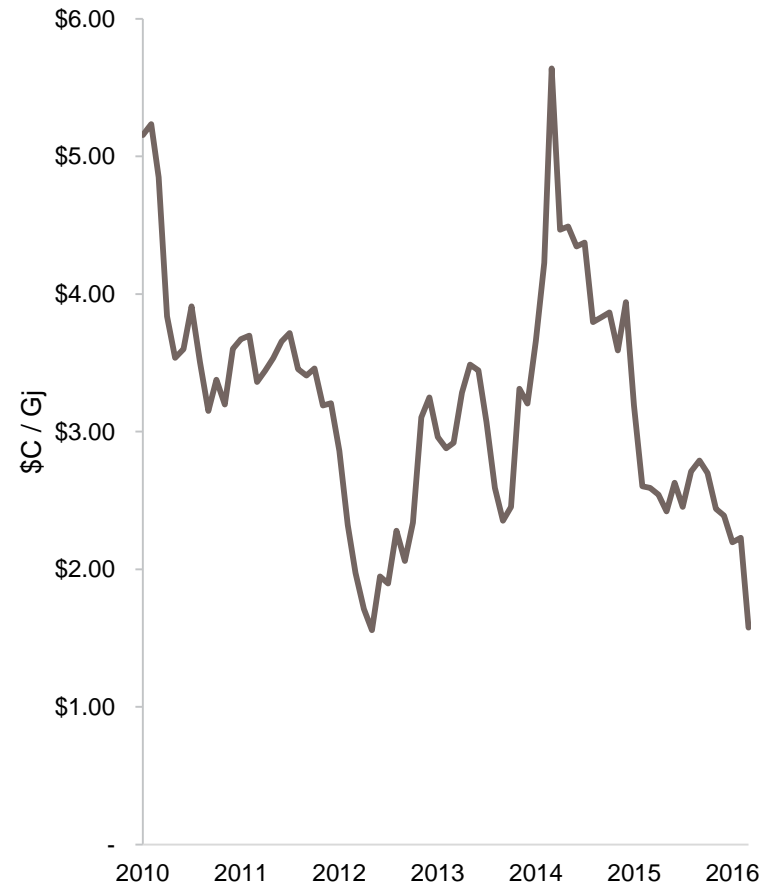
# Volatility remains the key theme in commodity markets



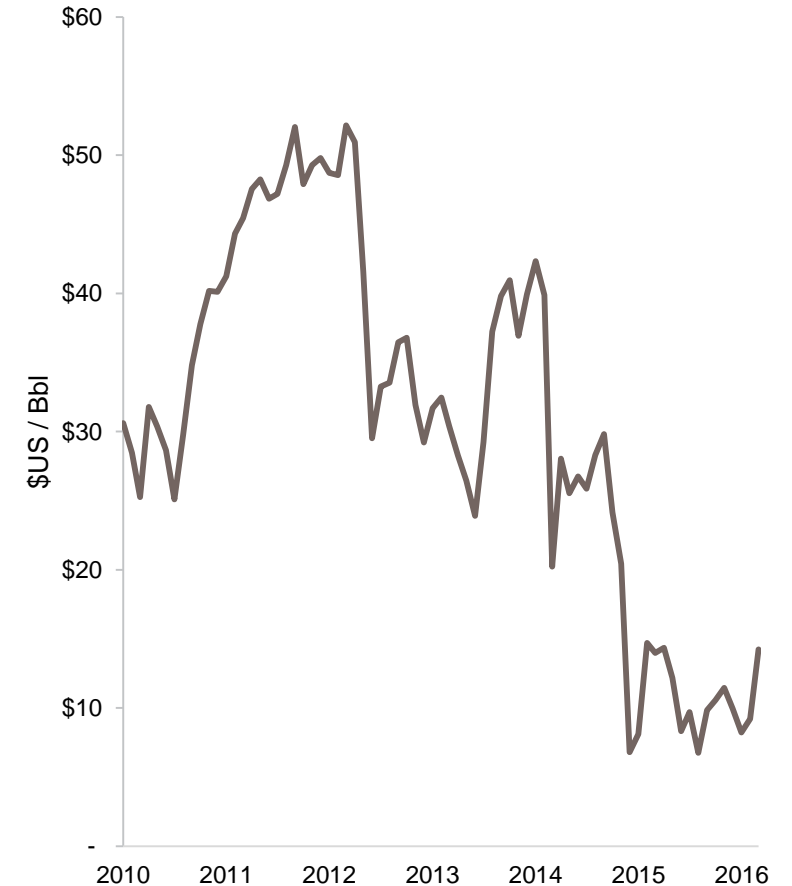
### Historical crude oil pricing



### Historical natural gas pricing



### Historical indicative fractionation spread<sup>(1)</sup>



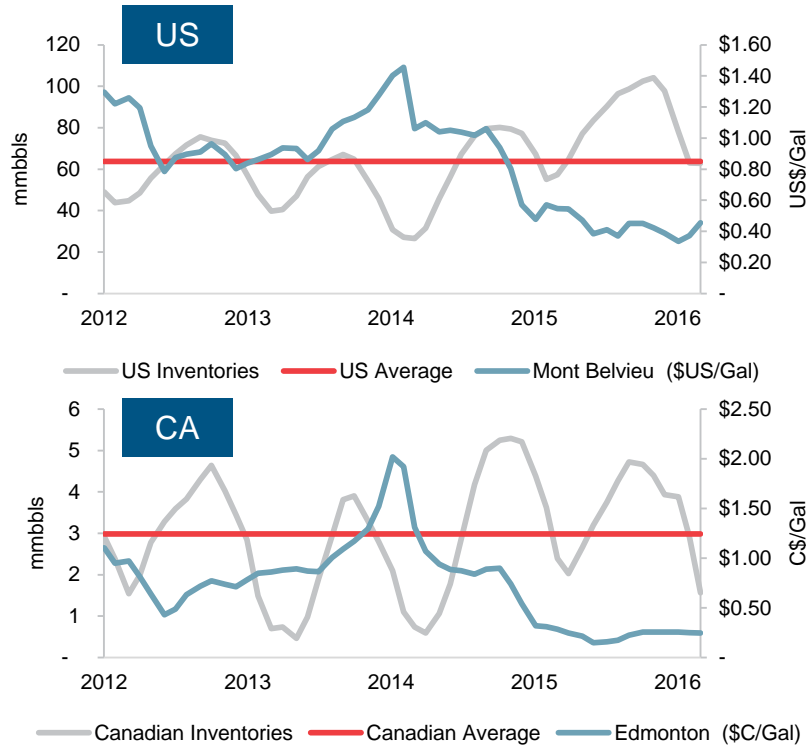
**Pembina remains focused on building out its fee-for-service asset base to mitigate commodity price volatility**

<sup>(1)</sup> Indicative fractionation spread calculation assumes 65% Mont Belvieu propane, 35% Mont Belvieu butane, 10% Mont Belvieu condensate pricing less AECO natural gas pricing.  
Source: BMO Capital Markets, Scotiabank GBM, based on monthly settlement prices.

# The worst might be over for North American propane markets

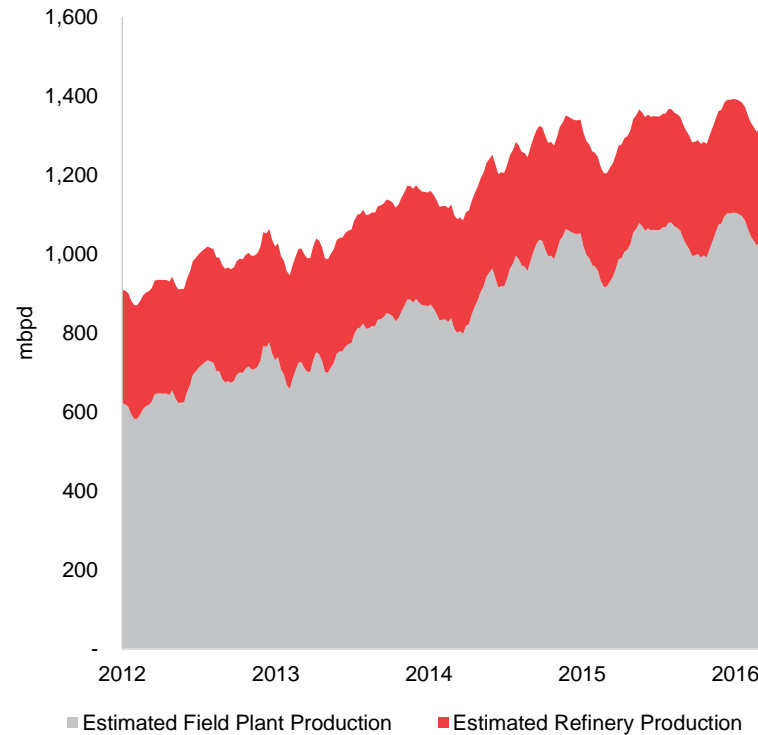


## Propane inventories + pricing



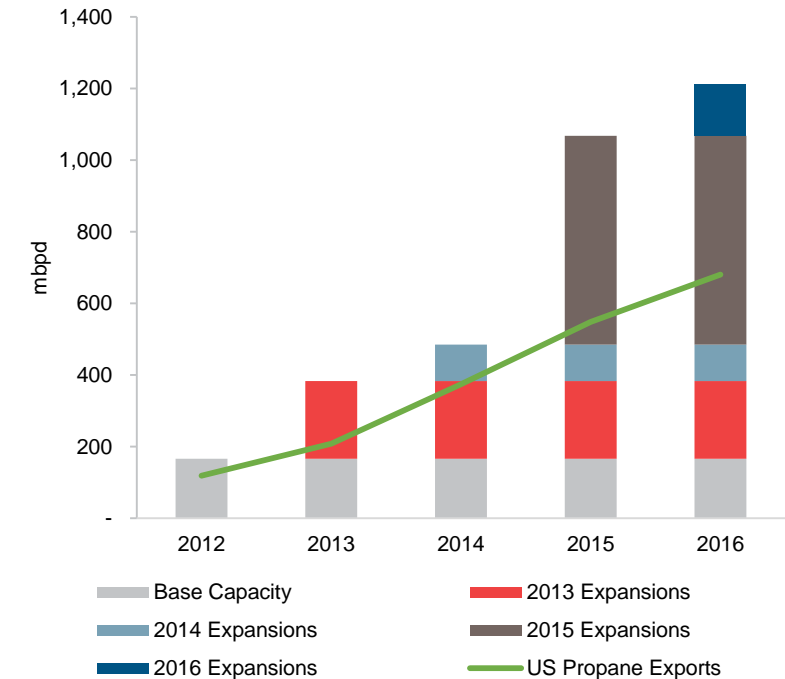
Inventory levels have begun to revert towards historical norms in the US and below in Canada

## US propane production (mbpd)



Supply growth has begun to slow down → since 2014 annual export growth has outpaced annual supply growth

## US propane exports vs. capacity



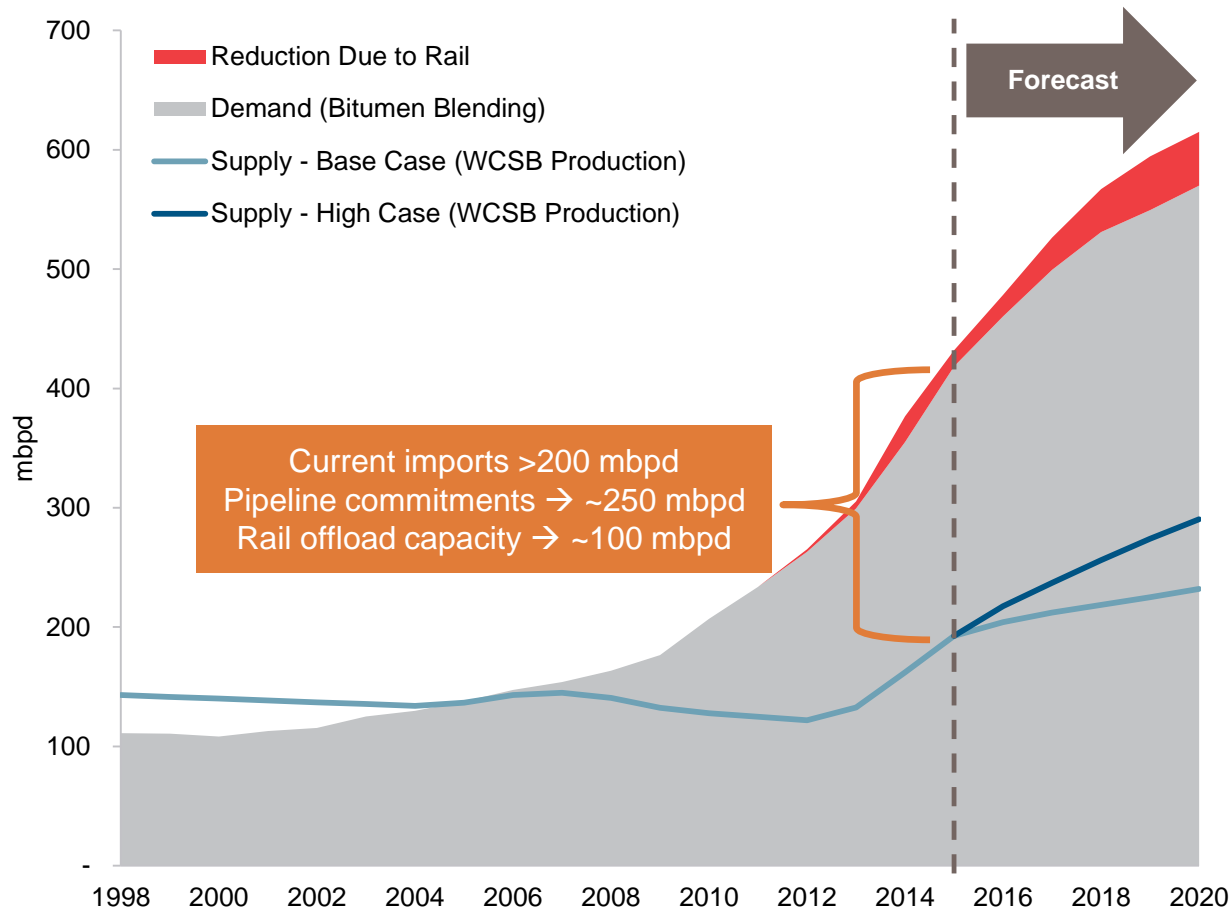
By the end of 2016 US export capacity is expected to reach over 1.2 mmbpd

Increased US exports may lead North American propane markets towards the early stages of a recovery

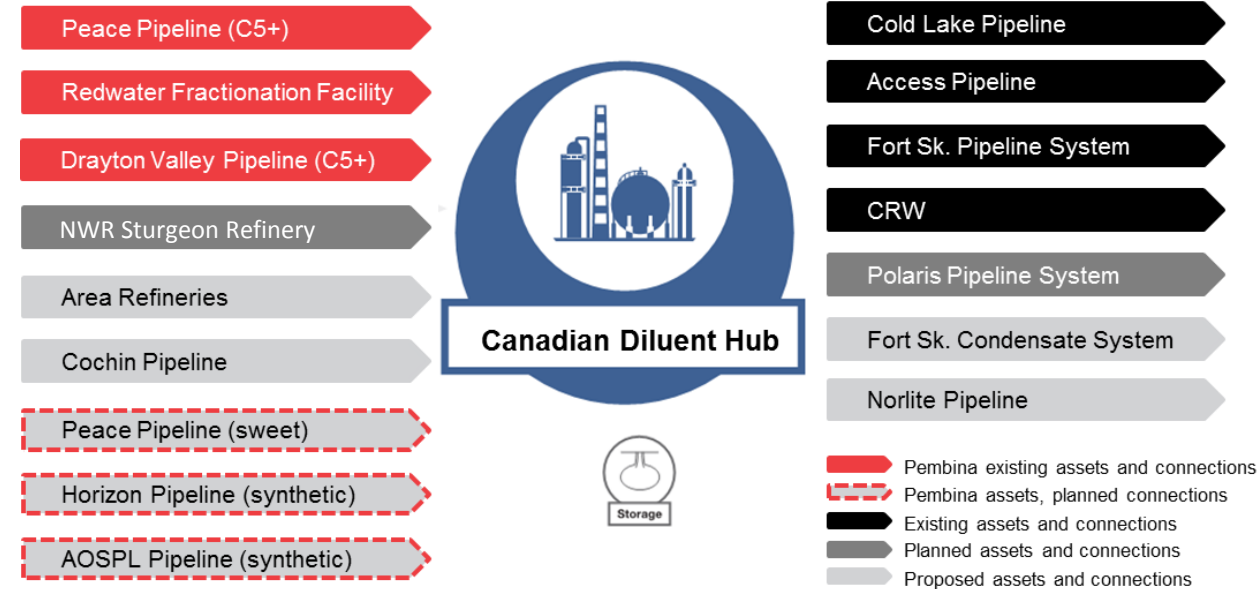
# Condensate market dynamics



## Western Canada condensate supply and demand<sup>(1)</sup>



## Pembina's Canadian Diluent Hub




Increasing Alberta supply and regional oil sands demand supports the development of the Canadian Diluent Hub

<sup>(1)</sup> Peters & Co estimates, AER, Geoscout, company reports. Assumes no incremental blending with synthetic oil above current levels, and incorporates reduction in condensate demand from increased use of rail to move heavy blend (assumes volumes of 150 MB/d of heavy by 2017 and 250 MB/d by 2020). Source: Peters & Co. Winter 2016 Oil and Gas Overview. See "Forward-looking statements and information."

An aerial photograph of a large-scale industrial construction site. In the upper left, a large, rectangular water reservoir is visible. The central and right portions of the image are dominated by a complex of industrial structures, including tall distillation columns, piping networks, and several yellow buildings. The ground is a mix of dirt, gravel, and patches of green grass. In the foreground, there are more yellow buildings, a parking lot with several vehicles, and a large, rectangular concrete foundation. The background shows a flat landscape with some trees and a clear sky. A red arrow points downwards from the top center of the image.

# Time-lapse Video of RFS II Construction



Break (15 mins)



PEMBINA



# Crude Oil Value Chain

Paul Murphy

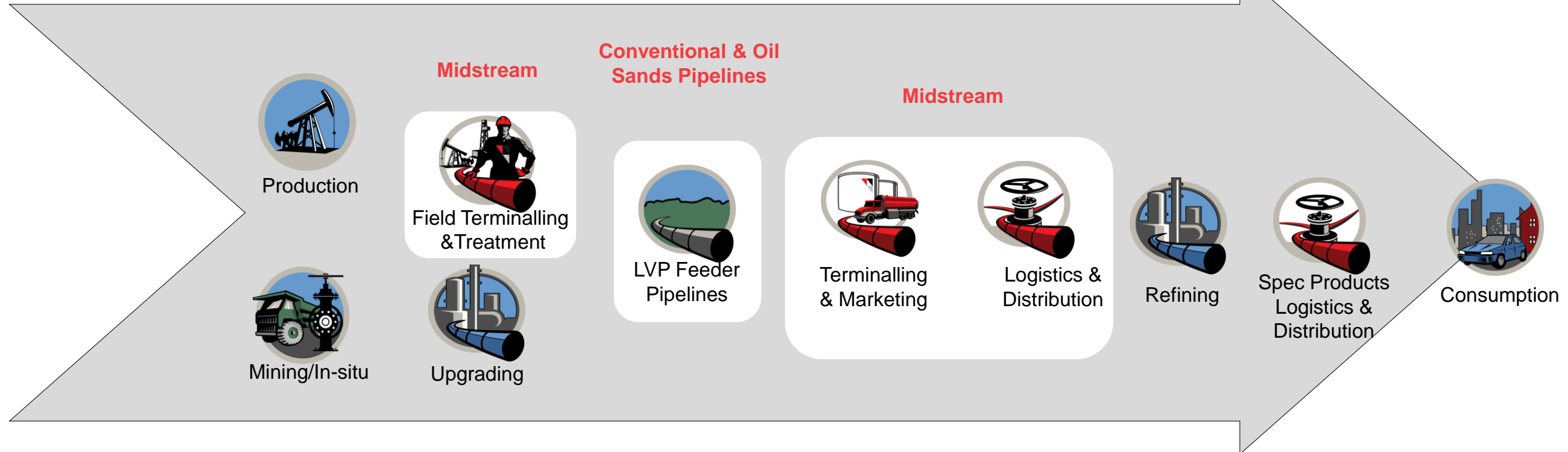


# Crude oil value chain – Pembina's integrated service offering



**Production**

**Consumption**



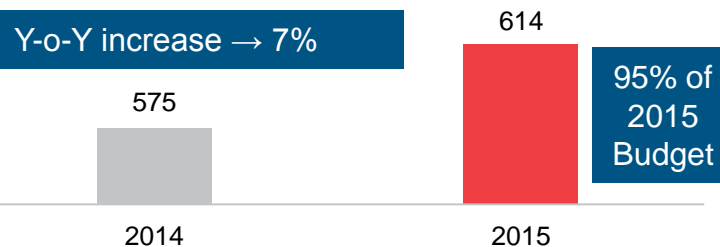
Integrated offering leads to exceptional customer experience

# Conventional Pipelines – update (2014 – 2016)

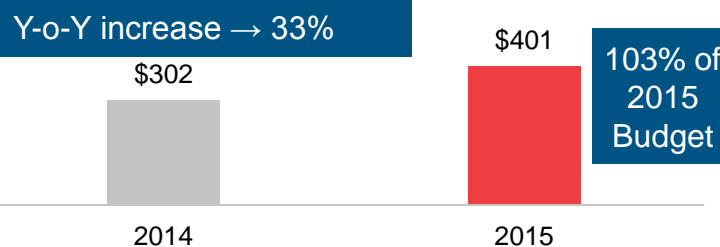


## Operating / financial overview

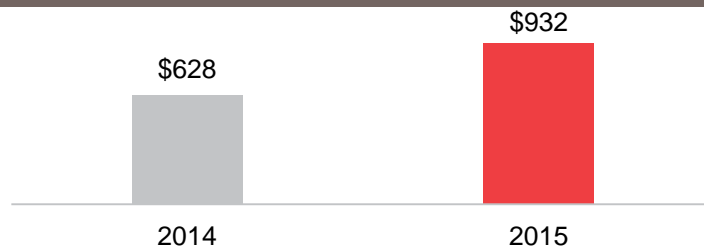
### Revenue volumes (mbpd)



### Operating margin (\$MM)



### Capital expenditure (\$MM)



## 2015 highlights + 2016 outlook

### 2015 Highlights

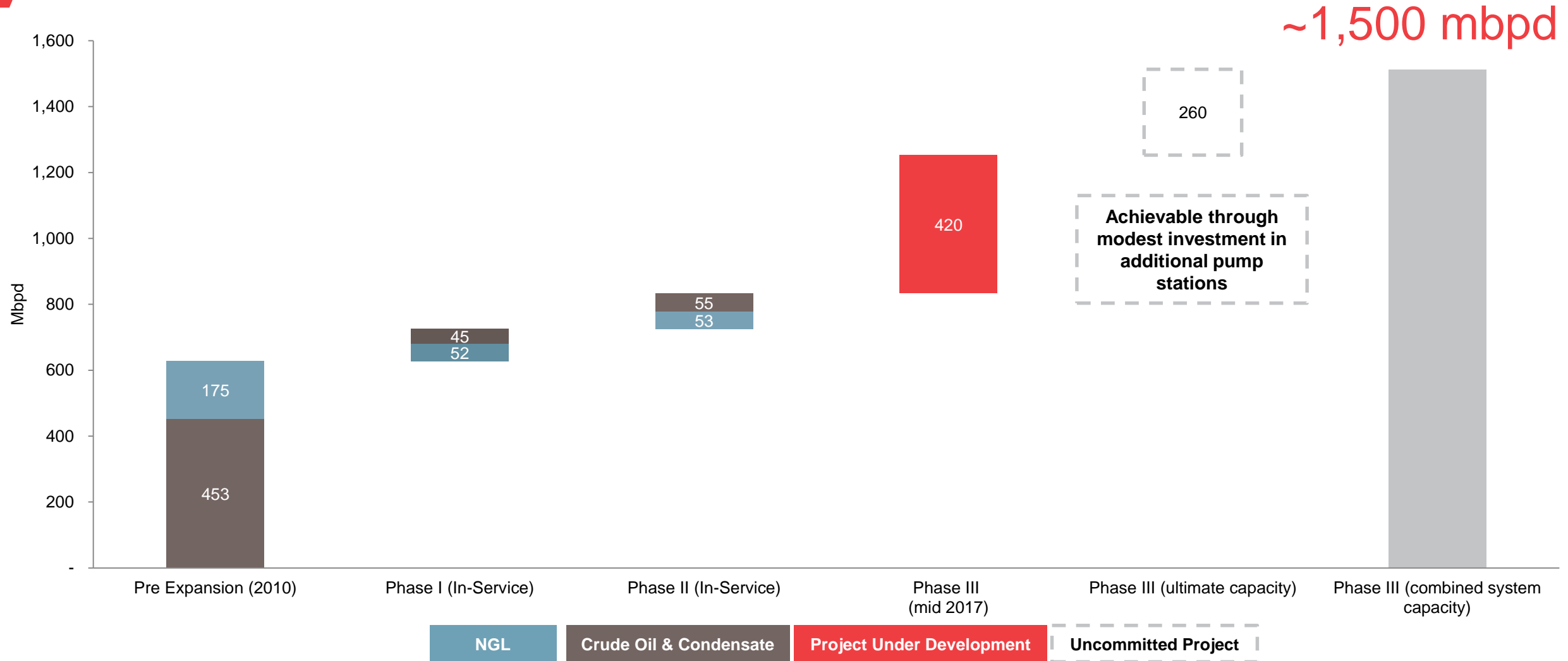
- Record annual revenue volumes (**614 mbpd**) + operating margin (**\$401 MM**)
- Another year of safe and reliable operations across 9,100+ km of pipelines
- Three new laterals / expansions contracted → representing **\$200 MM+** supporting the prolific NE BC Montney & ND Bakken resource plays
- Secured ~**70** mbpd under long term contracts (**777 mbpd** in aggregate)
- Completed Phase II expansion (LVP & HVP) → providing **108 mbpd** of incremental capacity
- Progressed \$2+ billion Phase III expansion → 70 km between Kakwa and Simonette completed

### 2016 Outlook

- Total system revenue volumes remain strong
- Continue to advance Phase III & NE BC expansion for 2017 in-service
- Commission new infrastructure within the WCSB and North Dakota

Solid operational and financial performance + significant progress on long-term growth projects

# Conventional Pipeline expansions could bring Alberta capacity to ~1.5 million bpd

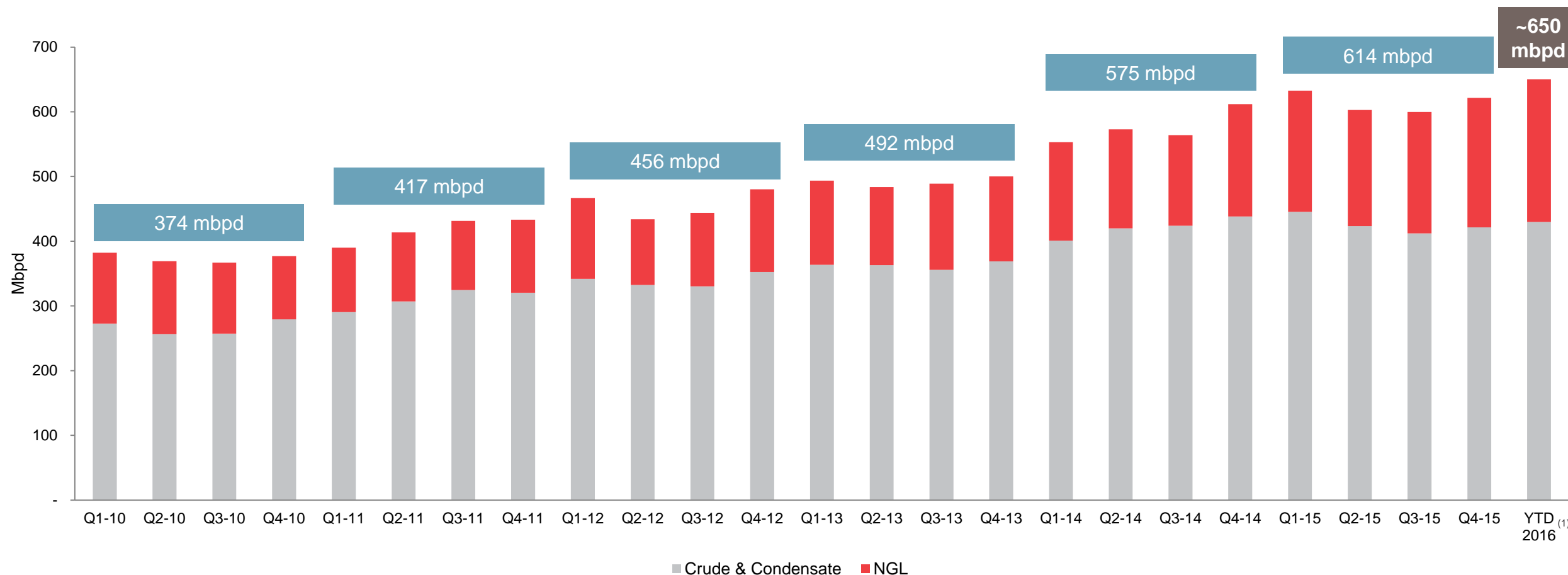


Significant growth completed and underway within Pembina's conventional pipelines business

# Our Conventional Pipeline revenue volumes continue to grow



- Solid industry performance and strategically located assets have led to strength in Pembina's throughput profile



2015 represented highest annual revenue volumes in Pembina's history

<sup>(1)</sup> Year-to-date revenue volumes as of February 2016. See "Non-GAAP, additional GAAP and other measures." & "Forward-looking statements and information."

# Strategic pipeline lateral program



## NEBC Expansion → estimated late 2017 in-service

- 150 km, up to 12" HVP/LVP batched pipeline, underpinned by long-term, cost-of-service agreement
- Base capacity of up to 75 mbpd

## Altares Lateral → estimated late 2017 in-service

- 64 km, 6" pipeline lateral, underpinned by long-term, cost-of-service contract
- Initial capacity expected to be ~17 mbpd

## Karr Lateral → estimated early 2016 in-service

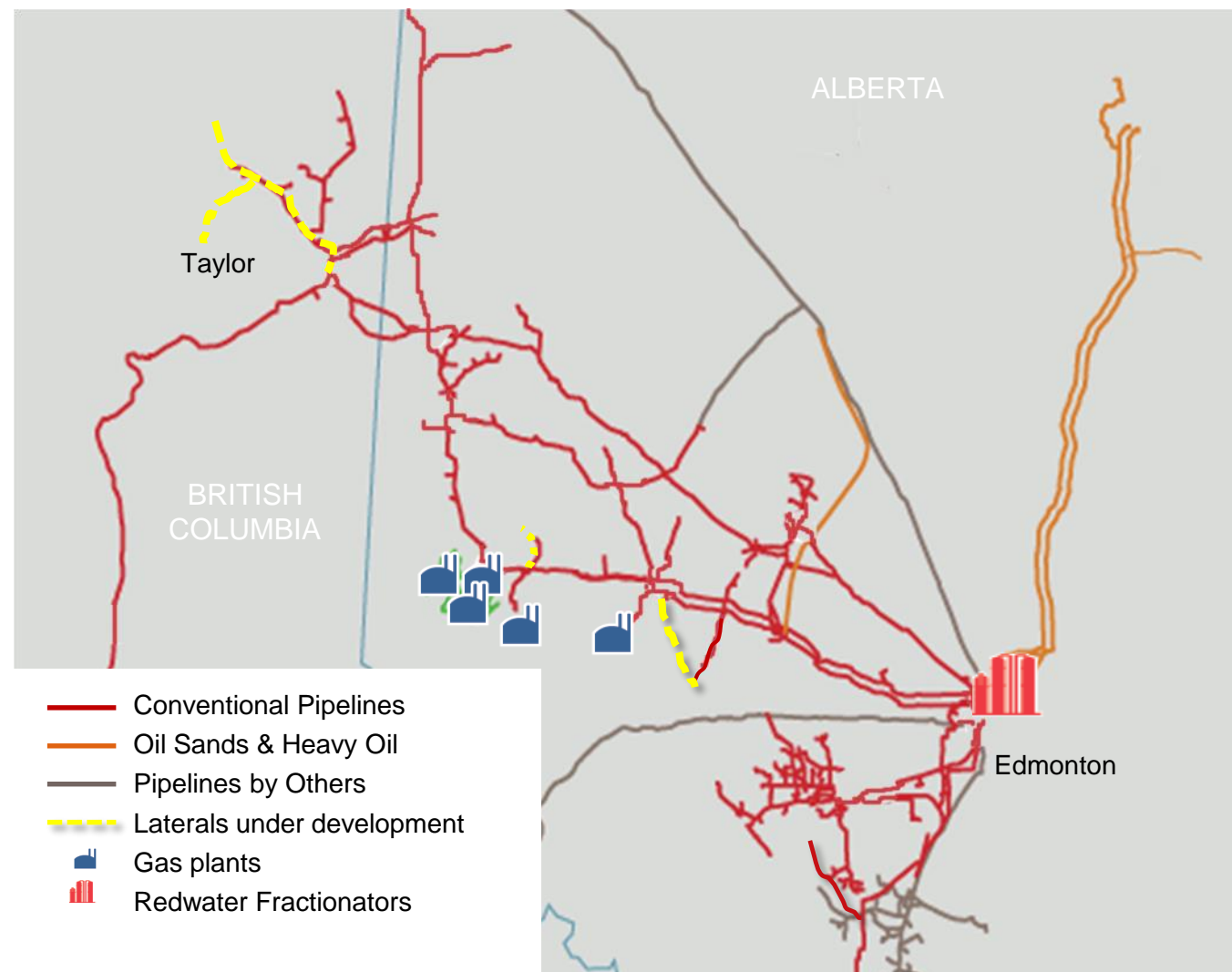
- 35 km, with design capacity of 30 mbpd, underpinned by long-term, fee-for-service agreement with a substantial take-or-pay

## Edson Lateral → estimated early 2017 in-service

- 12" HVP pipeline lateral, underpinned by long-term, take-or-pay contracts
- Maximum capacity expected to be ~60 mbpd

## Other Laterals → Target long-life economic hydrocarbons reserves

- Key resource plays → Montney, Duvernay, Cardium, Deep Basin
- Aggregates barrels and extends the reach and life of the mainline



Strategic \$300 MM+ pipeline lateral program underway to capture volumes for Pembina's mainline systems

# Oil Sands & Heavy Oil – update (2014 – 2016)

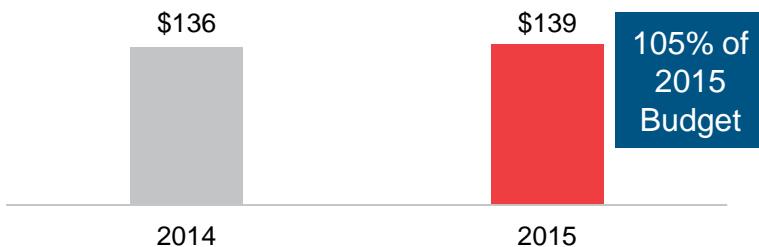


## Operating / financial overview

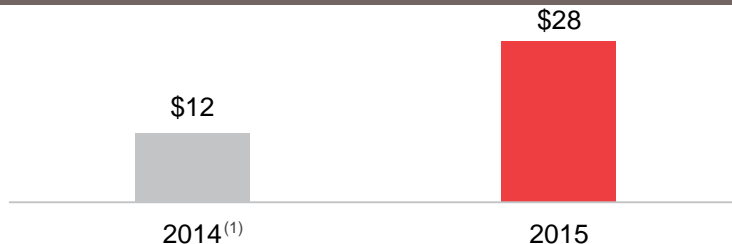
### Contracted capacity (mbpd)



### Operating margin (\$MM)



### Capital expenditure (\$MM)



## 2015 highlights + 2016 outlook

### 2015 Highlights

- Contracted capacity (**880 mbpd**) + operating margin (**\$139 MM**) remains steady
- Another year of safe and >99%+ reliable operations
- New Horizon Expansion announced + underway → **\$125 MM** investment to increase the Horizon pipeline capacity to 250 mbpd under a fixed return, long-term agreement with Canada's largest independent oil and gas company
- Cheecham Expansion underway (\$15 MM)

### 2016 Outlook

- System volumes remain stable supported by low-risk, largely investment grade counterparties who ship high value synthetic crude (not WCS)
- Expect to place the Horizon and Cheecham Expansions into service in mid-2016

Low risk business with steady returns over the long-term

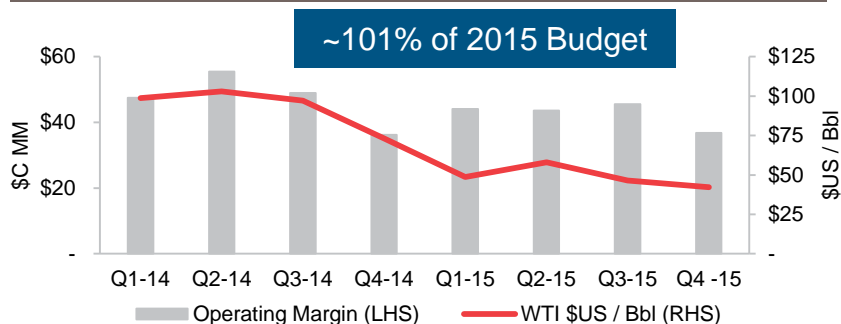
<sup>(1)</sup> 2014 reported capital expenditure has been adjusted for expenditure related to the Cornerstone project, as the majority of the capital spent was recovered under the engineering support agreement. See "Non-GAAP, additional GAAP and other measures." & "Forward-looking statements and information."

# Crude Oil Midstream – update (2014 – 2016)



## Operating / financial overview

### Operating margin (\$MM)



### Capital expenditure (\$MM)



## 2015 highlights + 2016 outlook

### 2015 Highlights

- Operating margin (**\$170 MM**) remains relatively strong despite low commodity prices
- Another year of safe and reliable operations with zero reportable or lost-time injuries

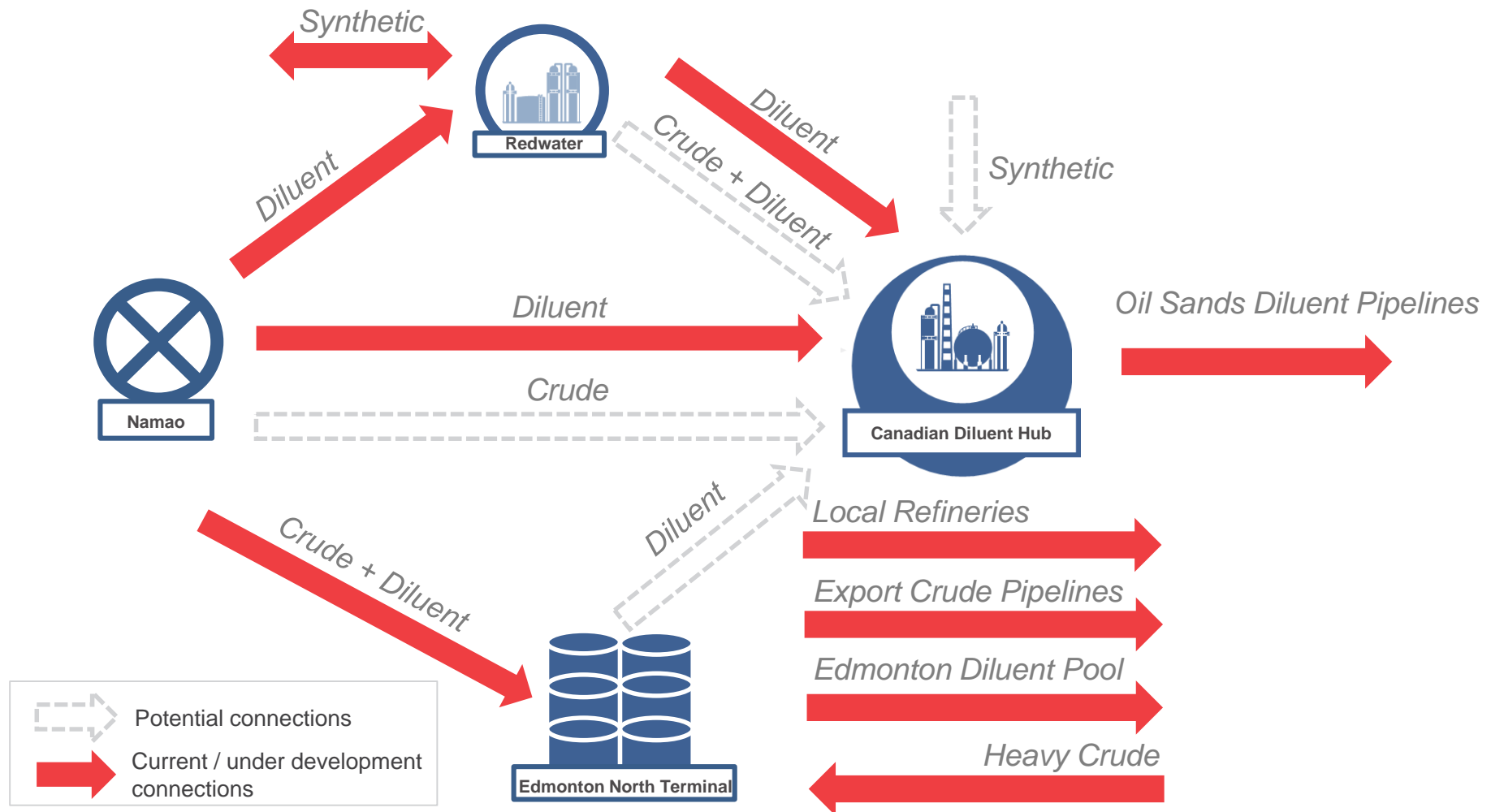
### 2016 Outlook

- Entered into new connection agreement for Canadian Diluent Hub which expands direct market access and demand for ancillary services
  - Design optimization reduced capital commitment (**\$250 MM**) while maintaining scope
- Placed Edmonton North Terminal storage into service ahead of schedule and under budget with no employee lost-time injuries.
  - More than doubled total storage capacity on site, well timed with a sustained contango market, generating proprietary and fee for service revenue opportunities

Crude Oil Midstream continues to see strong performance by focusing on market driven opportunities

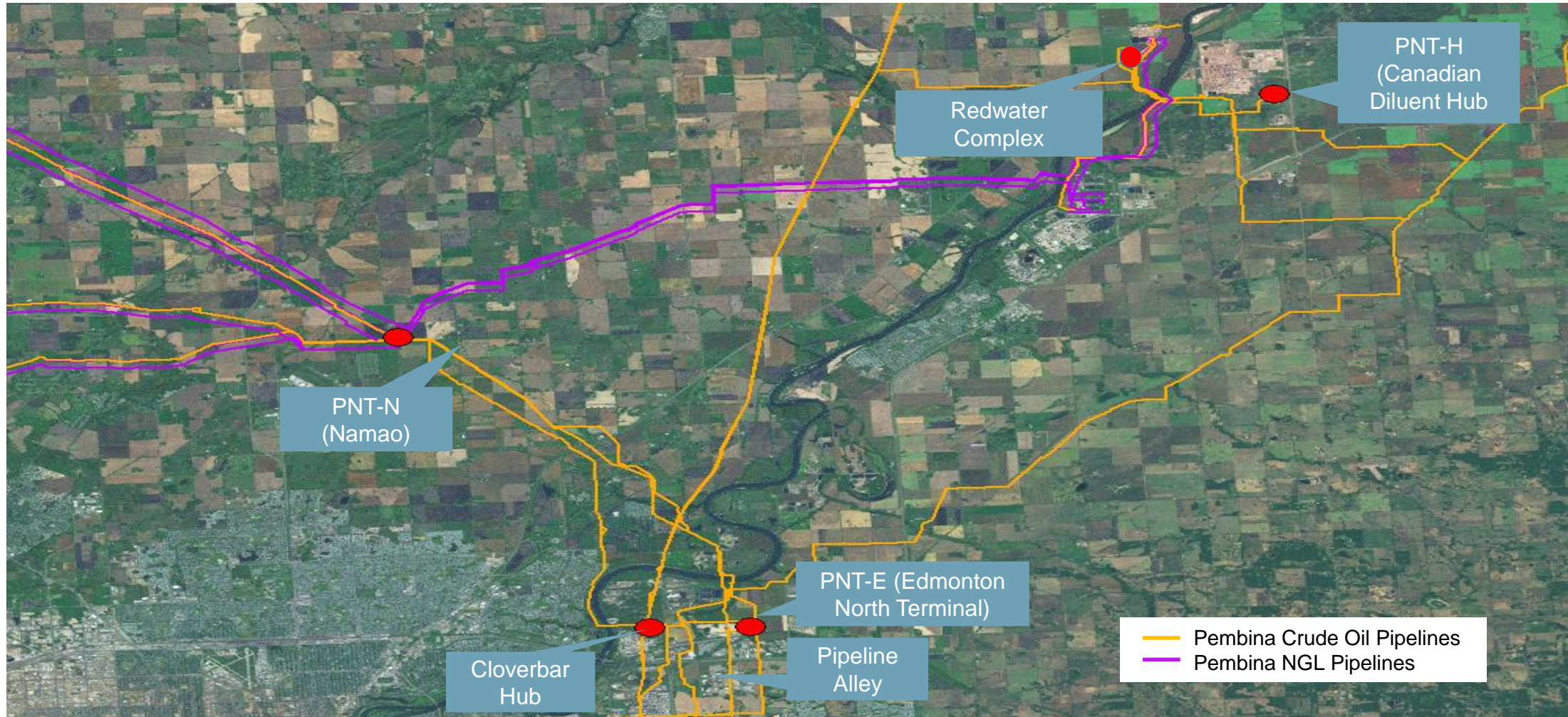


# Our Midstream assets are well-positioned and interconnected



Interconnectivity between conventional, heavy oil, NGL pipelines, storage and downstream markets is key to value creation

# Midstream assets are positioned to create significant optionality

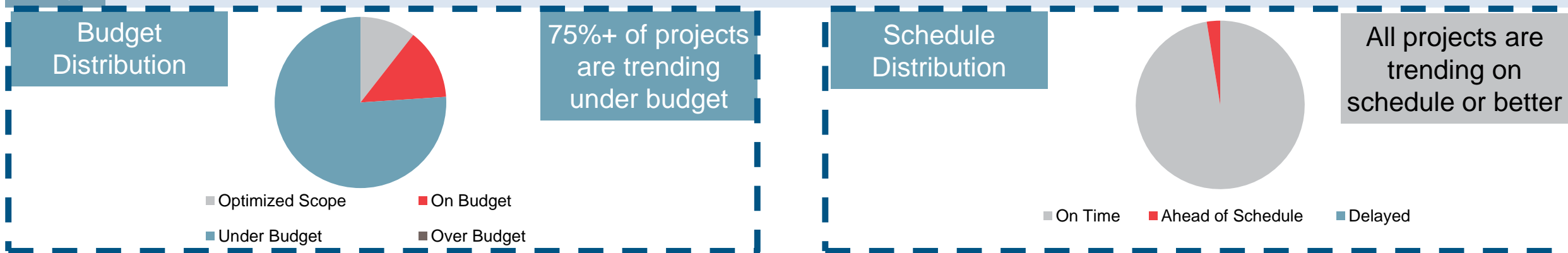


Strategically located, difficult to replicate, and integrated asset base creates competitive advantage

# Major development project update (LVP)



	Regulatory Approval	Project Status	Expected In-Service	Tracking On Time?	Tracking On Budget?	
Midstream	Canadian Diluent Hub	Yes	Under Development	Mid 2017	On Time	Optimized Scope
	Terminal and Hub Services	Yes	Construction Complete & Commissioned	Early 2016	Ahead of Schedule	Under Budget
Conventional	Phase III Pipeline Expansion	Pending	Under Development & Construction	Mid 2017	On Time	Under Budget
	NE BC Expansion	Pending	Under Development	Late 2017	On Time	On Budget
	Vantage Expansion	Yes	Lateral Completed & Pump Stations Under Construction	Late 2016 <sup>(1)</sup>	On Time <sup>(1)</sup>	Under Budget
Oil Sands	Horizon Expansion	Yes	Under Construction	Mid 2016	On Time	On Budget



Developing industry leading construction and implementation skills

<sup>(1)</sup> Due to a third-party delay the Vantage Expansion will be in-service in late 2016, contracted revenue is expected to start earlier.  
See "Forward-looking statements and information."

An aerial photograph of a large industrial facility, likely a natural gas liquids (NGL) processing plant. The facility is situated in a flat, open area with some trees and roads. It features several large, rectangular storage tanks, a complex network of pipes and walkways, and various processing units. The sky is clear, and the overall scene is well-lit.

# NGL Value Chain Overview

Stu Taylor

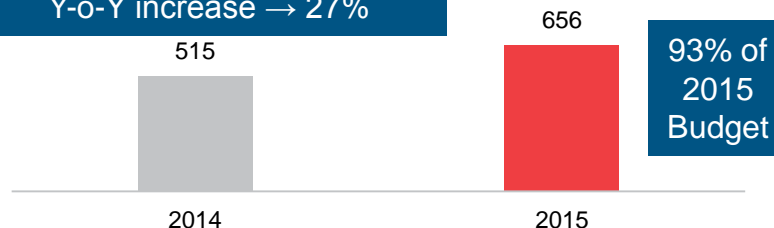
# Gas Services – update (2014 – 2016)



## Operating / financial overview

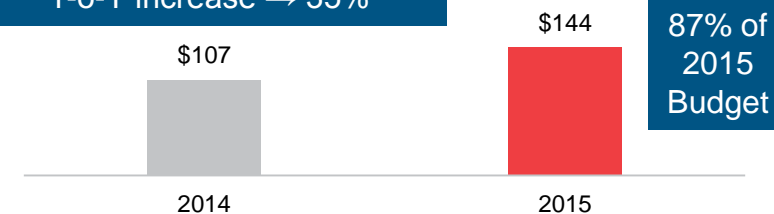
### Revenue volumes (mmcf/d)

Y-o-Y increase → 27%



### Operating margin (\$MM)

Y-o-Y increase → 35%



### Capital expenditure (\$MM)



## 2015 highlights + 2016 outlook

### 2015 Highlights

- Record annual revenue volumes (**656 mmcf/d**) + operating margin (**\$144 MM**) + another year of safe operations across all facilities
  - Since 2012, GBU operating margin has grown ~**35%** per year
- Secured first Duvernay specific gas plant (\$125 MM)** → supported by a global, super-major and underpinned by a long-term, fee-service agreement
- Commissioned **260 mmcf/d** of processing capacity and gathering pipeline at Resthaven → **in aggregate, under budget and on schedule or better**

### 2016 Outlook

- Revenue volumes remain strong → in excess of **660 mmcf/d YTD**
- Commissioning **200 mmcf/d** of processing capacity (gross) by mid 2016 → Resthaven + Musreau III both of which are supported by long-term, take-or-pay contracts
- Announcement of agreement to acquire strategic Montney infrastructure for \$556 MM<sup>(1)</sup> → enhances service offering and strengthens positioning in a core area

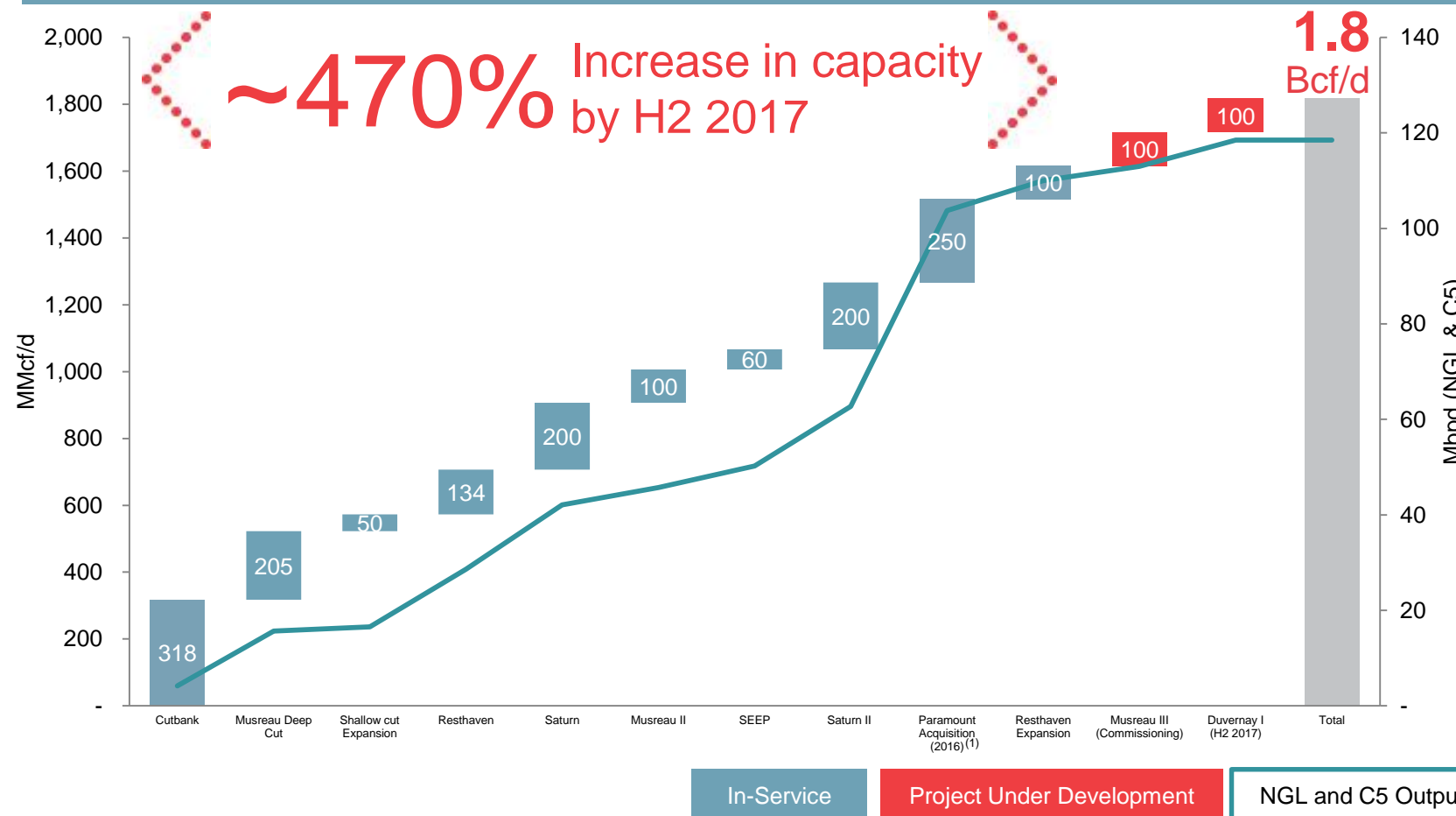
**Strong volumes + expansion projects commissioning creates a positive outlook for Gas Services**

<sup>(1)</sup> Paramount acquisition is expected close in the second quarter of 2016.  
See "Non-GAAP, additional GAAP and other measures." & "Forward-looking statements and information."

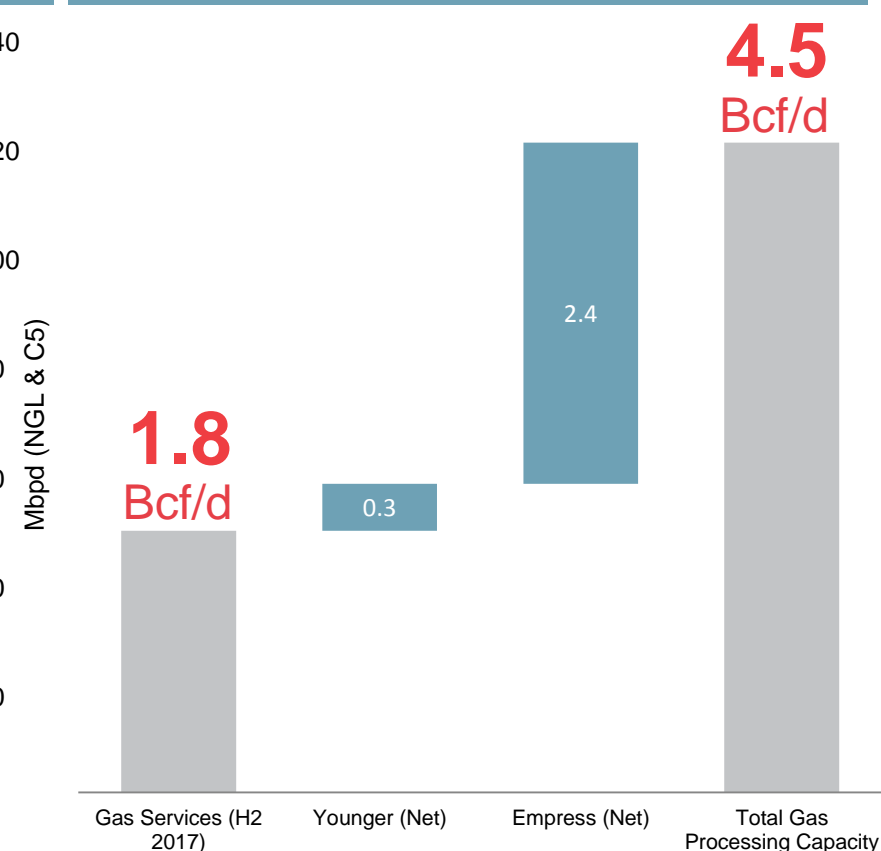
# Expanding to meet customer demand



## Gas Services secured growth projects



## Total gas processing capacity (bcf/d)



Working to become Canada's largest third-party gas processor

<sup>(1)</sup> Paramount acquisition is expected close in the second quarter of 2016.

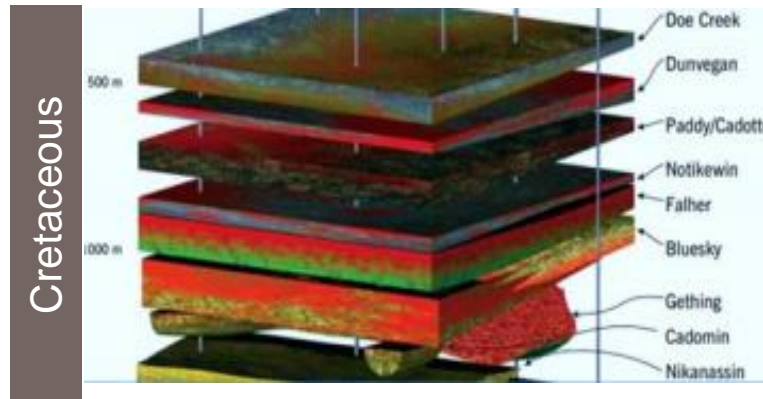
<sup>(2)</sup> Depends on plant utilization and gas composition. See "Forward-looking statements and information."

# Paramount Kakwa acquisition → top tier geology

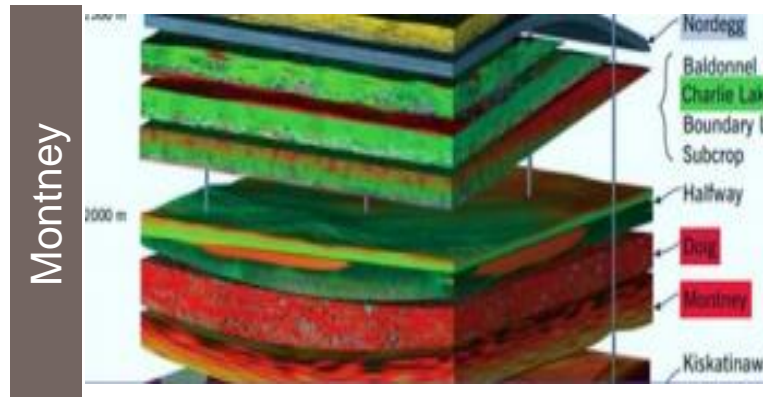
## Overview

- The Alberta Montney is one of fastest growing areas within the WCSB
  - Supported by strong condensate yields + significant resource potential
  - Regional producers include Seven Generations, Jupiter, Tourmaline, etc.
- Paramount has amassed a large-scale land base in the Alberta Montney / Cretaceous resource plays
  - Over 300,000 acres of Montney rights
  - Over 230,000 acres of Cretaceous rights
  - 2015 regional production of **~35,000 boe/d (double 2014 production)**
  - Further development potential through underlying Duvernay + Devonian shales

## Additional resource considerations



- Cretaceous land base resource potential of 11 Tcf of gas + liquids
- Potential ultimate recovery of up to 5 Bcf of gas per well
- Up to 20% internal rate of return potential<sup>(1)</sup>



- Drilled nearly 75 wells within the Kaybob Montney (since 2012)
- Montney land base resource potential of 22 Tcf of gas + NGLs
- Potential ultimate recovery of ~3 Bcf of gas per well
- Up to 30% internal rate of return potential<sup>(1)</sup>

Pembina's integrated value chain + Paramount's resource potential create a strong platform for long-term growth

<sup>(1)</sup> Assumes US\$40 / Bbl WTI and \$2.50 / GJ AECO pricing, rates of returns are calculated on a before tax basis.

Source: Paramount public disclosure (January 2016).

# Paramount Kakwa acquisition

(Newest member of the Cutbank Complex)



## Acquisition overview

- Pembina entered into an agreement to acquire Paramount's Musreau gas processing infrastructure for \$556 MM
  - Transaction is expected to close in the second quarter of 2016
- Assets are underpinned by a 20 year, fee-for-service contract with a substantial take-or-pay commitment
- Enhances Pembina's position in one of the most prolific resource plays in the WCSB

## Asset overview

### Kakwa Assets

- 250 mmcf/d of gas processing capacity (200 mmcf/d sour deep cut and 50 mmcf/d shallow cut)
- 22,500 bpd of condensate stabilization capacity
- Connected to Pembina's Conventional Pipelines + Cutbank Complex (via a Paramount operated pipeline)
- Located approximately 15 km from Pembina's Cutbank Complex
- Only sour gas plant west of Smoky River within 50+ km

### 6-18 Facility (Proposed)

- Paramount or Pembina's option to construct new infrastructure
- Commercial terms are expected to be similar to Kakwa Assets
- Site licensed for sour gas processing plant construction
- Site can support up to 600 mmcf/d of sweet or sour gas processing capacity
- Located approximately 7 km from Pembina's Cutbank Complex

## Illustrative regional map



Strategic acquisition in one of Pembina's core areas + a platform for growth longer term

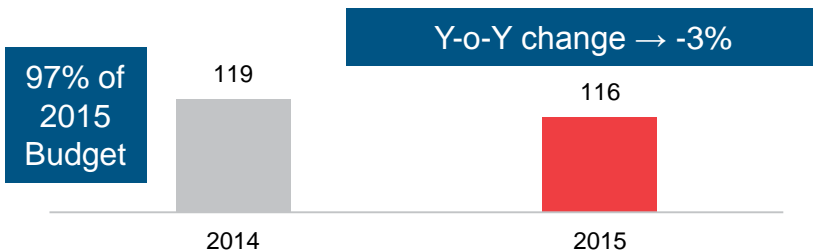


# NGL Midstream – update (2014 – 2016)

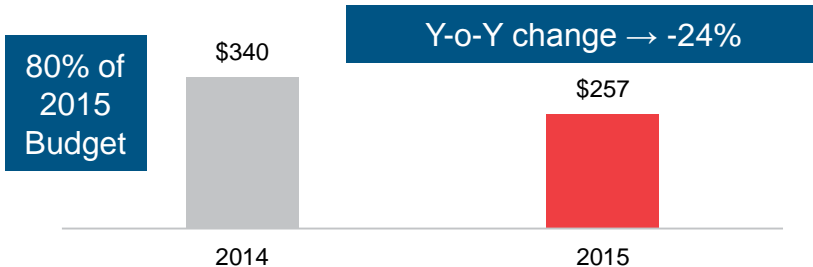


## Operating / financial overview

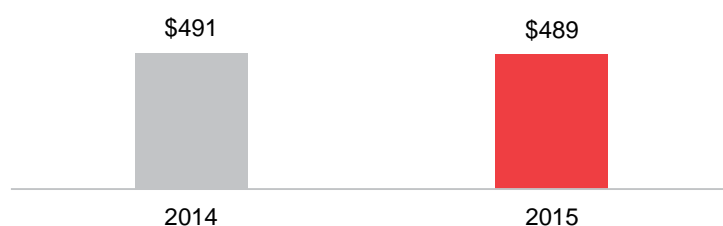
### NGL sales volumes (mboe/d)



### Operating margin (\$MM)



### Capital expenditure (\$MM)



## 2015 highlights + 2016 outlook

### 2015 Highlights

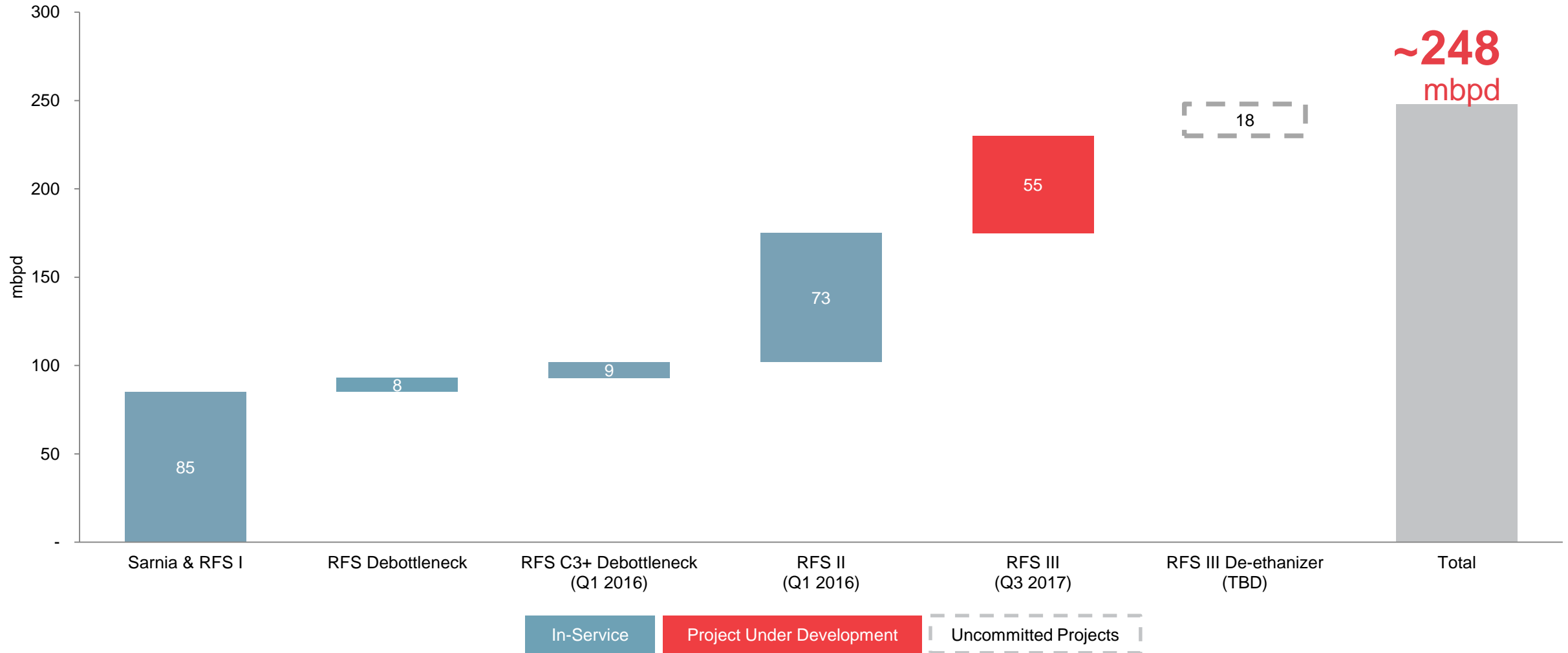
- Another year of safe, reliable operations across all facilities
- Announced \$180 MM terminalling project for NWR Sturgeon Refinery
  - Underpinned by a 30-year, fixed-return agreement with an investment grade counterparty
- Progressed Corunna expansion to commissioning stage → (cavern storage, rail and 30 spot truck loading rack)
- Reached mechanical completion of RFS II

### 2016 Outlook

- RFS II is now in-service (**73 mbpd C2+**) in March → **first new fractionator built in Alberta in approximately 20 years**
- Executing construction of large scale fee-for-service projects across Pembina's asset base → RFS III (**\$400 MM**), NWR terminalling (**\$180 MM**) + other projects
- Continue to develop both high quality value chain extension opportunities and new market access solutions for our customers

In spite of commodity price impact Pembina continues to advance key strategic initiatives in our Midstream business

# Significantly growing our NGL fractionation capacity

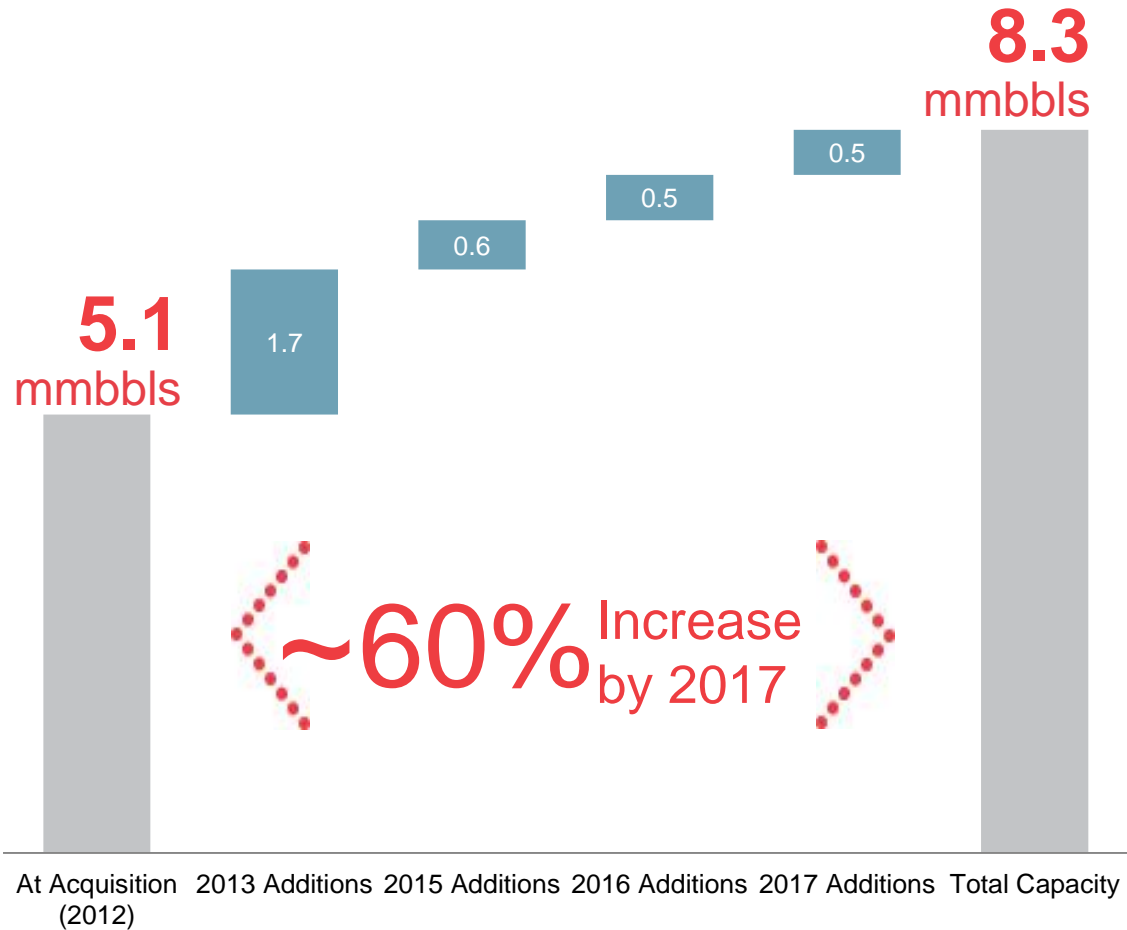


Tripling Pembina's fractionation capacity at Redwater with RFS III

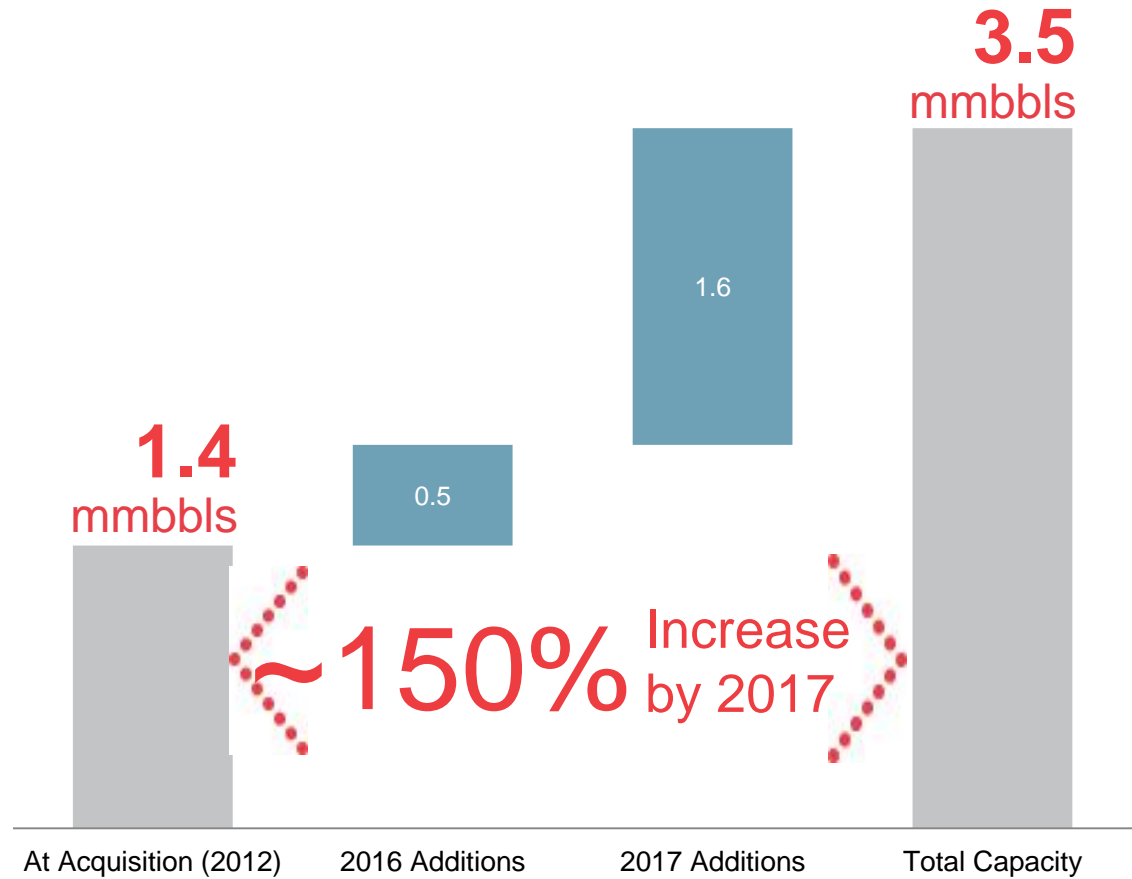
# Significant growth in NGL storage capacity



## Finished product storage capacity

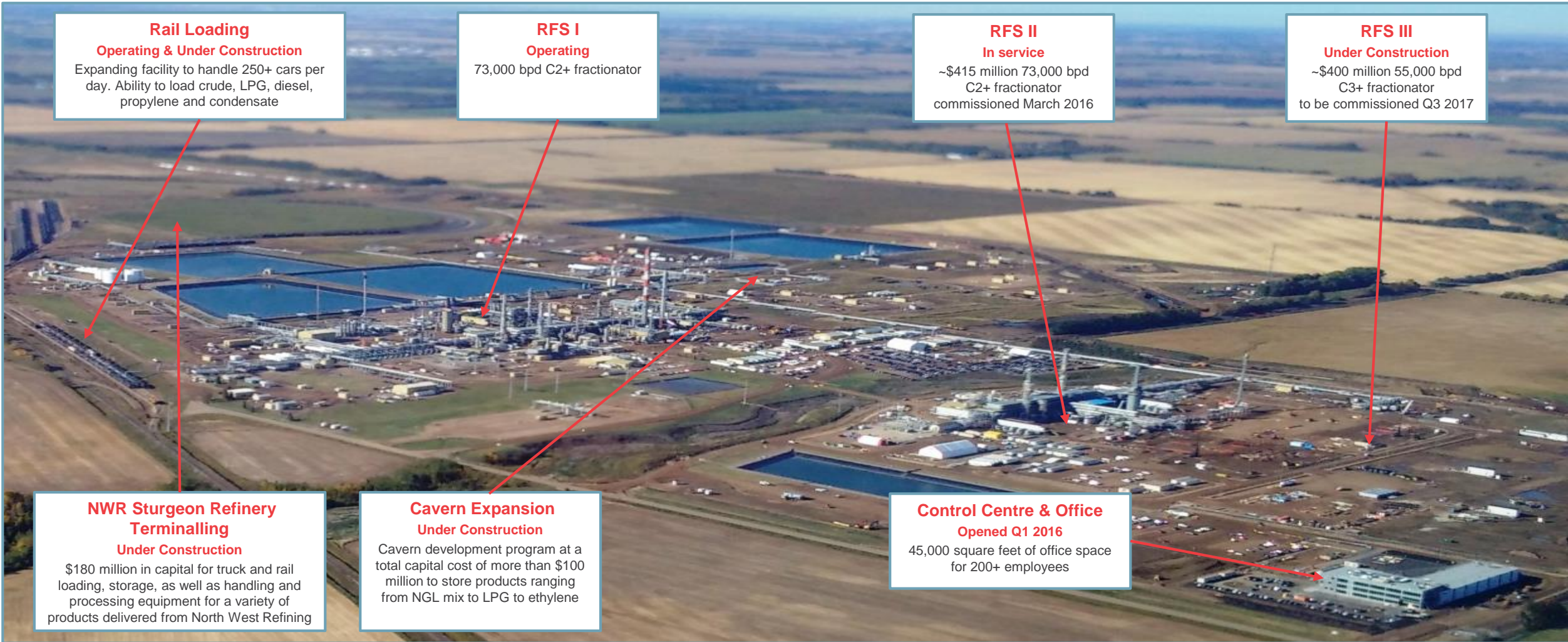


## Operational storage capacity



One of Canada's largest storage owners

# Over \$1 billion in capital projects at Redwater

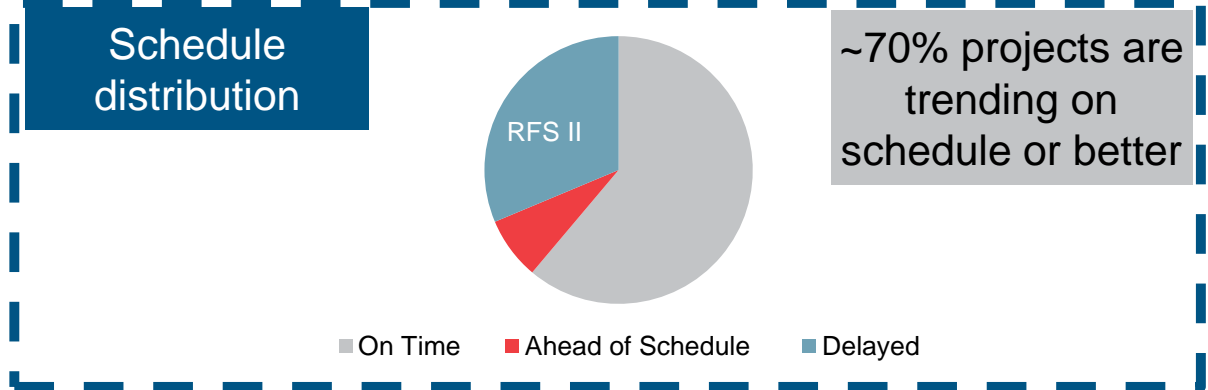
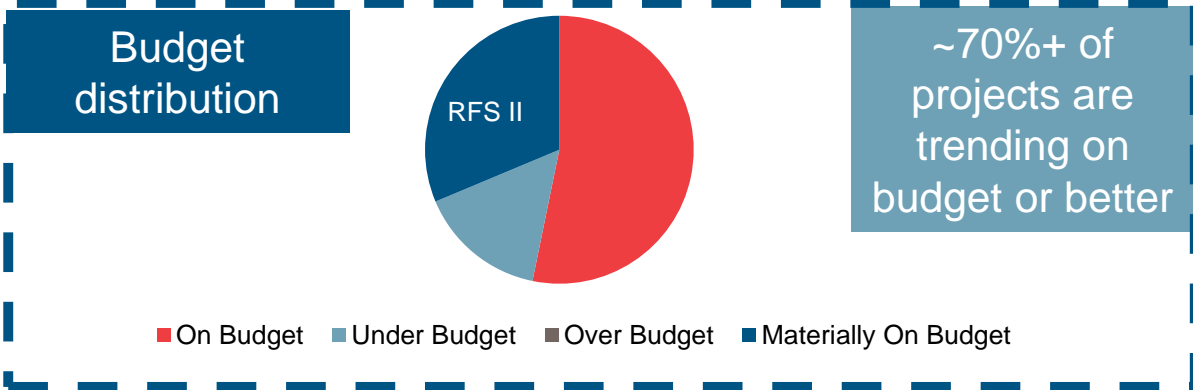


**\$1 billion of capex, 1,000 workers, 100 new permanent employees and over 2,000,000 construction man hours**

# Major development project update (NGL)

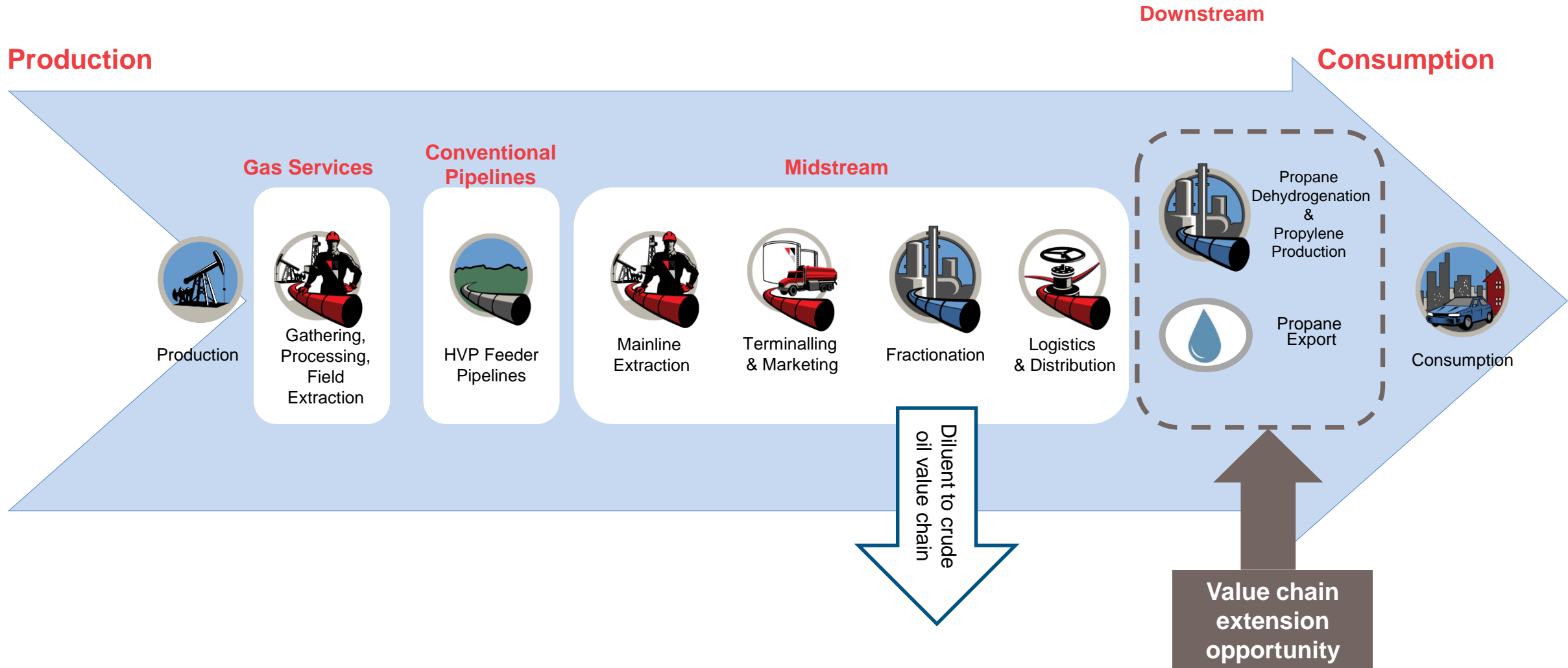


	Regulatory Approval	Project Status	Expected In-Service	Tracking On Time?	Tracking On Budget?	
Gas Services	Resthaven Expansion	Yes	In-Service	Mid 2016	On Time	Under Budget
	Musreau III	Yes	Commissioning	Mid 2016	Ahead of Schedule	Under Budget
	Duvernay I	Plant (P/L Pending)	Under Construction	H2 2017	On Time	On Budget
Midstream	RFS II Fractionator	Yes	In-Service	Q1 2016	Delayed (1 Quarter)	Materially on Budget
	RFS III Fractionator	Yes	Under Construction	Q3 2017	On Time	On Budget
	NWR Sturgeon Refinery	Yes	Under Development	Mid 2017	On Time	On Budget



Developing industry leading suite of growth projects on-time and on-budget

# NGL value chain – Pembina's integrated service offering



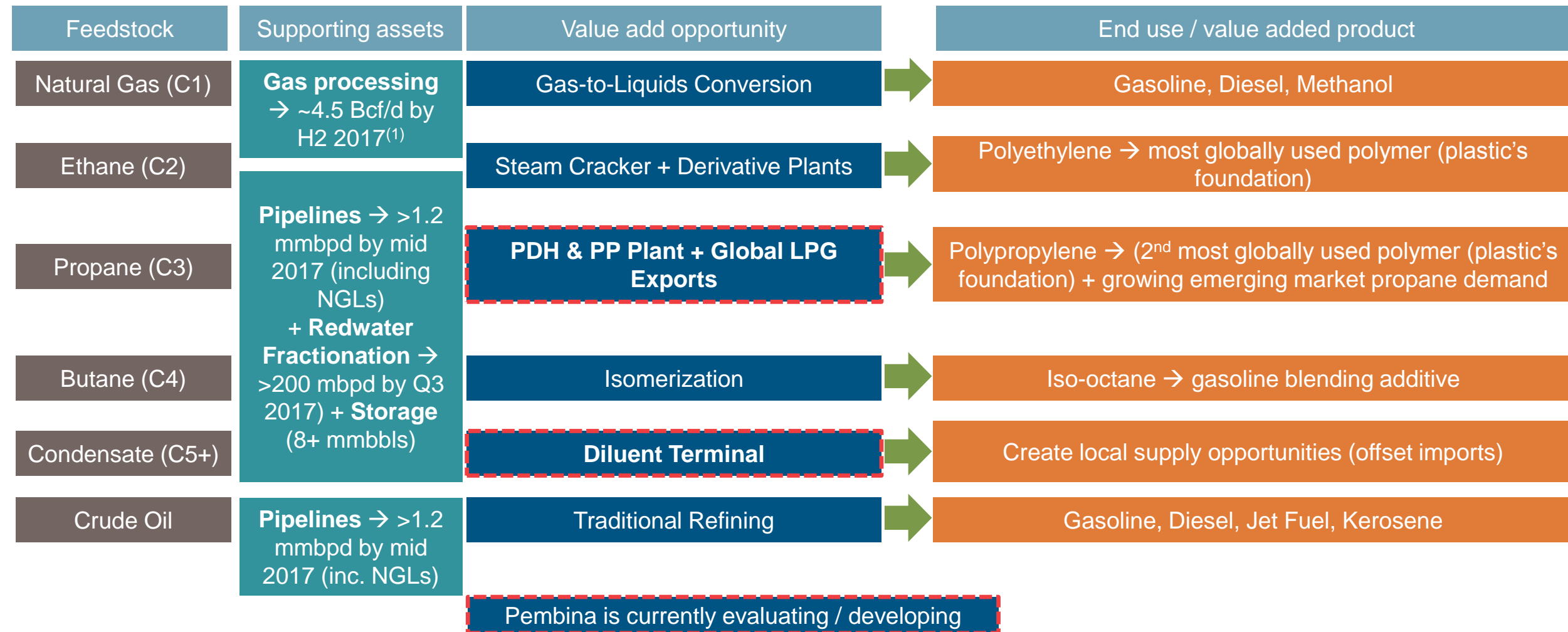
Integrated offering leads to exceptional customer experience

An aerial photograph of an industrial facility, possibly a refinery or chemical plant, surrounded by green fields and a highway. A red arrow points downwards from the top center of the image. The text 'Value Chain Extension' is overlaid in white, and 'Stu Taylor' is written below it.

# Value Chain Extension

Stu Taylor

# Alberta feedstock advantage creates 'value add' opportunities



Pembina is evaluating value add investment opportunities to enhance customer netbacks

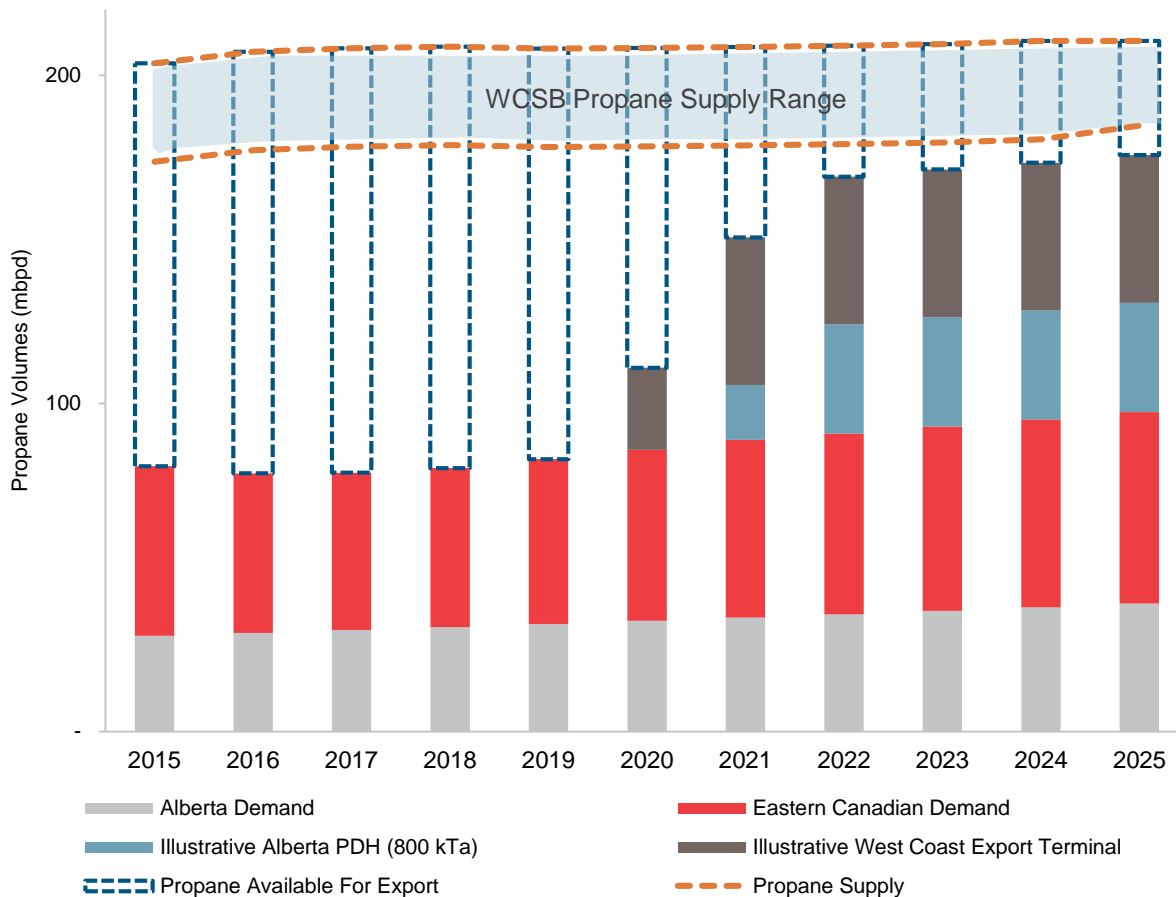
<sup>(1)</sup> Includes announced acquisition of Paramount Resources' midstream assets announced March 17<sup>th</sup>, 2016, transaction is expected to close in the second quarter of 2016. Total gas processing capacity includes net capacity at Empress and Younger facilities. See "Forward-looking statements and information."



# Doing more with the molecule → propane market dynamics



## Illustrative WCSB propane supply & demand<sup>(1)</sup>



## Additional market considerations

- The revolution in unconventional drilling and liquids production has created a paradigm shift in Pembina's operating regions
- Pembina's critical mass of propane creates opportunities to develop new infrastructure
- Pembina is currently evaluating downstream value chain extension opportunities → world-scale PDH facility as well as a LPG West Coast export terminal
- Pembina is the largest WCSB marketer of propane and is competitively positioned to supply its infrastructure opportunities under evaluation plus potentially supply other infrastructure under development by third-parties

Significant opportunities remain to develop additional export / value-add infrastructure over the long-term

<sup>(1)</sup> Source: AER, company filings, Pembina internal forecast. Timelines noted for development projects is meant to be illustrative and actual schedule may vary. See "Forward-looking statements and information."

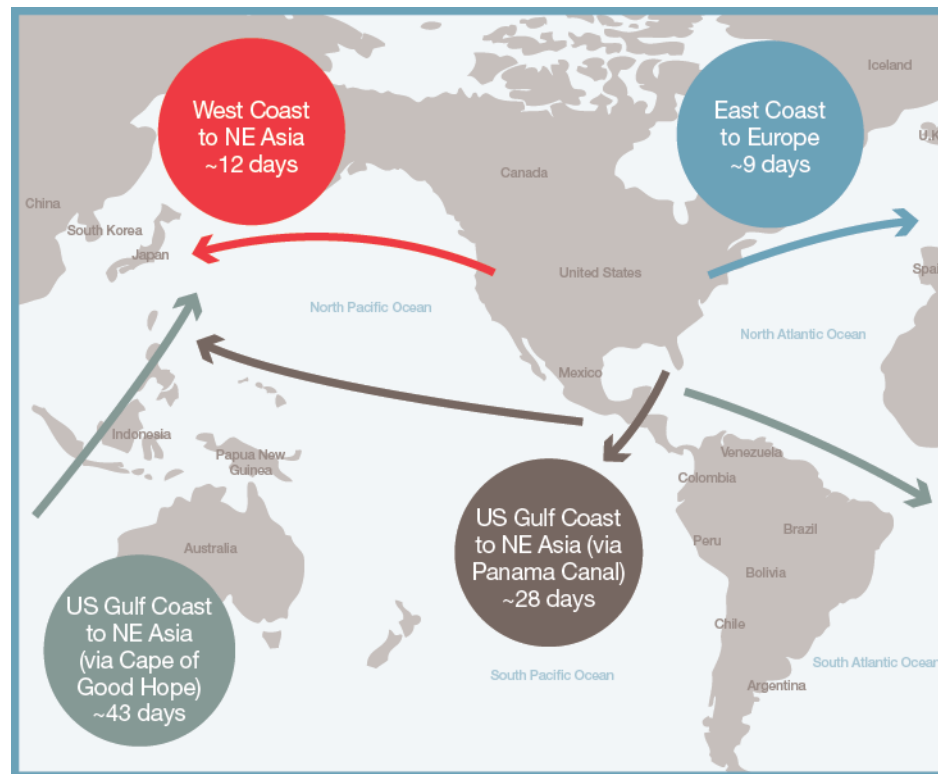
# Doing more with the molecule → LPG export terminal



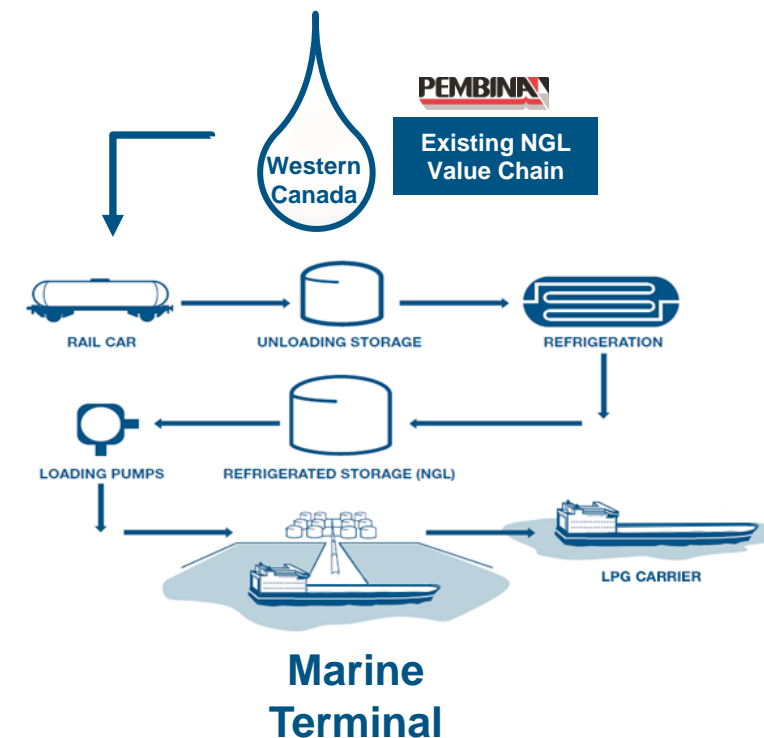
## LPG export terminal opportunity

- Global opportunity
  - Growing North American production and robust Asian demand
- Decrease of traditional markets
  - Eastern Canada and US expected to be supplied by growing US production
- Canadian upstream development shift
  - Gas-weighted firms are reliant on NGL production
- Advantageous position
  - West coast provides shorter shipping times to Asia
- Pembina is currently working to advance a West Coast propane / butane export terminal
  - Target capacity of 37,500 – 75,000 bpd
  - Anticipated capital cost of \$700 million – \$1+ billion

## Shortest route to NE Asia from North America West Coast



## Pembina value chain extension opportunity



Propane export project would extend Pembina's reach and provide international market access for producers

# Doing more with the molecules → uses of polypropylene

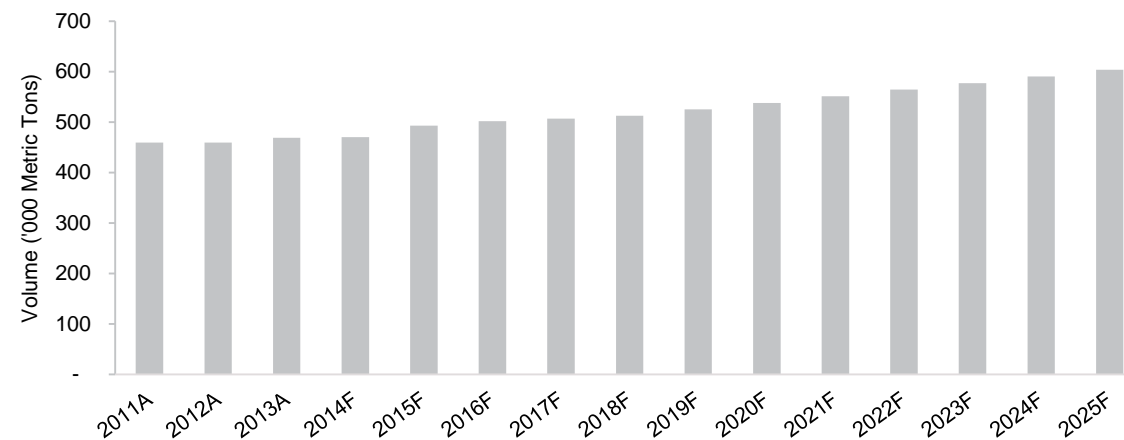
## Polypropylene (PP) pellet type & selected end use



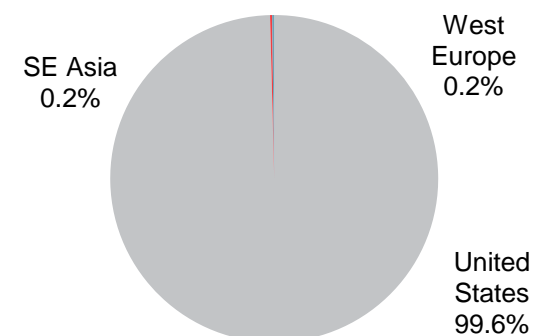
### PP Conversion



## Canadian PP Demand<sup>(1)</sup>



## Canadian PP Imports<sup>(1)</sup>



Canada imports essentially 100% of its PP demand from the U.S.

PP is a building block of everyday life and represents a large-scale value add opportunity for Alberta

<sup>(1)</sup> Source: IHS 2015.  
See "Forward-looking statements and information."

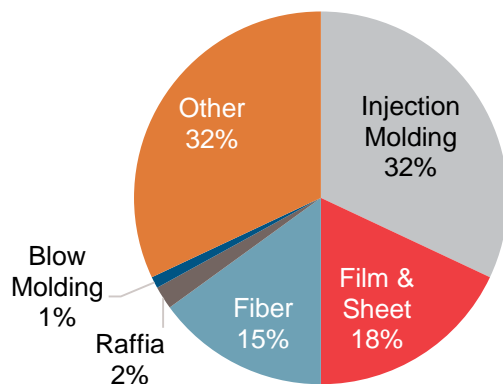
# Doing more with the molecule → polypropylene market?



## Polypropylene (PP) overview

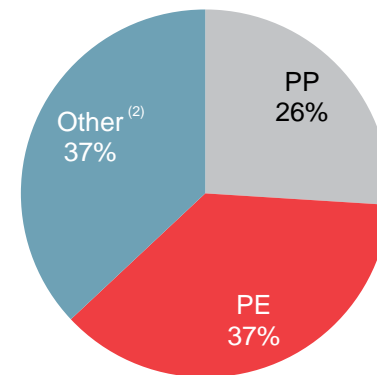
- PP is a downstream petrochemical product derived from the olefin monomer, propylene
- PP has many desirable properties including high stiffness, impact resistance, transparency, heat resistance and flowability
- It is widely used for automobile plastic materials, home electronic appliances, medical devices, various transparent containers, sanitary staple fiber, packaging, film, etc.
- 2<sup>nd</sup> best selling polymer worldwide next to polyethylene ("PE") based on volume
- Largest demand source in North America is for use in injection molding

## North American PP demand by end use (2015)<sup>(1)</sup>



Total North American Demand → 7.7 mmta

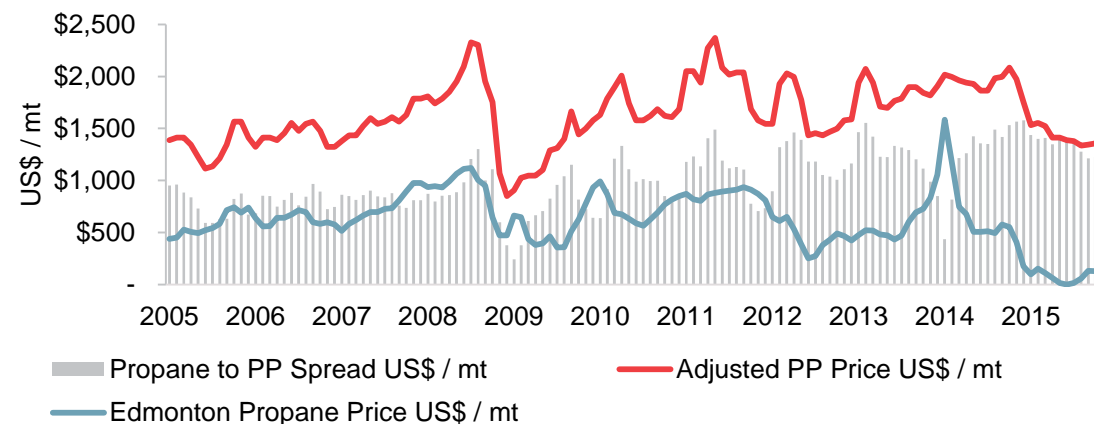
## World plastic demand by polymer (2015)<sup>(1)</sup>



224 mmta

PE derivatives account for a combined 85 mmta (38%) with PP having the 2<sup>nd</sup> largest share at 58 mmta (26%) worldwide

## Propane to PP Spread<sup>(3)</sup>



Pembina and potential partner are well positioned to compete in PP due to feedstock, transportation, and economies of scale advantages

<sup>(1)</sup> Source: IHS 2015.  
<sup>(2)</sup> Other includes: Polystyrene, Acrylonitrile Butadiene Styrene, Polyvinyl Chloride, Polyethylene Terephthalate, Polycarbonate.  
<sup>(3)</sup> PP price adjusted for shipping cost from Edmonton to end markets. Source: IHS, OPIS, Pembina internal.

# Kuwait Petroleum Corporation Qualifications

Subsidiary Petrochemical Industries Companies (“PIC”) has agreed to a Joint Feasibility study with Pembina (Announced April 2016)



## PDH Experience



- PIC has 25% stake in SK Gas’ **600kTa** PDH in Ulsan, South Korea

## PP Experience



- PIC operates an existing **150kTa PP** plant in Kuwait + global marketing of facility output
- PIC is responsible for marketing PP for Idemitsu’s **380kTa PP** facility in Vietnam

## PIC Has Robust Financial Support



- PIC is a wholly-owned subsidiary of Kuwait Petroleum Company, which is wholly owned by the State of Kuwait
- Kuwait’s investment grade sovereign credit rating: **Aa2 (Moody’s), AA (S&P), AA (Fitch)** with the 5<sup>th</sup> highest GDP per capita according to The World Bank

## Upstream WCSB Assets



- PIC’s sister company, KUFPEC, is Chevron’s **30% partner in the Duvernay (330,000 net acres in the prolific Kaybob region)**
- **\$1.5 billion Duvernay investment** (initial cash and a capital expenditure commitment) which was announced October 2014

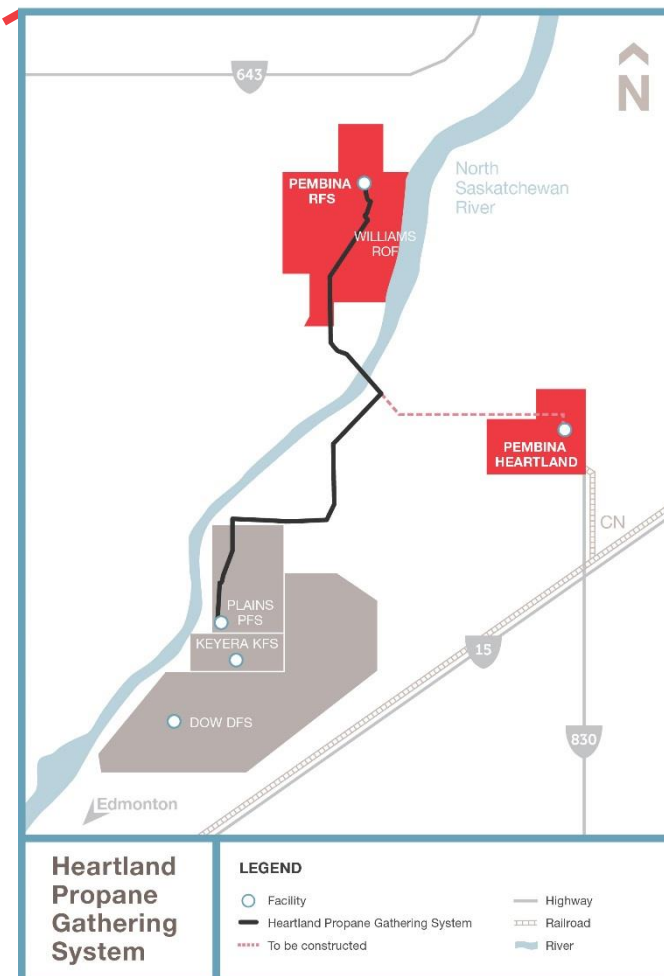
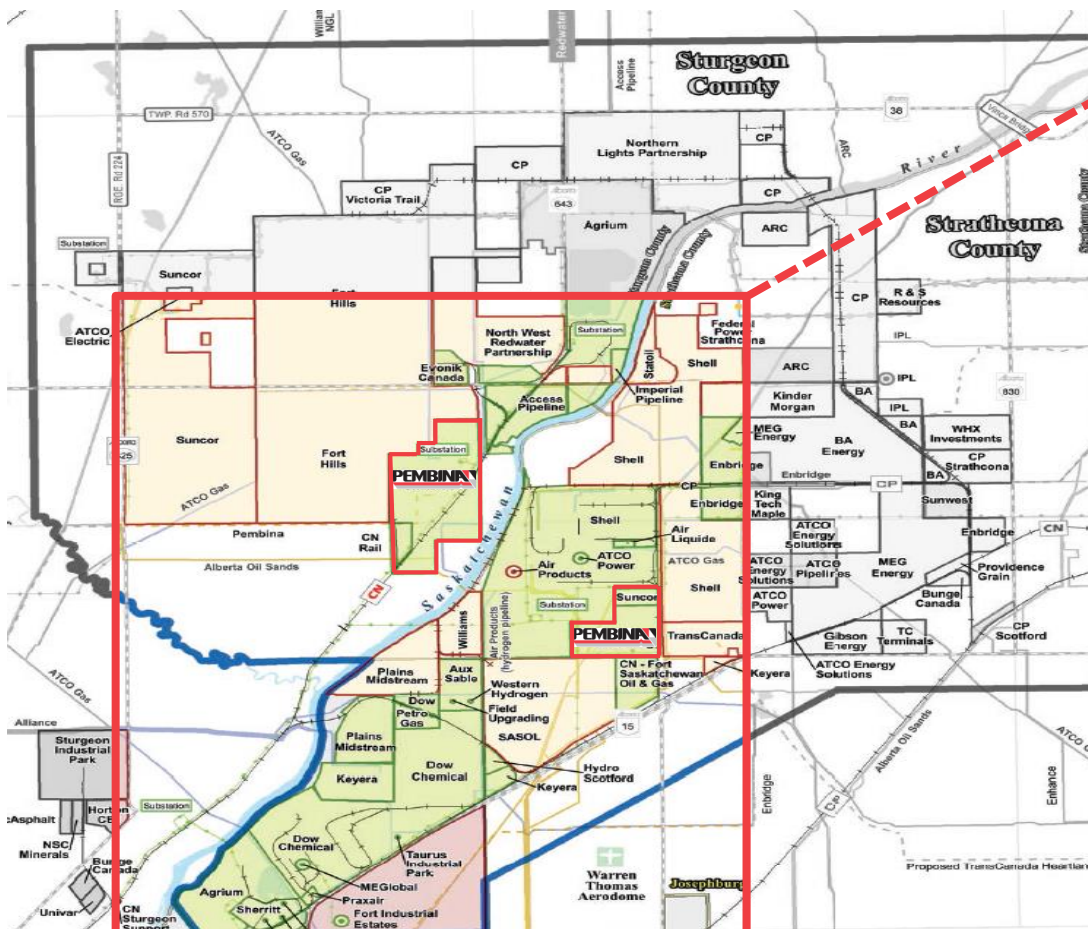
## Existing Operations in Alberta



- MEGlobal (PIC’s joint venture with Dow Chemical) operates three ethylene glycol facilities in Alberta (two in Fort Saskatchewan, one in Red Deer)
- MEGlobal named **2016 Top 70 Alberta employers**

PDH & PP experience, robust financial support, strategic upstream investments, and Alberta operating experience

# Strategic project location



Rail access →

Proximate to major pipelines →

Zoned heavy industry →

Salt cavern storage rights →

Lands available for world-scale development →

Pembina has secured an ideal site for potential PDH + PP development in Alberta's Industrial Heartland

# PDH considerations → 'Investment Criteria' / 'Guard Rails'



## Capital expenditure

- Pursue fixed price / turn-key EPC solutions to limit capital cost exposure / risks
- Evaluate project finance → maintain a strong balance sheet and a strong investment grade credit rating
- Well positioned for a portion of the \$500 million diversification subsidy announced by Alberta Government (February 2016)
- Potential strategic partnership with PIC reduces Pembina's total capital commitment

## Commodity price

- Exploits existing propane price risk already inherent in Pembina's existing business
- Target to secure long-term feedstock supply to manage input costs
- Precedent exists for the development of such a facility on a fee-for-service basis

## Operations / Marketing

- Negotiate a long-term off-take arrangement for facility output to reduce exposure to sales price fluctuations
- Facility would leverage proven technology with a long-term history of safe and reliable operations
- Work with upstream customers to develop strategic alliances along the value chain for further price risk mitigation
- PIC has a breadth of global PDH and PP experience → responsible for operations and marketing of over 500kTa of PP

## Other

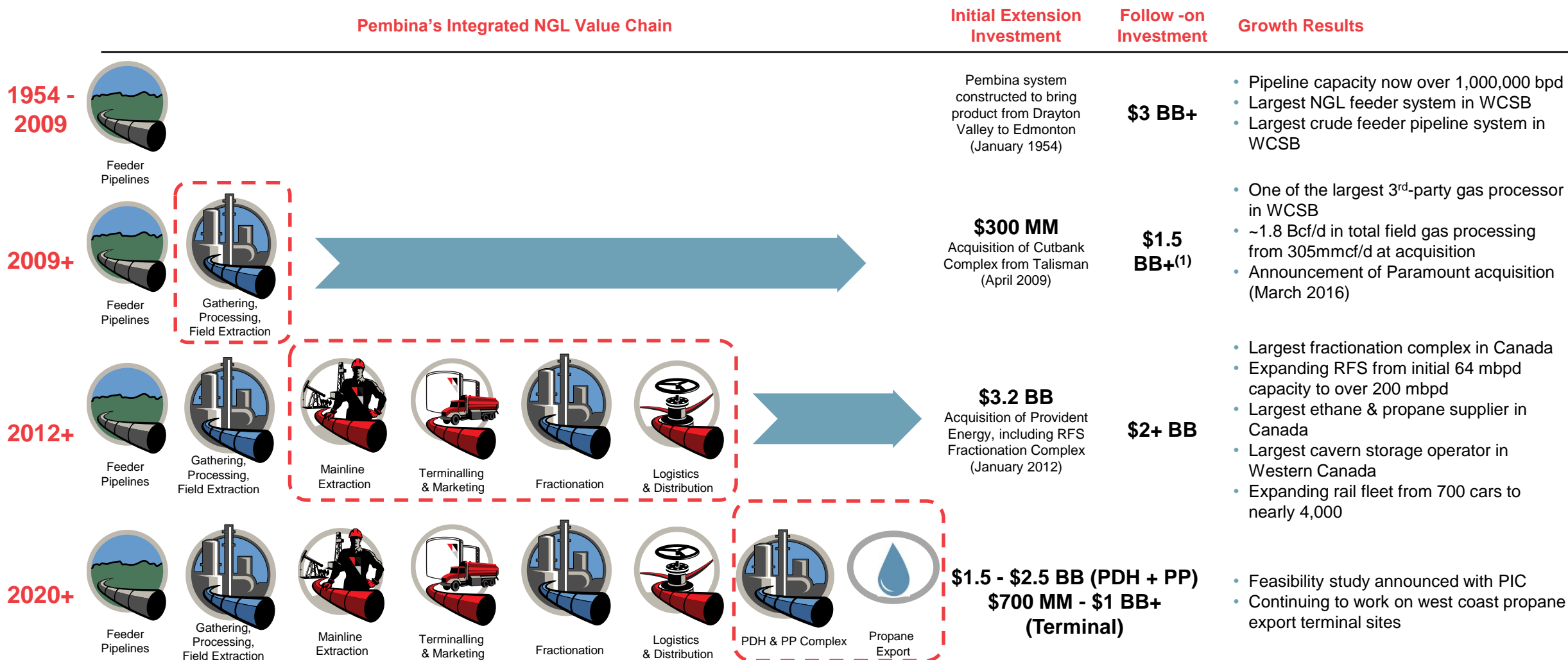
- Pembina has a proven history of strategic and large-scale expansions along the value chain → facility would be integrated with Pembina's asset base and create local market demand for our customers

Pembina will ensure this potential opportunity meets our Investment Criteria & Guard Rails

# Track record of value chain investment & extension



## Pembina's Integrated NGL Value Chain



Once Pembina enters a business line, we are committed to follow-on investment, growth, and economies of scale

(1) Includes acquisition of Paramount Resources' midstream assets announced March 17<sup>th</sup>, 2016, transaction is expected to close in the second quarter of 2016. See "Forward-looking statements and information."

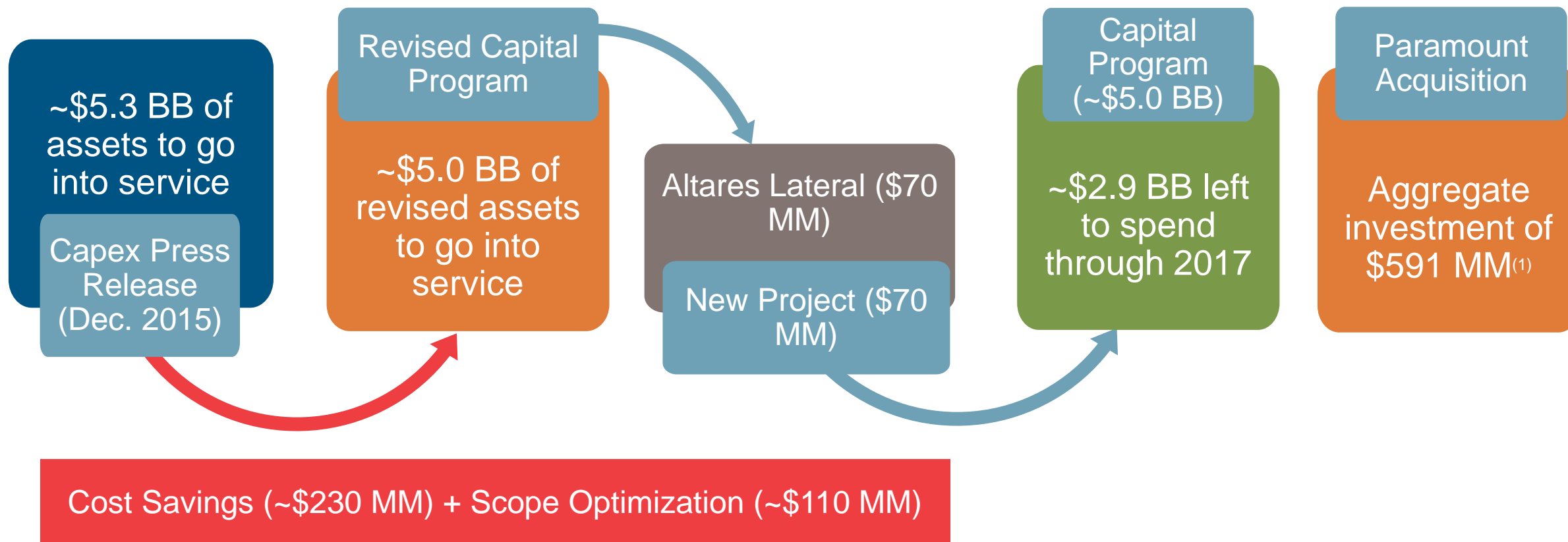


An aerial photograph of an industrial facility, likely a water treatment plant, showing a dense network of pipes and machinery. Two workers in blue uniforms and hard hats are visible, one standing near a piece of equipment and another further away. The ground is covered in gravel. A red arrow points downwards from the top center of the image.

# Capital Program

Scott Burrows

# Pembina's secured capital program progression



Pembina continues to drive material savings in capital program + securing new opportunities

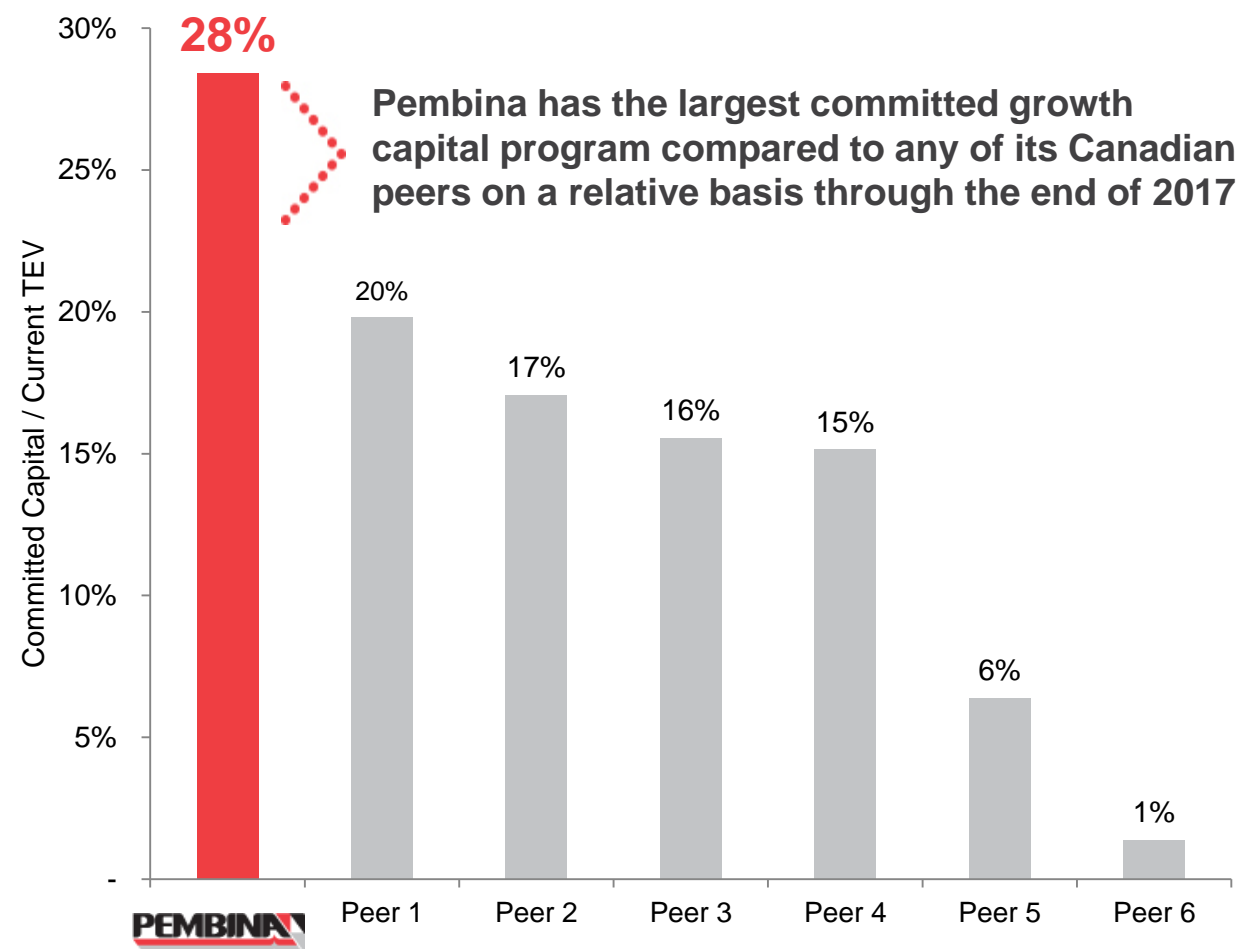
<sup>(1)</sup> Inclusive of cash purchase price of \$556 million and \$35 million debottlenecking initiative, acquisition is expected to close in the second quarter of 2016. See "Forward-looking statements and information" and "Non-GAAP, additional GAAP and other measures."

# We are pursuing a fee-for-service growth portfolio



Secured Growth Projects	In-Service	Capital Cost (\$MM)
Phase III Pipeline Expansions <sup>(1)</sup>	Mid 2017	\$2,440
NEBC Expansion <sup>(1)</sup>	Late 2017	\$220
Vantage Expansion	Late 2016	\$85
Laterals	Various	\$250
<b>Conventional Pipelines</b>	<b>Subtotal</b>	<b>\$2,995</b>
Musreau III Facility	Mid 2016	\$100
Resthaven Expansion	Mid 2016	\$105
Duvernay I <sup>(1)</sup>	H2 2017	\$125
<b>Gas Services</b>	<b>Subtotal</b>	<b>\$330</b>
Cavem Development	Various	\$105
Canadian Diluent Hub	Mid 2017	\$350
Terminal and Hub Services	Early 2016	\$85
RFS II Fractionator	Q1 2016	\$415
RFS III Fractionator	Q3 2017	\$400
NWR Sturgeon Refinery	H2 2017	\$180
Other <sup>(1)</sup>	Various	\$270
<b>Midstream</b>	<b>Subtotal</b>	<b>\$1,805</b>
Horizon Expansion	Mid 2016	\$125
Cheecham Expansion	Mid 2016	\$15
<b>Oil Sands &amp; Heavy Oil</b>	<b>Subtotal</b>	<b>\$140</b>
<b>Committed Capital</b>		<b>\$5,270</b>
<b>Cost Savings + Scope Optimization</b>		<b>(\$340)</b>
<b>Newly Announced Project</b>		<b>\$70</b>
<b>Revised Secured Capital</b>		<b>\$5,000</b>
<b>Proposed Marine Terminal<sup>(2)</sup></b>		<b>\$700 - \$1,000</b>
<b>Uncommitted Opportunities</b>		<b>\$1,200</b>
<b>Total Unrisked Capital Opportunities</b>		<b>\$6,900 - \$7,200</b>

## Relative Growth Project Portfolio



Source: Company filings, Street Research (peers include: ALA, ENB, IPL, KEY, TRP, VSN).

Over \$5 billion in committed projects underway

<sup>(1)</sup> Subject to regulatory and environmental approval.

<sup>(2)</sup> Subject to project sanctioning, reaching commercial agreements and regulatory and environmental approvals.

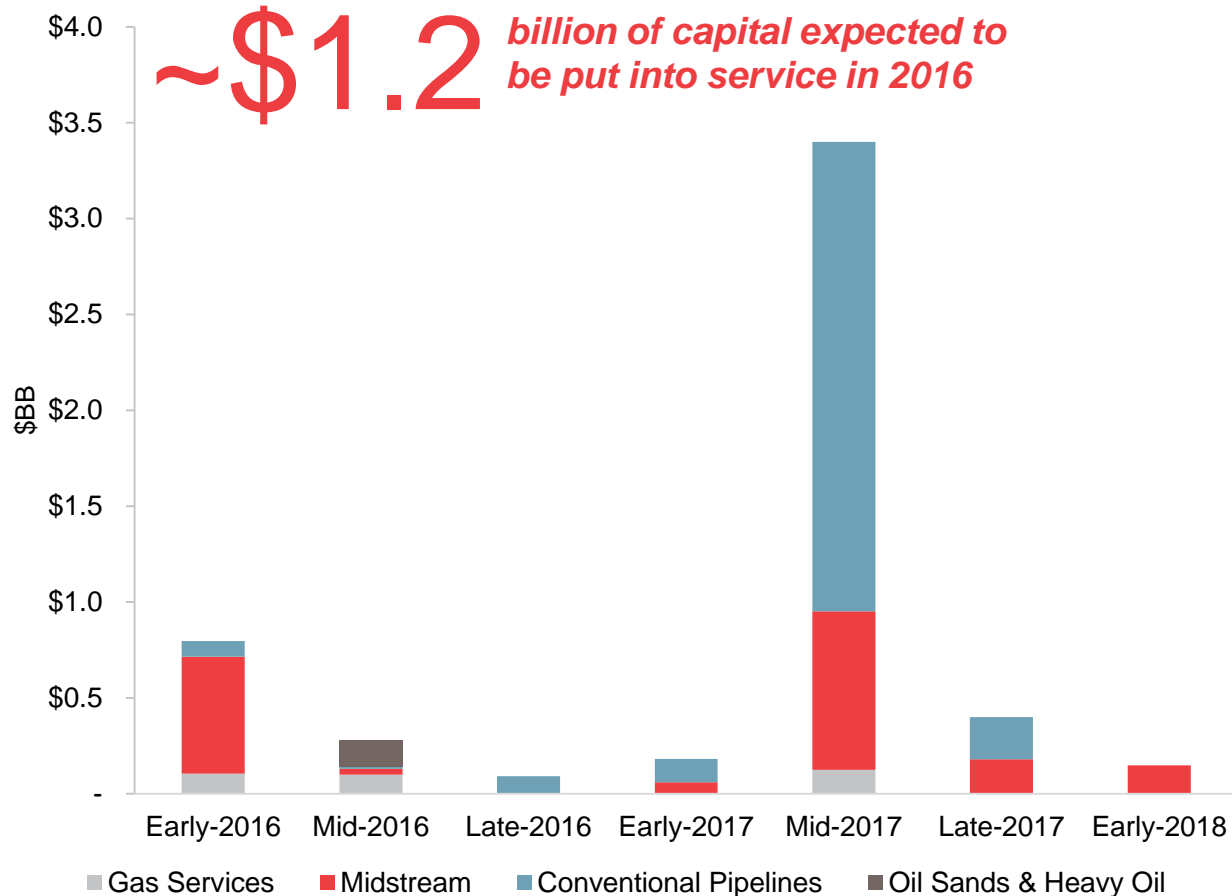
Source: Bloomberg, Company Filings. See "Forward-looking statements and information" and "Non-GAAP, additional GAAP and other measures."

# Project timelines & in-service dates

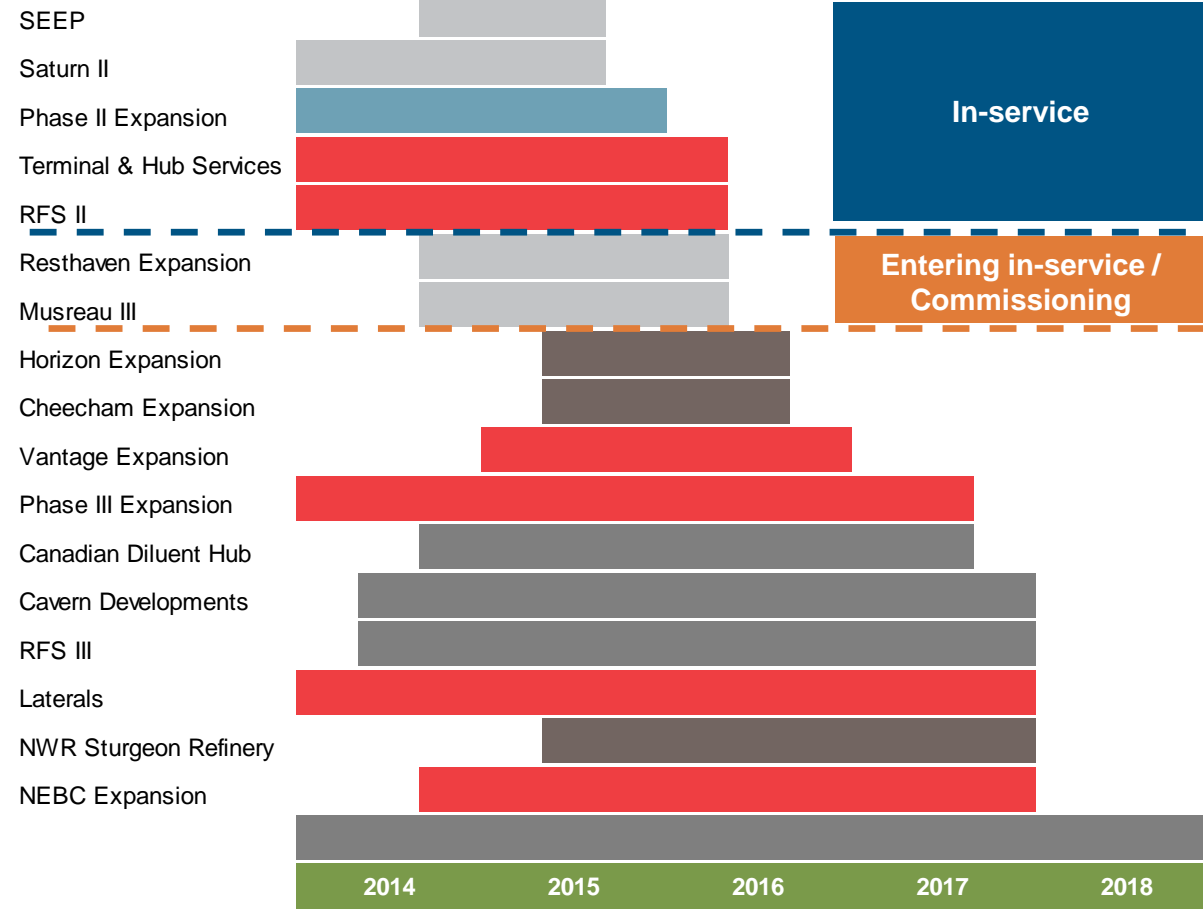


Committed capital expected in-service date<sup>(1)</sup>

**~\$1.2 billion of capital expected to be put into service in 2016**



Expected project timelines<sup>(1)</sup>



Overall project portfolio is tracking on-time and on-budget to meet 2018 objective

<sup>(1)</sup>Actual capital in-service dates may be different than what is shown here depending on regulatory approval and construction. See "Forward-looking statements and information."

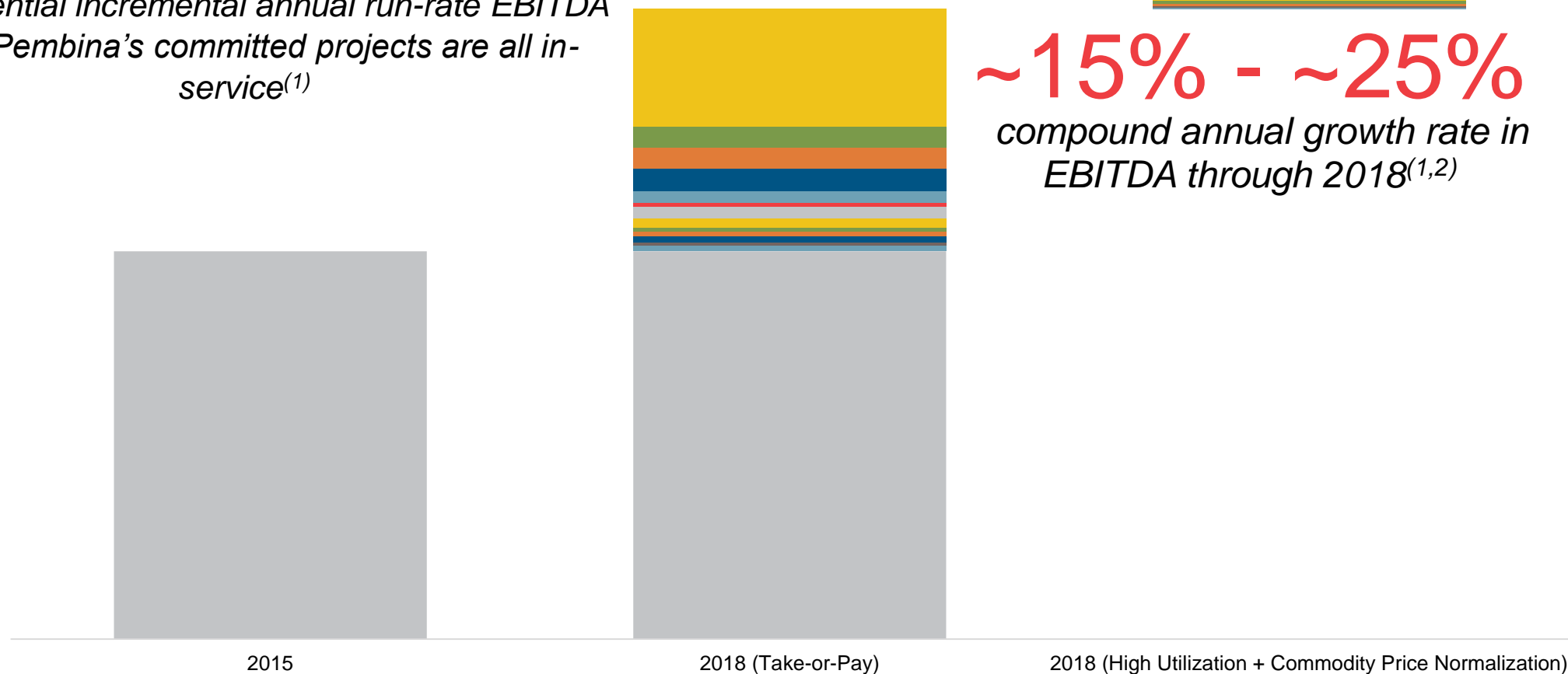
# Summary of individual project contributions



**\$600 - \$950 million**

*of potential incremental annual run-rate EBITDA once Pembina's committed projects are all in-service<sup>(1)</sup>*

**~15% - ~25%**  
*compound annual growth rate in EBITDA through 2018<sup>(1,2)</sup>*



- Phase III
- Laterals
- RFS III Fractionator
- RFS II Fractionator
- Canadian Diluent Hub
- Vantage Expansion
- Other (NGL Midstream)
- NE BC Expansion
- NWR Sturgeon Refinery
- Duvernay I
- Musreau III
- Horizon Expansion
- Terminal and Hub Services
- Resthaven Expansion
- Cheecham Expansion
- Base Business

**Pembina's secured growth projects are expected to drive significant growth in EBITDA**

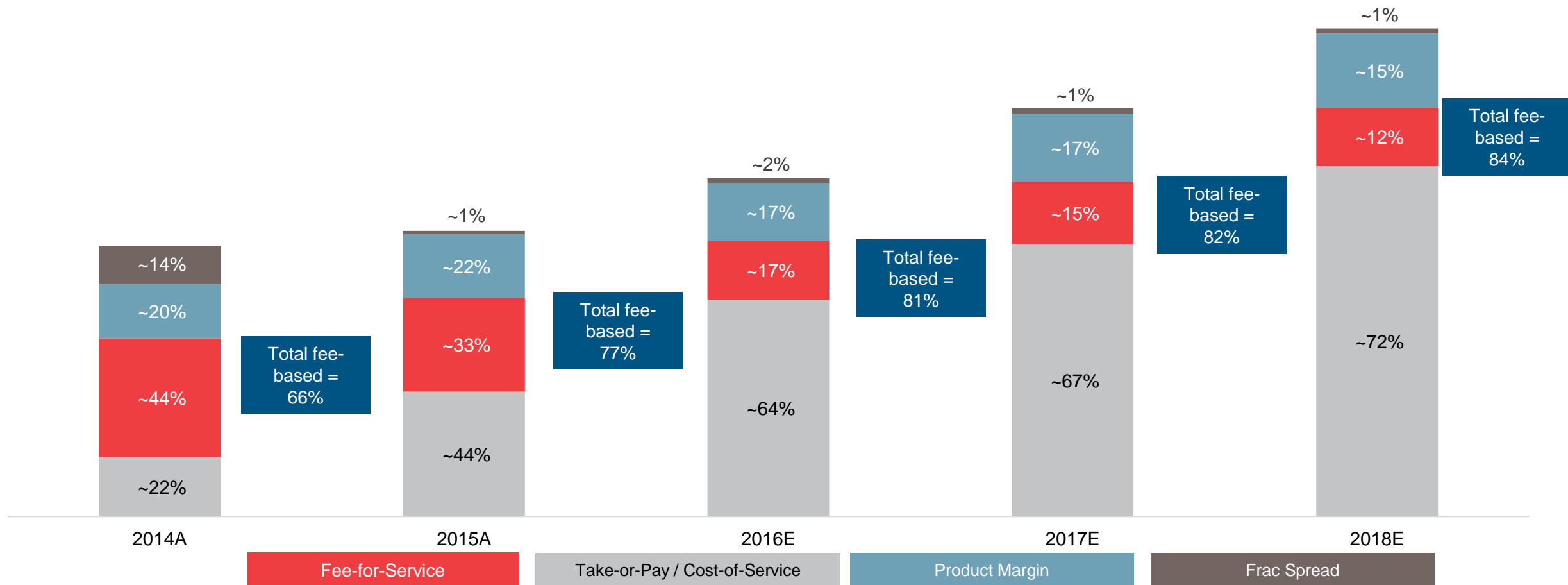
<sup>(1)</sup> Based on approximately \$5 billion of committed capital projects with in-service dates between 2016 and end of 2017. Upper end of range depending on utilization above take-or-pay levels and commodity prices.

<sup>(2)</sup> Illustrative compound annual growth rate calculations assume Pembina's underlying business remains constant. See "Non-GAAP, additional GAAP and other measures." & "Forward-looking statements and information."

# We are committed to a low-risk business platform



Summary of operating margin by type (\$MM)<sup>(1)</sup>



**80%+ of operating margin is expected to be generated from fee-for-service contracts in 2018**

<sup>(1)</sup> 2014 and 2015 figures based on actual results, while forward years are based on Pembina's current long-term forecast and actual results may vary depending on asset utilization, commodity pricing and other factors. See "Non-GAAP, additional GAAP and other measures." & "Forward-looking statements and information."



# Strong Financial Platform

Scott Burrows

# Financing objectives

- ✓ Finance growth ~50/50 debt/equity
- ✓ Maintain BBB rating with conservative balance sheet metrics
- ✓ Manage through the investment cycle
- ✓ Ensure ample liquidity to fund capital program
- ✓ Ensure financing flexibility to respond to market conditions



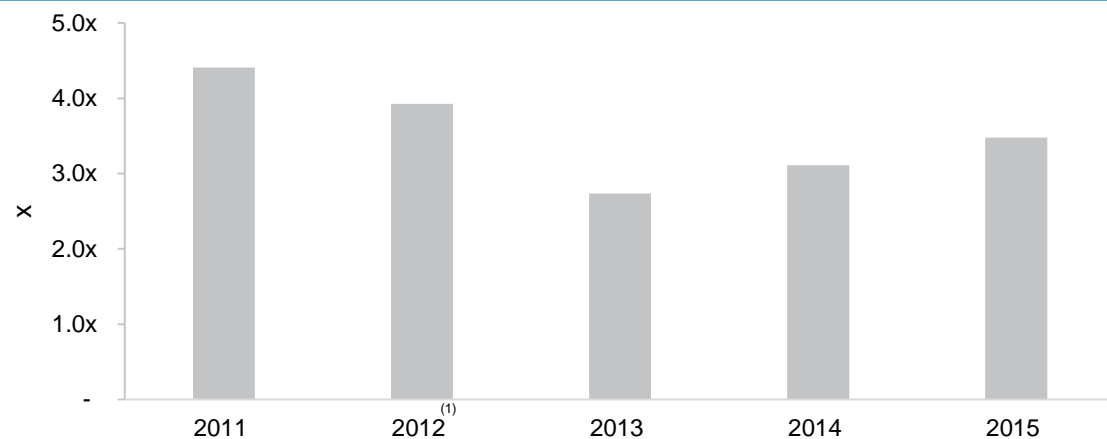
Pembina continues to have excellent access to capital



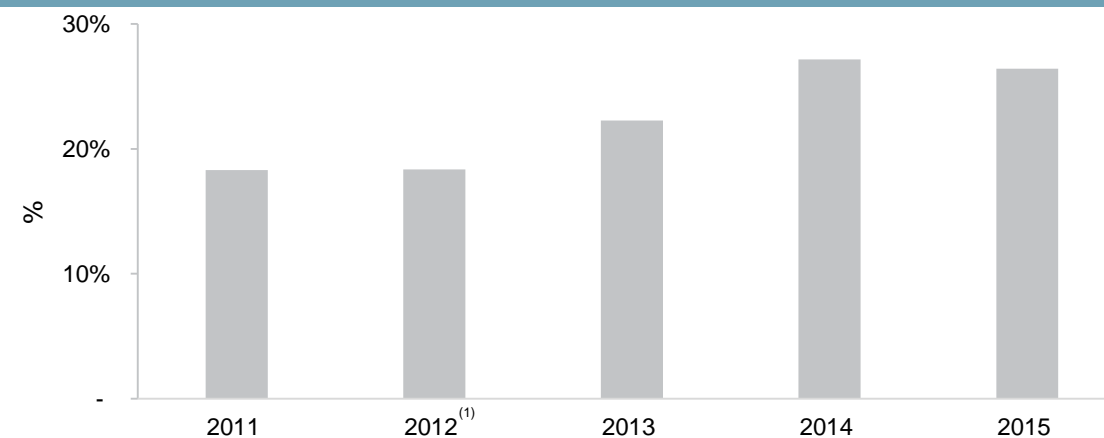
# Debt metrics



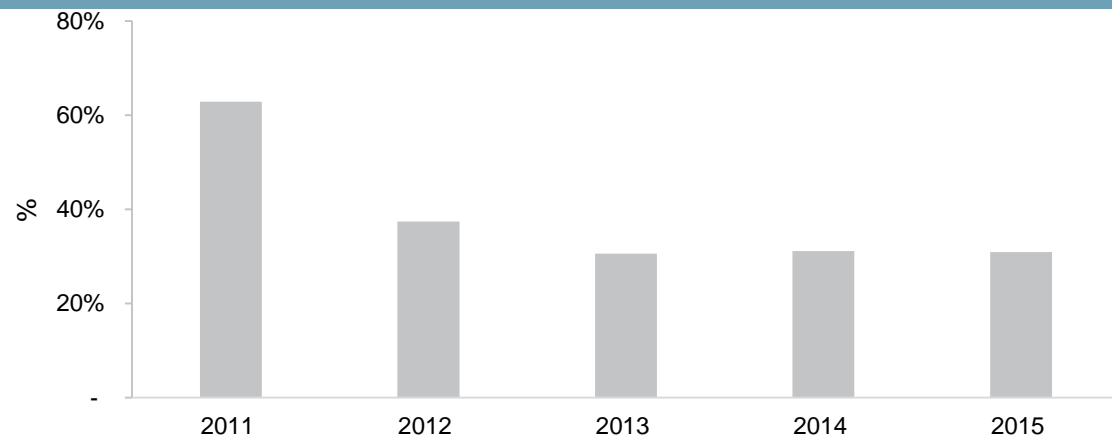
### Total Debt / EBITDA



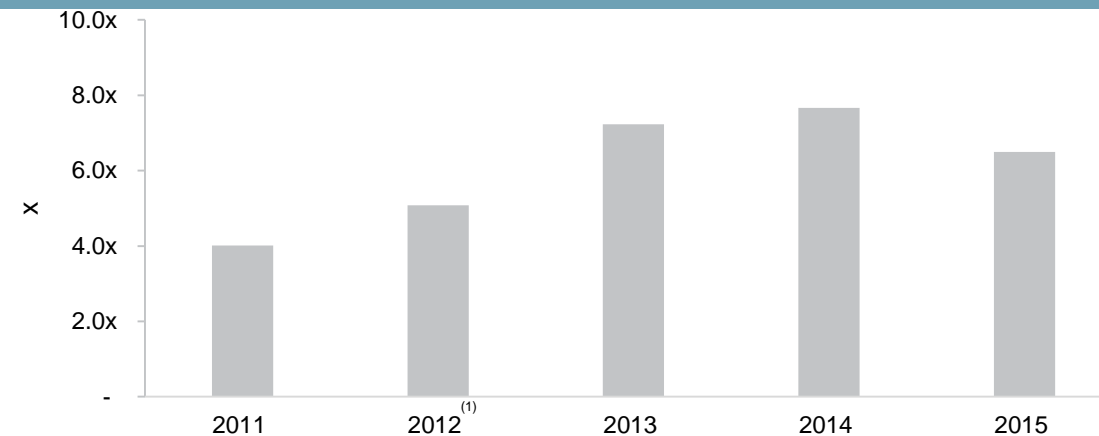
### Funds from Operations / Total Debt



### Total Debt / Total Book Capitalization



### Interest Coverage



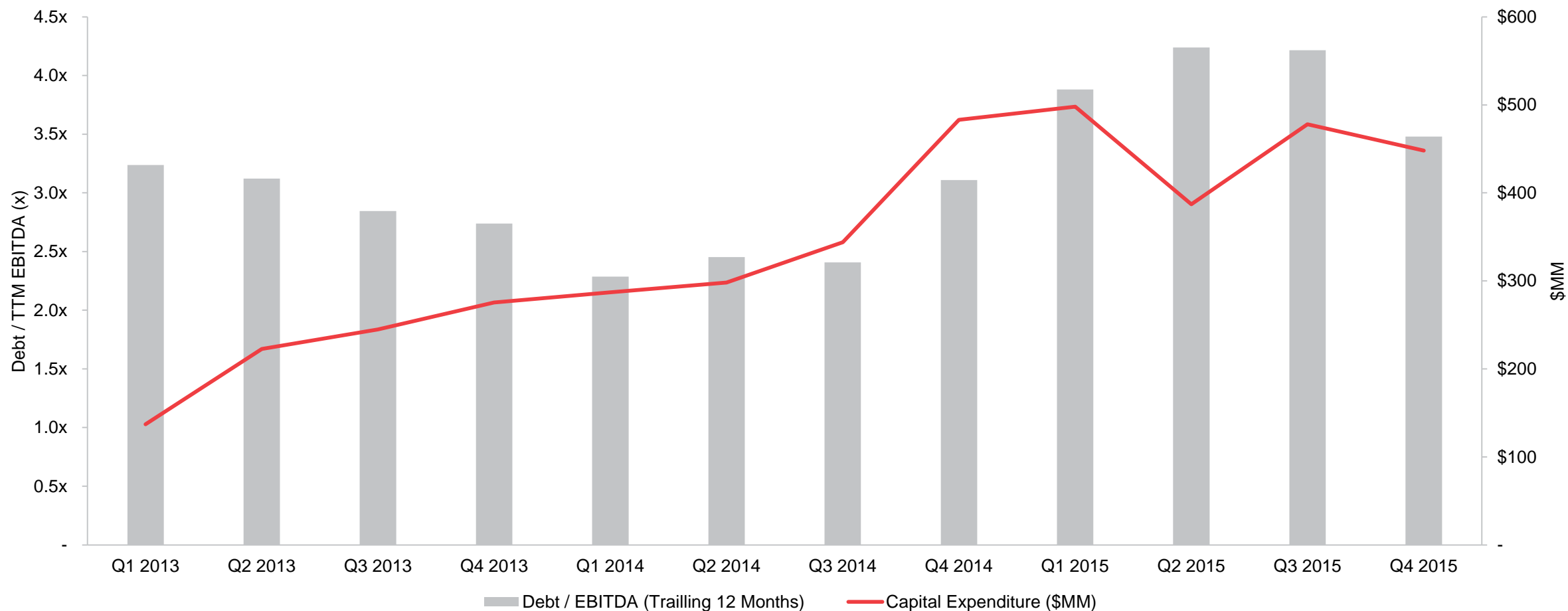
**Pembina remains committed to prudent financial management**

<sup>(1)</sup> 2012 adjusted for a full-year contribution from the Provident assets.  
All financial figures as at respective year-end. See "Non-GAAP, additional GAAP and other measures."

# Historical balance sheet review



## Historical debt / trailing twelve month ("TTM") EBITDA and. capital expenditures



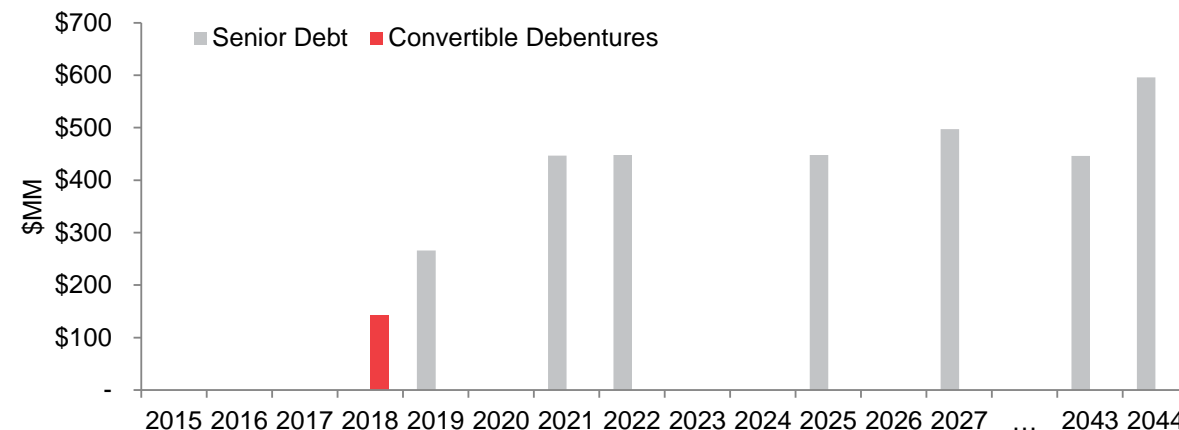
Pembina's debt metrics should continue to improve as large-scale fee-for-serve assets are put into service

# Long-dated debt maturity profile

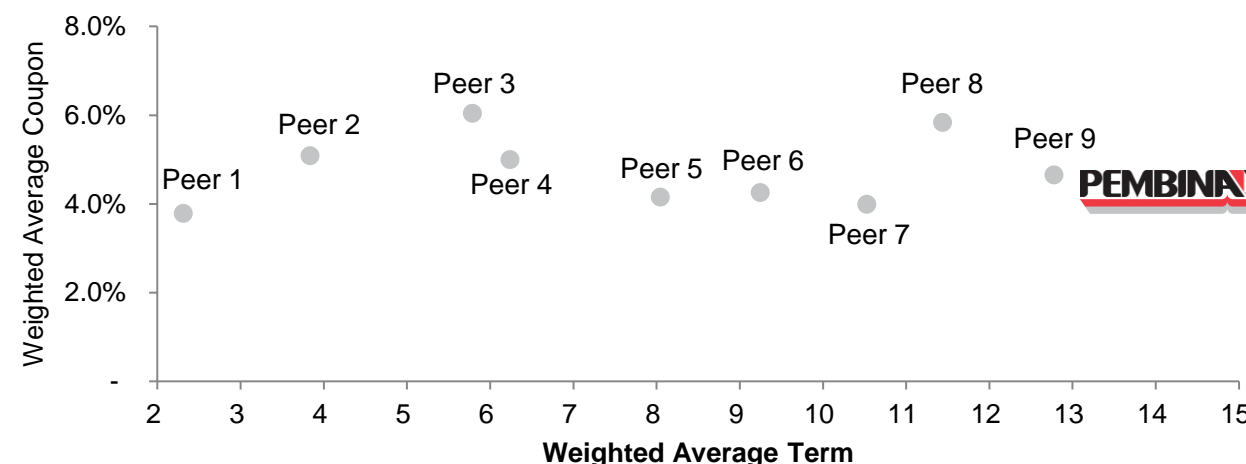


- Pembina's debt portfolio is more conservative than its peer group:
  - Weighted average maturity of ~14 years vs. peer group average of ~8 years
  - Weighted average coupon of ~4.5%; peer average of ~4.8%
  - Maturities gaps in 2023, 2026 and 2046 allow for "standard" issuance tenors
- Series C & E of the convertible debentures were redeemed in October 2015

Pembina debt maturity profile



Peer debt versus Pembina tenor analysis<sup>(1,2)</sup>



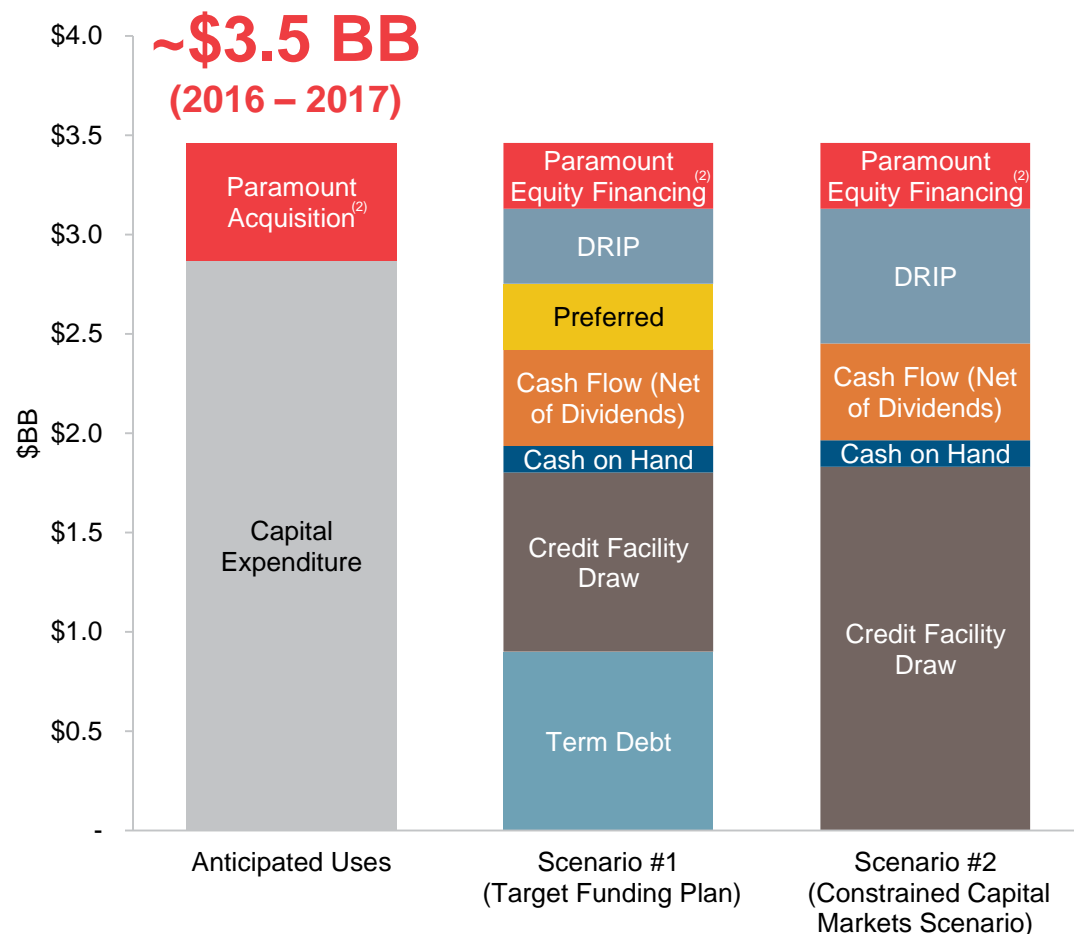
Continued focus on maintaining a conservative balance sheet

<sup>(1)</sup> C\$ fixed rate denominated debt only as of April 2016.  
<sup>(2)</sup> ENB and ENF not adjusted for the inter-company loan announcement.  
 Source: National Bank Financial. Peers include AltaGas, Brookfield Renewable Power, Capital Power, Enbridge, Enbridge Income Fund, Inter Pipeline, TransAlta, TransCanada, Veresen.

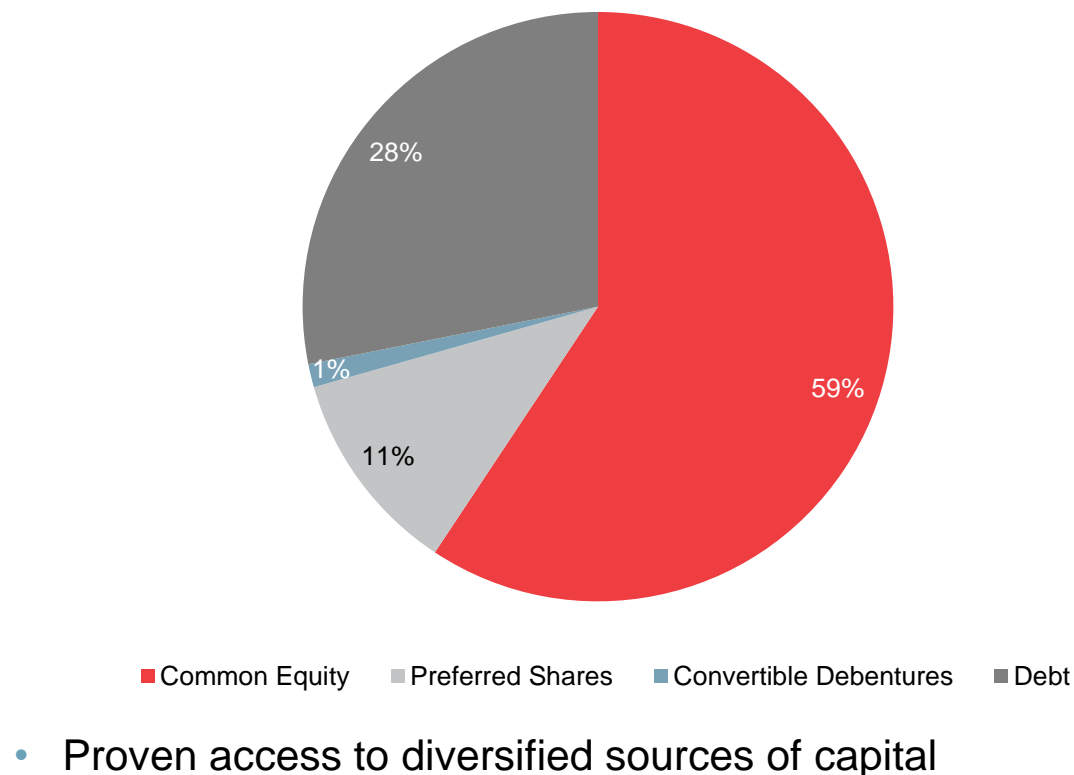
# Funding plan and capital structure are equipped for growth



Funding plan (2016 - 2017)<sup>(1)</sup>



Capital structure (March 31, 2016)



Well thought out financing plan with multiple execution options

<sup>(1)</sup> Funding plan is as of the end of February 2016.  
<sup>(2)</sup> Announced March 17, 2016, acquisition is expected to close in the second quarter of 2016.  
 See "Forward-looking statements and information."

# Sensitivities (2016 EBITDA C\$MM)



## Conventional Pipelines

### Key variable

### Uncontracted volumes

Volume  $\pm$  10,000 bpd

$\pm$ \$9

## Gas Services

### Key variable

### Uncontracted volumes

Volume  $\pm$  10 mmcf/d

$\pm$ \$2

## NGL Midstream<sup>(1,2)</sup>

### Key variables

AECO  $\pm$  \$0.25 CAD/gj

$\pm$  \$10

Mont Belvieu Propane  $\pm$  \$0.10 US/usg

$\pm$  \$35

Edmonton Butane  $\pm$  \$0.10 US/usg

$\pm$  \$7

Frac Spread  $\pm$  \$1.00 US/bbl

$\pm$  \$13

FX  $\pm$  0.05 CAD per US

$\pm$  \$10

## Crude Oil Midstream<sup>(2)</sup>

### Key variables

WTI  $\pm$  \$5.00 US/bbl

$\pm$  \$6

Crude Oil Volumes  $\pm$  10,000 bpd

$\pm$  \$3

Condensate Volumes  $\pm$  10,000 bpd

<\$1

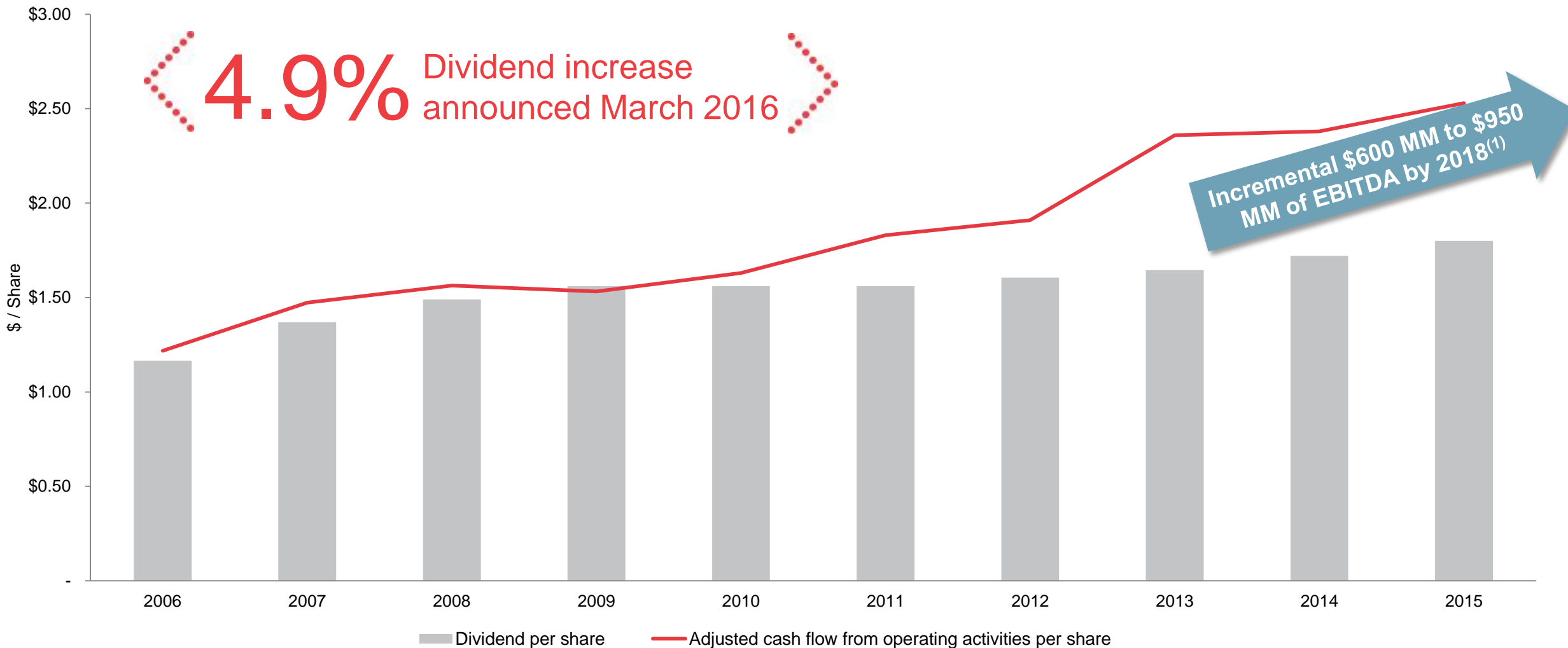
Business is well equipped to handle broader market volatility

<sup>(1)</sup> Sensitivity can be higher or lower depending on cost of inventory.  
<sup>(2)</sup> Midstream sensitivities assume a CAD/USD exchange rate \$1.36.  
 See "Forward-looking statements and information" and "Non-GAAP, additional GAAP and other measures."

# Dividend growth supported by growing cash flow



4.9% Dividend increase announced March 2016



Strong history of growing Pembina's dividend and adjusted cash flow per share

(1) Based on approximately \$5 billion of committed capital projects with in-service dates between 2016 and the end of 2017. Upper end of range depending on utilization above take-or-pay levels and commodity prices. See "Forward-looking statements and information" and "Non-GAAP, additional GAAP and other measures."



# Conclusion

Mick Dilger

# We continue driving shareholder value



**330** % total shareholder return\*

\*Jan 1, 2006- Apr 1, 2016, inclusive of dividends reinvested.

**5.0** % CAGR in dividends per share\*

\* 2006 - 2015

**\$4.1** billion in dividends paid since inception\*

\* To December 2015, Pembina began paying dividends in 1997.

**15** % average compound annual return\*

\*Jan 1, 2006- Apr 1, 2016, inclusive of dividends reinvested.

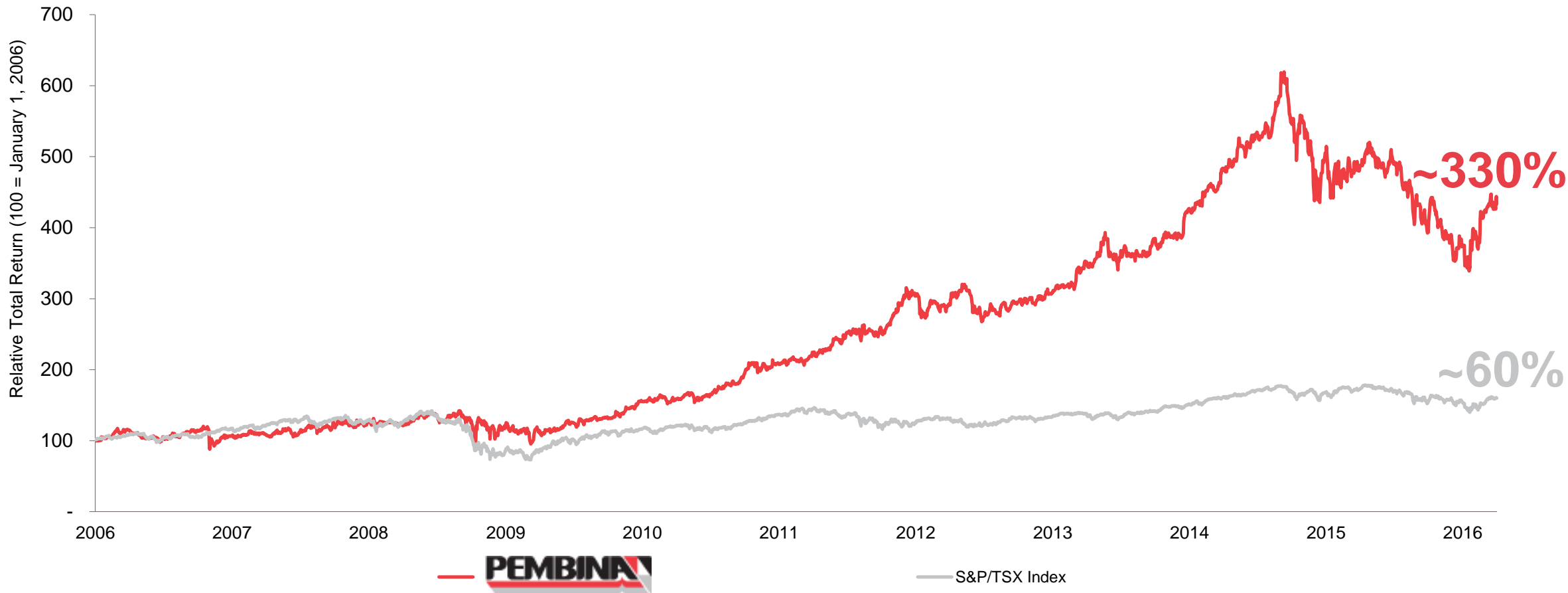
Proven long-term track record of shareholder value creation



# We produce exceptional performance



Total return – Pembina vs. S&P/TSX



Pembina has a long-term track record of strong share price performance

# Key take-away → we are doing the important things right



- **Strategically located and well-established infrastructure**
  - ✓ Extensive and diversified asset footprint with high barriers to entry, serving long-life, economic hydrocarbon reserves
- **Proven track record and experienced management team**
  - ✓ History of safe and reliable operations, solid historical financial and operational performance
  - ✓ Demonstrated ability to execute on business plan and generate leading returns for shareholders
- **Highly contracted and stable cash flow**
  - ✓ Fee-for-service focused capital program
- **Strong balance sheet**
  - ✓ Investment-grade credit rating and attractive debt metrics with proven access to debt/equity markets and financial flexibility
- **History of stable and growing dividends**
  - ✓ Delivering on our promises; consecutively increased dividend 2012 – 2016
- **Sector leading growth portfolio**
  - ✓ \$2.1 billion capital spending plan for 2016; ~\$5 billion of committed growth and additional uncommitted growth opportunities

Doing the important things right to facilitate our objective of doubling EBITDA in 2018

**Contact Us:**

# Pembina Pipeline Corporation

Suite 4000, 585 8th Avenue S.W.

Calgary, AB T2P 1G1

**[www.pembina.com](http://www.pembina.com)**

**[investor-relations@pembina.com](mailto:investor-relations@pembina.com)**

**Toll Free: 1-855-880-7404**

**Phone: (403) 231-3156**



# Non-GAAP, additional GAAP and other measures



This presentation uses certain terms that are not defined by GAAP but are used by management of Pembina to evaluate Pembina's performance. Non-GAAP and additional GAAP financial measures do not have a standardized meaning prescribed by GAAP and are therefore unlikely to be comparable to similar measures presented by other companies. Pembina uses the non-GAAP terms "total enterprise value" (market value of Pembina's common shares plus preferred shares and convertible debentures plus senior debt less cash and cash equivalents), EBITDA (results from operating activities plus share of profit from equity accounted investees (before tax, depreciation and amortization) plus depreciation and amortization (included in operations and general and administrative expense) and unrealized gains or losses on commodity-related derivative financial instruments) and Adjusted Cash Flow from Operating Activities (cash flow from operating activities plus the change in non-cash working capital and

excluding preferred share dividends and acquisition-related expenses), and the additional GAAP term "operating margin" (gross profit before depreciation and amortization included in operations and unrealized gain/loss on commodity-related derivative financial instruments). Financial ratios are used to demonstrate financial leverage (extent to which debt is used in a company's capital structure) which include Total Debt (Total Senior Debt outstanding plus face value of Convertible Debentures as per the financial statements of the corresponding reporting year), Interest Coverage (EBITDA divided by Net Interest Paid (interest paid plus interest received), Total Debt to Total Capitalization (Total Debt divided by Total Equity less non-controlling interest) and Funds From Operations to Total Debt (Adjusted Cash Flow from Operating Activities divided by Total Debt), Reinvested cash flow (Cash flow from Operations less Preferred Share Dividends), Revenue Volumes (contracted plus interruptible volumes), Physical Volumes

(physical throughput on Pembina's systems). Management believes these non-GAAP and other measures provide an indication of the results generated by Pembina's business activities and the value those businesses generate. Investors should be cautioned that these non-GAAP and other measures should not be construed as an alternative to net earnings, cash flow from operating activities or other measures of financial performance determined in accordance with GAAP as an indicator of Pembina's performance. For additional information with respect to financial measures which have not been identified by GAAP, including reconciliations to the closest comparable GAAP measure, see Pembina's Management's Discussion and Analysis for the fiscal year ended December 31, 2015, available on SEDAR at [www.sedar.com](http://www.sedar.com) or in Pembina's annual report on Form 40-F for the fiscal year ended December 31, 2015 available on EDGAR at [www.sec.gov](http://www.sec.gov).



# Business Overview

The background image shows an industrial facility, possibly a refinery or power plant, during sunset. The sky is a mix of orange, yellow, and blue. In the foreground, there are large, dark silhouettes of industrial structures, including pipes and towers. Two workers in hard hats are visible in the middle ground, silhouetted against the bright light of the setting sun. The overall scene conveys a sense of industrial activity and energy.

# Pembina represents a unique investment opportunity



**Pure play energy infrastructure company that allows investors to participate in the oil and natural gas liquids industry across Canada and North Dakota. We:**

- ✓ are well-positioned for growth
- ✓ have a strong demand for our services
- ✓ have a solid and sustainable business platform with only modest exposure to commodity prices



TSX: PPL | NYSE: PBA

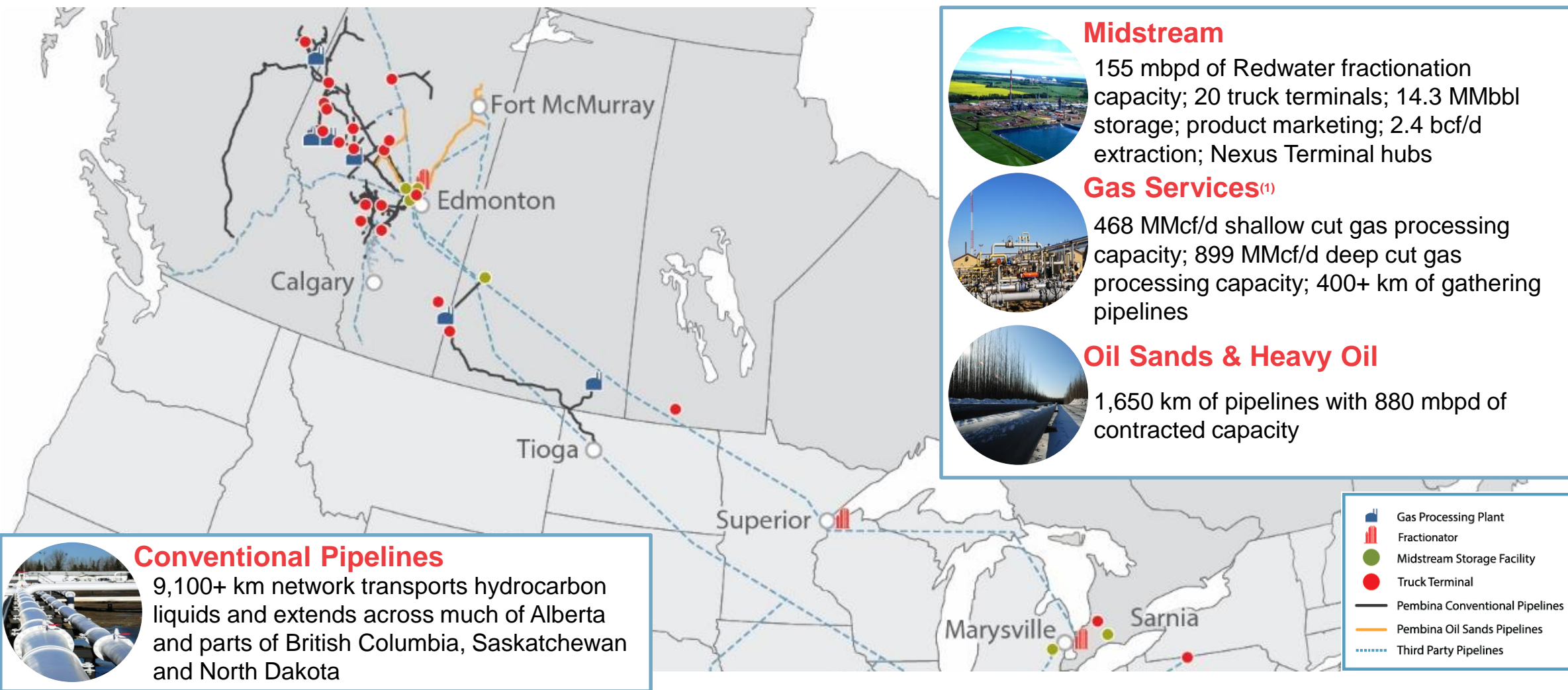
Common shares outstanding <sup>(1)</sup>	387 million
TSX common share trading price <sup>(1)</sup>	\$34.29
TSX 52-week trading range <sup>(1)</sup>	\$27.20 - \$43.20
Market capitalization <sup>(1)</sup>	\$13.3 billion
Total enterprise value <sup>(1)</sup>	\$17.3 billion
Common Share Dividend	\$1.92 / share annualized (\$0.16 / share monthly)
Yield <sup>(1)</sup>	5.6%
Corporate credit rating	BBB (S&P and DBRS)

Member of the TSX/S&P 60

One of the largest energy infrastructure companies in Canada with a sector leading secured growth platform

<sup>(1)</sup> As at April 1, 2016, TEV includes convertible debentures, preferred shares and senior debt.  
See "Forward-looking statements and information" and "Non-GAAP, additional GAAP and other measures."

# Pembina's assets and businesses at a glance



Continental presence with focus on Western Canadian Sedimentary Basin

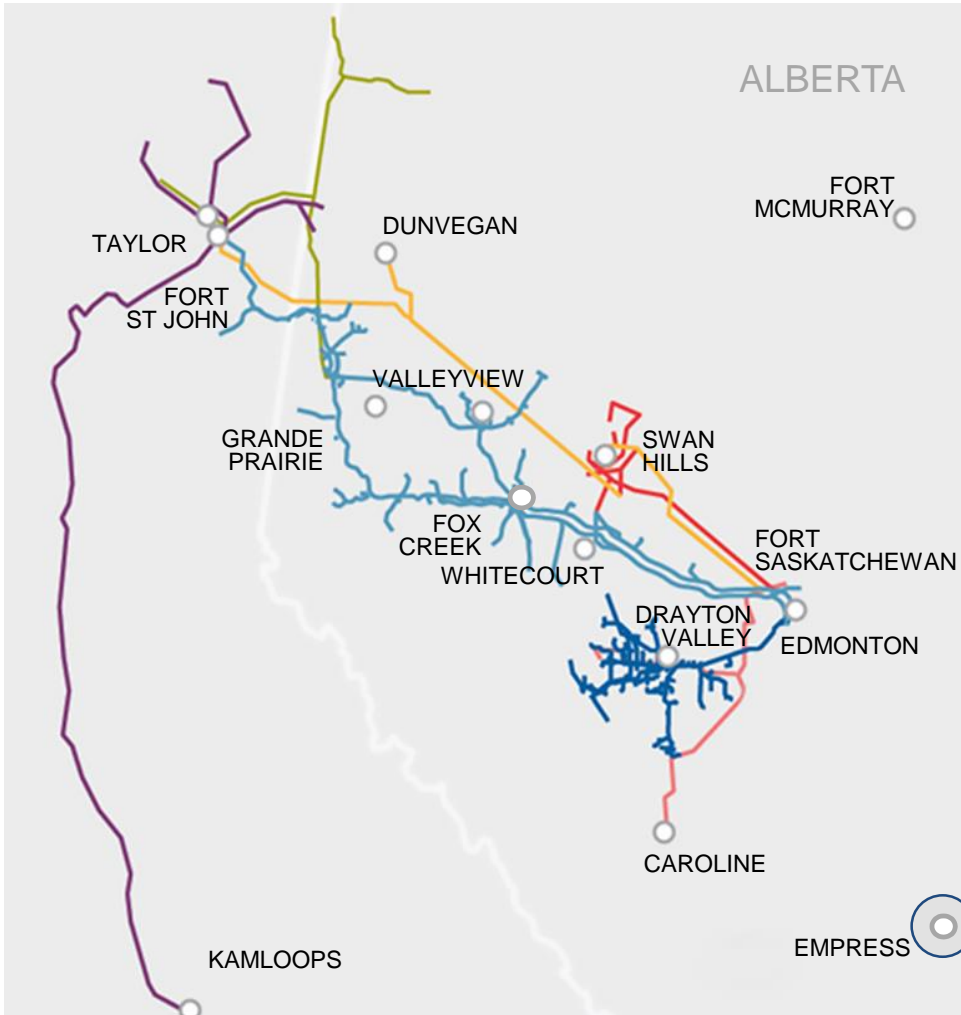
<sup>(1)</sup> Does not include acquisition of Paramount Resource's midstream assets announced March 17<sup>th</sup>, 2016, transaction is expected to close in the second quarter of 2016.

# Business Segment Overviews

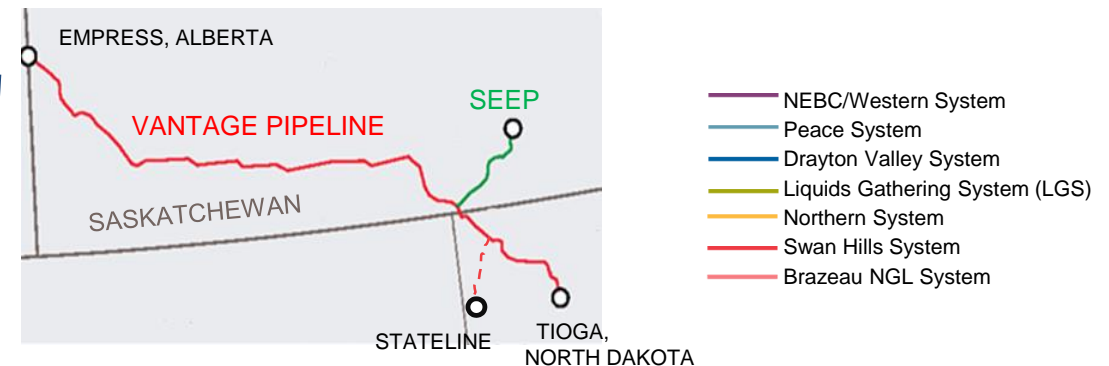




# Conventional Pipelines

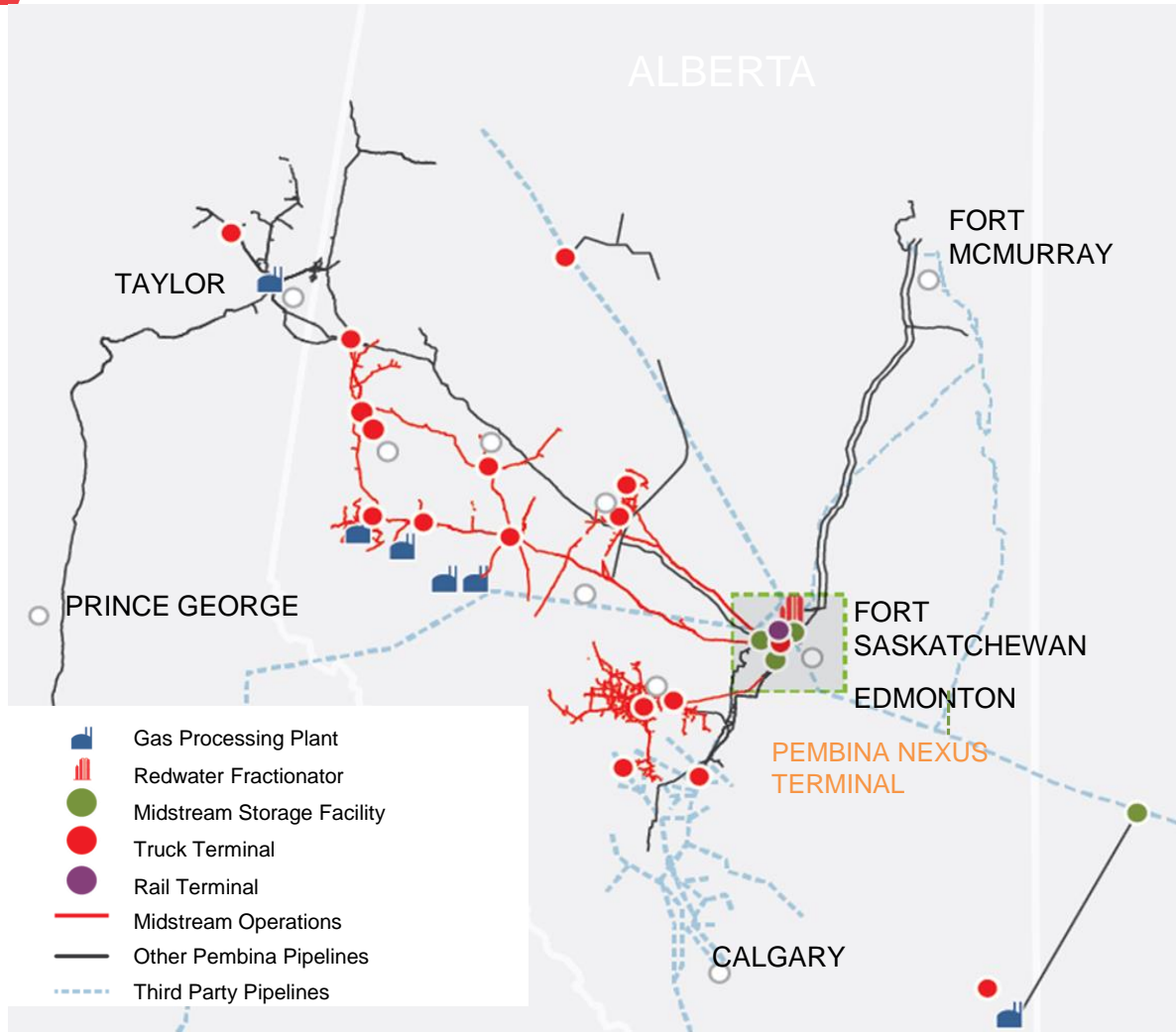


- Pipeline operational excellence: 97%+ reliable (2015)
- Proximal to prolific geology
- Q4 2015 revenue volumes: 621 mbpd (~2% increase from Q4 2014)
- 2015 revenue volumes: 614 mbpd (~7% increase from 2014)
- Connected to refineries, export pipelines, fractionation and petrochemical facilities
- Diverse producers and product types with over 300 receipt points
- ~165 km of new pipelines constructed during 2015



Leader in conventional hydrocarbon products gathering business

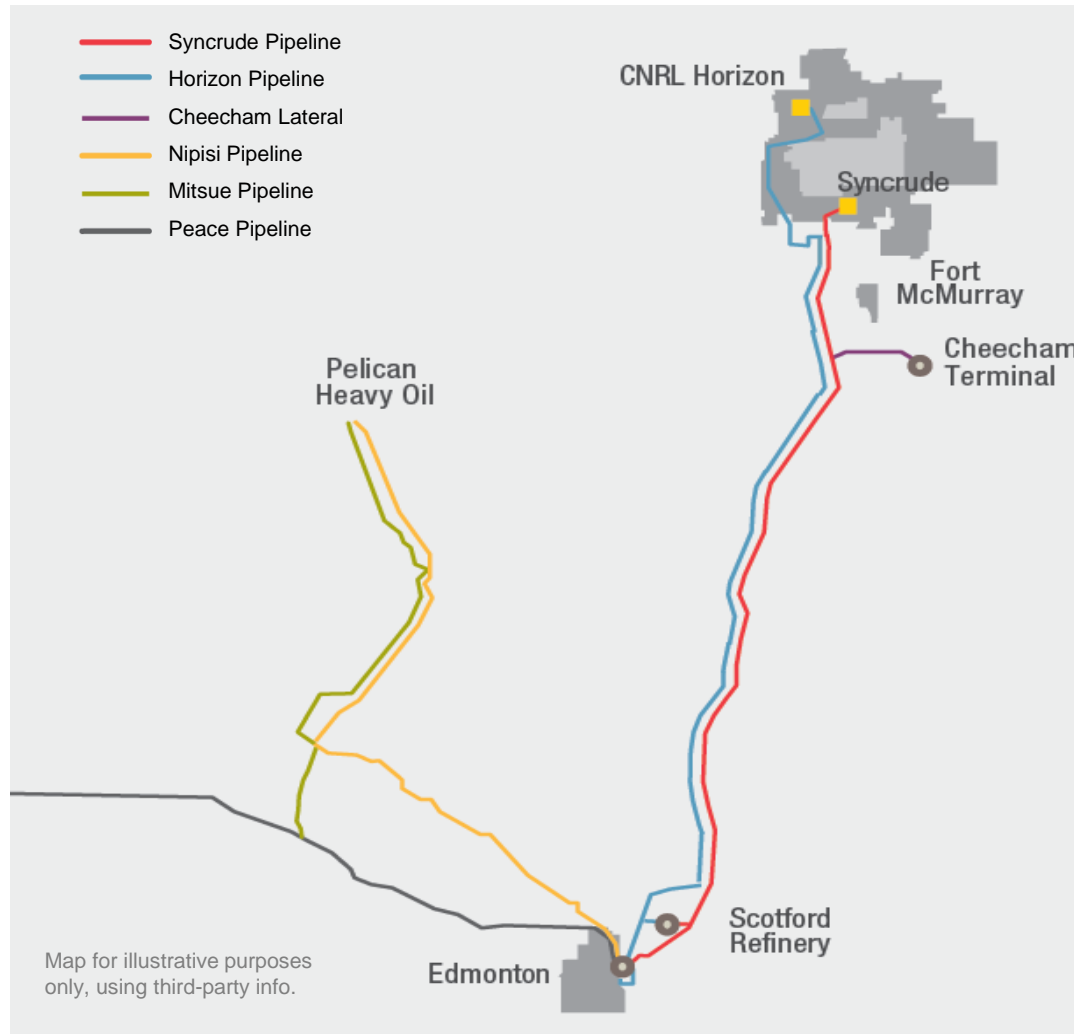
# Crude Oil Midstream



- Develop and provide terminal, hub & storage services to support the energy industry
- Over 900 mbbbls of above ground crude oil and condensate storage capacity + expansion potential of 1,500 – 2,000 mbbbls
- Access to approximately 1.2 mmbpd of crude oil and condensate supply through connected pipelines
- Revenue generated from multiple service offerings and commodity types
- Opportunities exist in various market conditions

One of Canada's largest crude oil marketing businesses

# Oil Sands & Heavy Oil



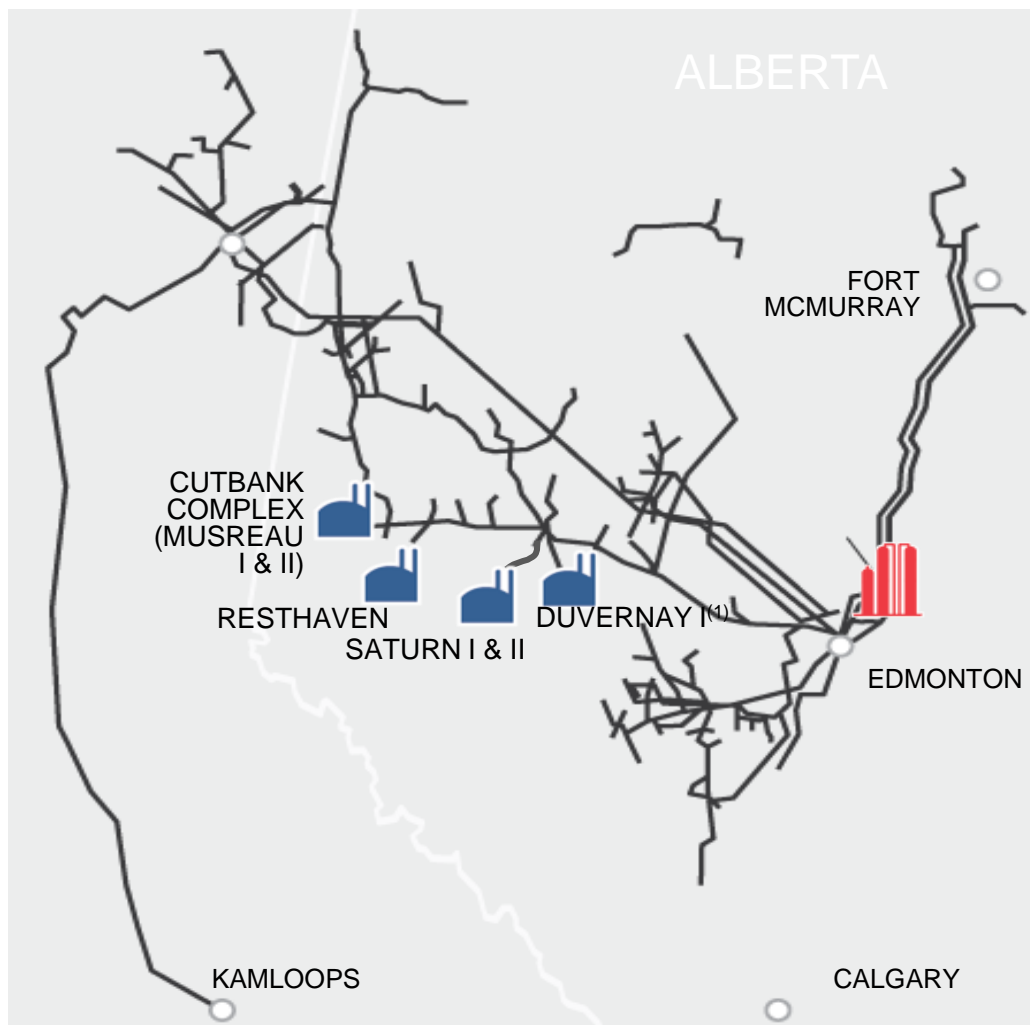
- Operational excellence
  - 99+% reliable (2015)
- Diverse connectivity to various industry hubs for crude oil and condensate
- Contracts are long-life with high credit worthy counterparties

Pipeline System	Syncrude	Horizon	Cheecham	Nipisi & Mitsue
<b>Contracted Capacity (bpd)</b>	389,000	250,000 <sup>(1)</sup>	136,000	127,000
<b>Contract Type</b>	Cost-of-Service	Fixed Return	Fixed Return	Fee-for-Service
<b>Initial Term</b>	25 years	25 years	25 years	10 years
<b>Shippers</b>	Syncrude Partnership: Suncor 49% Imperial Oil 25% Sinopec 9% Nexen 7% Murphy 5% Mocal 5%	CNRL	Conoco Total CNOOC	CNRL Cenovus PMLP

One of Canada's largest oil sands and heavy oil pipeline operators

<sup>(1)</sup> Denotes capacity with the addition of pump stations, announced June 2, 2015. See "Forward-looking statements and information."

# Gas Services



- Operational excellence
  - 97% reliable (2015)
- Positioned in active and emerging NGL rich plays
- Provide gas gathering, compression and shallow/deep cut processing services
- 468 MMcf/d shallow cut and 899 MMcf/d deep cut gas processing capacity<sup>(1)</sup>
- Q4 2015 average revenue volumes:
  - 618 MMcf/d (~6% increase from Q4 2014)
- Facilities placed into service in late 2015: Saturn II and SEEP
- Facilities under development + recently placed into service: Musreau III, Resthaven Expansion and Duvernay I

Leader in third-party gas processing

<sup>(1)</sup> Does not include acquisition of Paramount Resource's midstream assets announced March 17th, 2016, which is expected to close in the second quarter of 2016.

Maps for illustrative purposes only (does not show SEEP).

# NGL Midstream

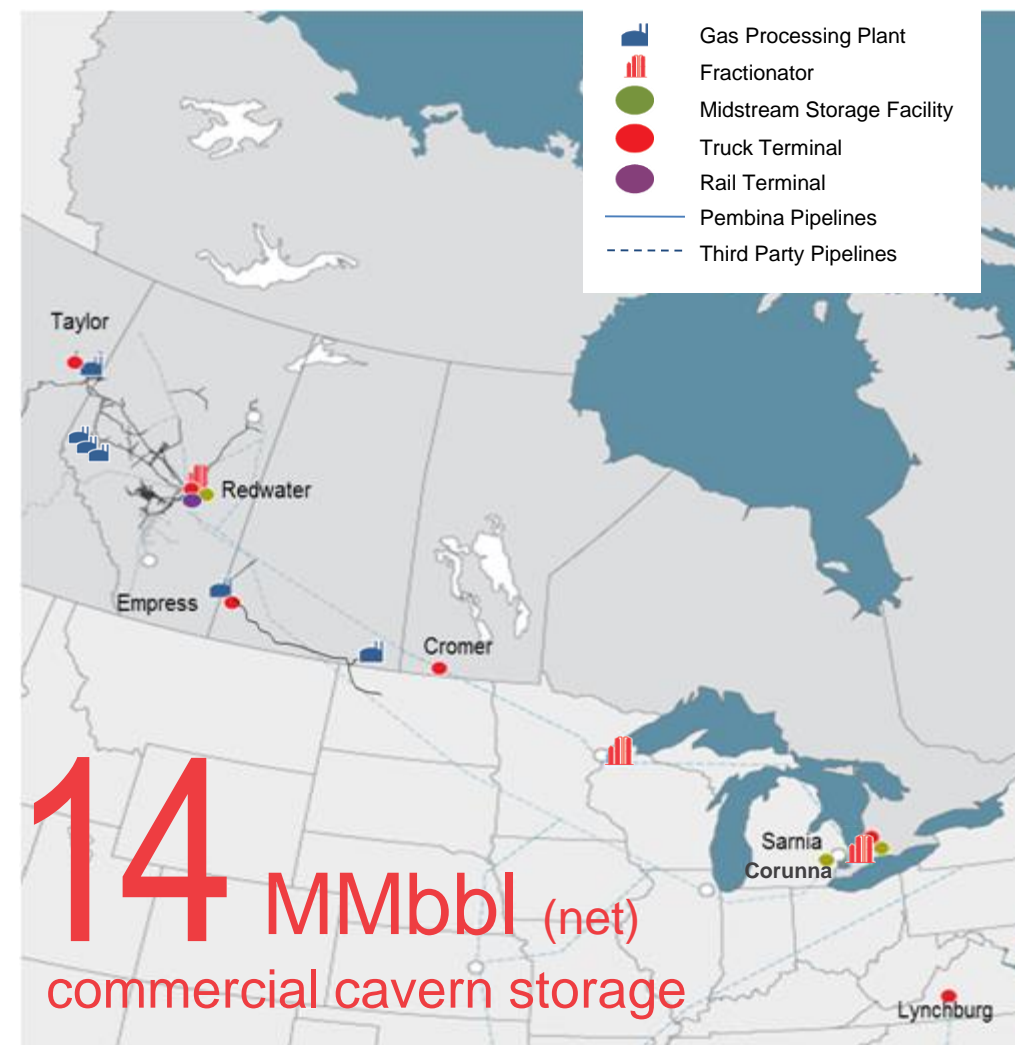


## Redwater West:

- 155 mbpd of NGL fractionation capacity and 7.8 mmbbls of finished product cavern storage
- Industry-leading rail-based terminal (largest NGL rail yard in Canada) with unit train capability
- 320 MMcf/d (net to Pembina) Younger extraction and fractionation facility in northeast B.C.

## Empress East:

- 2.4 bcf/d capacity in the straddle plants at Empress, Alberta
- 20 mbpd of fractionation capacity and 1.1 mmbbls of cavern storage in Sarnia, Ontario
- Ownership of 5.3 mmbbls of hydrocarbon storage at Corunna, Ontario



Pembina has a leading position in Canadian NGL markets



# Major Development Project Updates



# NEBC Montney Expansion

## Conventional Pipelines



### Project overview

- Large-scale pipeline expansion, underpinned by long-term, cost-of-service agreement with an anchor shipper
- ~150 kilometers of up to 12-inch diameter pipeline
- Base capacity of up to 75,000 bpd
- Parallels Pembina's existing Blueberry pipeline system northwest of Taylor, BC to the Highway/Blair Creek area of BC.
- Feeds Pembina's downstream expansions (Phase III)
- Expected in-service late-2017, subject to regulatory and environmental approval

### Construction update

#### Key Accomplishments in 2015

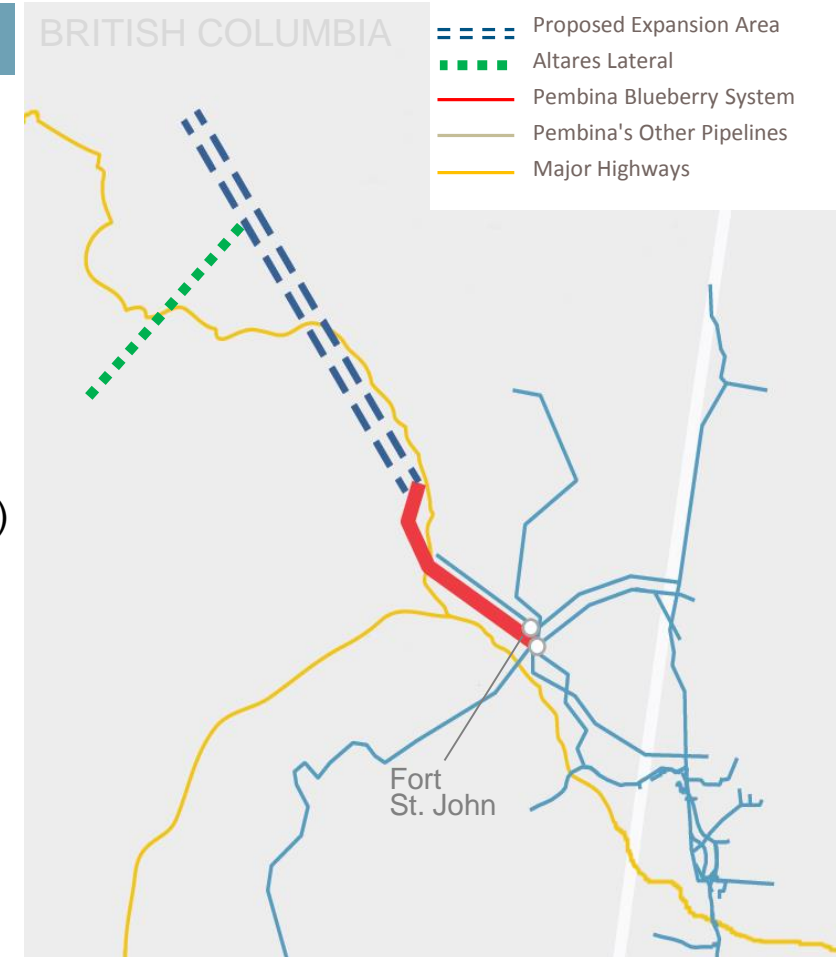
- Completed project environmental and engineering studies
- Completed pipeline route selection
- Began public consultation
- Submitted project application to the BC Environmental Assessment Office

#### Key Activities in 2016

- Complete detailed engineering (early 2016)
- Award major long lead material contracts (early 2016)
- Award pipeline installation contracts (early 2016)
- Receipt of regulatory approvals anticipated (Mid 2016)
- Begin construction activities (early 2016)

#### Other Project Updates

- Commissioning and startup (late 2017)



Large-scale cost-of-service pipeline capitalizing on the enormous potential of the NEBC Montney resource play

# Phase III

## Conventional Pipelines



### Project overview

- Largest expansion project in Pembina's history
- 880 km total of new pipeline with four distinct lines from Fox Creek into Edmonton that can separately transport C2+, C3+, condensate and crude oil
- Capacity of 420 mbpd between Fox Creek and Edmonton → **potential expansion capacity of 680 mbpd with additional pump stations**

### Construction update

#### Key Accomplishments in 2015

- Completed Kakwa to Simonette Pipeline and placed in service
- Began construction on Wapiti to Kawa section
- Progressed engineering and design on all Phase III pump stations

#### Key Activities in 2016

- Completed the Gordonale lateral and placed into service (early 2016)
- Complete and place in service Wapiti to Kakwa section (mid 2016)
- Complete Sunrise lateral (late 2016)
- Anticipate receiving regulatory approvals for all pump stations in 2016
- All long-lead facility equipment is ordered

#### Other Project Updates

- Project is currently ~30% complete



Pembina's largest project ever is trending under-budget and on-time for a mid-2017 start-up



# Vantage Expansion

## Conventional Pipelines



### Project overview

#### Base System

- ~ 700 km ethane import pipeline originating in Tioga, North Dakota and terminating near Empress, Alberta
- Acquired by Pembina in October 2014
- Current capacity is ~40,000 bpd

#### Expansion

- New 80 km lateral and three mainline pump stations
- Ties into a third-party processing plant
- Expansion increases system capacity by **~70% to 68,000 bpd**
- Underpinned by a take-or-pay contract with a fixed return the lateral portion of the expansion

### Construction update

#### Key Accomplishments in 2015

- All NEB permits received
- All land and project procurement complete
- Completed Department of Transport and North Dakota Public Service inspections
- Lateral construction completed in late 2015

#### Key Activities in 2016

- Pump station construction ~40% complete
- All lateral valve sites 100% complete
- Complete Hydro testing of lateral pipeline target
- Expected commissioning late 2016 (due to third-party facility delay)

#### Other Project Updates

- Trending under budget



Vantage expansion demonstrates Pembina's ability to drive shareholder value through acquisition

# Horizon Pipeline System Expansion

## Oil Sands & Heavy Oil



### Project overview

- Expanding the existing Horizon Pipeline System to 250 mbpd at the request of the anchor tenant CNRL<sup>(1)</sup>
- Expansion includes upgrading of mainline pump stations and other facility modifications
- Expected to be in-service mid 2016
- Horizon, a 513 km pipeline, was originally commissioned in 2008 under a 25-year fixed return contract to connect CNRL's Horizon Oil Sands facility to refineries, export pipelines and other delivery locations

### Construction update

#### Key Accomplishments in 2015

- Procured over 100% of long-lead equipment on schedule
- Detailed engineering over 60% complete
- Construction leadership team has been assembled and has compiled a detailed execution plan and schedule

#### Key Activities in 2016

- Completed engineering and procurement (early 2016)
- Completed early work construction (early 2016)
- Receiving all major equipment and installing (16 new pumps, 25 new motors, 8 E-Houses)
- Commission and complete 6 pumps stations (mid 2016)

#### Other Project Updates

- Tracking on-time and on-budget



Supports long-term growth of fixed-return, low-risk cash flow streams

<sup>(1)</sup> Canadian Natural Resources Limited ("CNRL").  
See "Forward-looking statements and information."

# Edmonton North Storage

## Midstream



### Project overview

- Original storage on site → ~300 mbbls
- Provides storage upstream of pipeline alley
- Connected to Edmonton refiners and export pipelines (TransMountain and Enbridge Mainline)
- Opportunity for storage of various grades (sour, sweet and condensate) transported on Pembina's Conventional Pipelines
- Recently completed expansion provided for an additional over 550 mbbls of above ground storage

### Construction update

#### Key Accomplishments in 2015

- Storage tanks fabrication completed
- Facility civil/mechanical construction completed

#### Key Activities in 2016

- Fire suppression system installation
- Electrical construction completed
- Dry and wet commissioning successfully completed
- Facility has been officially turned over to operations

#### Other Project Updates

- Completed under budget and ahead of schedule
- Over 189,000 hours worked to date with zero lost time incident



Enhancing customer's optionality and provides additional opportunities for Pembina's midstream business

### Project overview

- Development of a new 100 MMcf/d shallow cut gas plant, with expected NGL extraction capacity of ~5,500<sup>(1)</sup> bpd
- Facility will be located near Pembina's Fox Creek Terminal
- Underpinned by a large, diversified, investment grade customer
- Leverages designs of Musreau II and III gas plants → proven design for on-time and on-budget execution
- Expected to be in service in the second half of 2017

### Construction update

#### Key Accomplishments in 2015

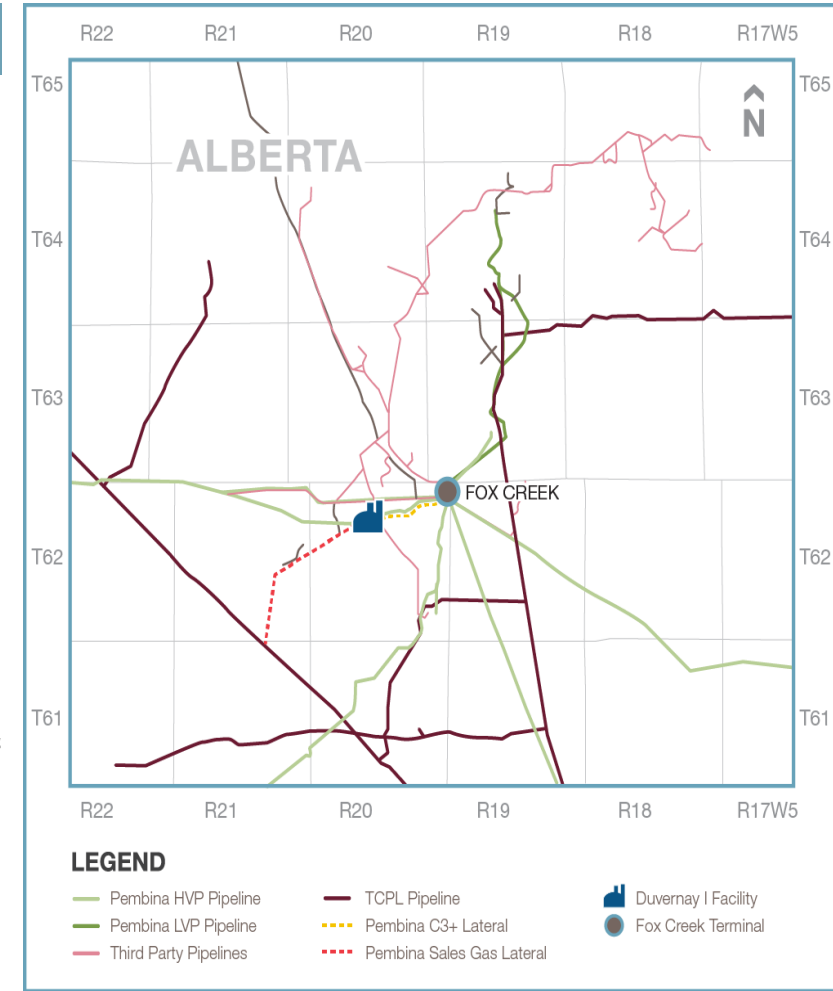
- Announced agreement to build, own and operate Duvernay I facility
- Received regulatory approval for gas plant and commenced site clearing (completed in Jan 2016)

#### Key Activities in 2016

- Receive regulatory approval for sales gas pipeline
- Site grading and piling to commence
- Mobilization of mechanical and electrical contractors late in 2016
- Prepare for 2016/2017 winter installation of the sales gas pipeline

#### Other Project Updates

- Tracking on-time and on-budget
- Engineering is now 30% complete



Duvernay I will be the first large-scale gas processing plant designed specifically for the Duvernay

<sup>(1)</sup> Subject to gas compositions.  
See "Forward-looking statements and information."

# Musreau III

## Gas Services



### Project overview

- Constructing a new 100 MMcf/d shallow cut facility with expected NGL extraction capacity of ~3,000<sup>(1)</sup> bpd
- Leverages engineering and design work from our existing Musreau and Musreau II facilities and will use the same lateral to access Pembina's Conventional Pipeline
- Underpinned by long-term, take-or-pay service agreement

### Construction update

#### Key Accomplishments in 2015

- Completed all engineering and procurement
- Graded site and installed piles
- Took delivery of and set all equipment
- Substantially completed the mechanical and electrical work

#### Key Activities in 2016

- Completed the mechanical and electrical work
- Complete commissioning and introduce gas in April 2016

#### Project Updates

- Tracking ahead of schedule and under-budget



Musreau III represents a further expansion of one of Pembina's core areas in the prolific Alberta Montney

<sup>(1)</sup> Subject to gas compositions.  
See "Forward-looking statements and information."

# Resthaven Expansion

## Gas Services



### Project overview

- Expanding the Resthaven facility by an incremental 100 MMcf/d, bringing total plant capacity to 300 MMcf/d<sup>(1)</sup>
- Underpinned by a long-term fee-for-service
- Plant expansion to be in-service in mid-2016
- 28 km 12" gas gathering pipeline has already been placed in-service → underpinned by a fixed return agreement

### Construction update

#### Key Accomplishments in 2015

- Completion of gas gathering pipeline
- Engineering and procurement complete
- Storage and power generation portions of expansion already in service
- Mechanical and electrical progressed significantly

#### Key Activities in 2016

- Completed remaining mechanical and electrical work
- Commission the new compressors and new condensate stabilizer
- Complete construction and commissioning of the expansion

#### Other Project Updates

- Tracking on-time and under-budget



Pembina (and its partners) have meaningfully expanded the reach and scale of the Resthaven facility

<sup>(1)</sup> Gross capacity of the existing Resthaven Facility is 200 MMcf/d (134 MMcf/d net to Pembina). See "Forward-looking statements and information."

### Project overview

- New 73 mbpd C2+ fractionator
- Facility twins Pembina's existing C2+ Redwater fractionator
- RFS II is supported by essentially 100% take-or-pay contracts for a term of 10-years
- Ethane produced at RFS II will be sold under a long-term arrangement with a major petrochemical company

### Construction update

#### Key Accomplishments in 2015

- Reached mechanical completion

#### Key Activities in 2016

- Commissioning of all utility systems in January 2016
- C2+ NGL feed to be received from pipeline and injected into the feed cavern by February 2016
- Introduction of C2+ NGL feed into the RFS II facility and production of finished products by March 2016
- Project completion and handed to Operational staff

#### Other Project Updates

- Project was completed materially on budget



Mirror image of Pembina's existing Redwater fractionator → supported by 10 year take-or-pay contracts

### Project overview

- New 55 mbpd C3+ fractionator
- Underpinned by long-term take-or-pay contracts with multiple producers
- Leverage design and engineering work completed for RFS I and RFS II + recent construction experience from RFS II
- Expected to be in-service by Q3 2017

### Construction update

#### Key Accomplishments in 2015

- Completed all earthworks, piling and foundations
- Received and erected the first pipe-rack modules
- 100% of major equipment ordered, and 50%+ received on site

#### Key Activities in 2016

- Detailed engineering completed (early 2016)
- Main pipe-racks completed (early 2016)
- Receive fractionation towers (mid 2016)
- 100% of major equipment received (mid 2016)
- Progress Mechanical and Electrical construction ongoing

#### Other Project Updates

- Detailed engineering is currently 90% complete
- Tracking on-time and on-budget



Further expansion of Pembina's Redwater infrastructure + long-term upside potential (expansion pre-engineered)



# Terminalling Services for NWR Sturgeon Refinery

## Midstream



### Project overview

- Provide terminalling services for Sturgeon Refinery (North West Redwater Partnership) under a 30-year fixed return agreement and a 10-year fractionation supporting RFS III
- Expected capital cost of \$180 million to construct terminalling facilities, including: truck and rail loading, storage and handling and processing equipment for a variety of products
- Facilities are expected to be commissioned throughout the second half of 2017

### Construction update

#### Key Accomplishments in 2015

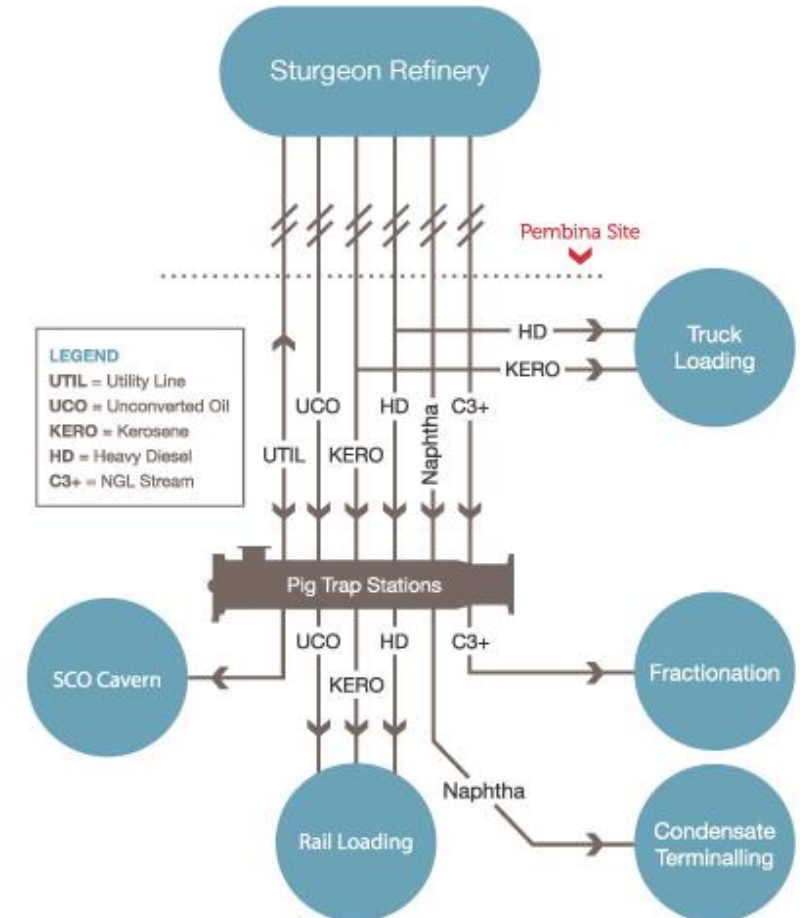
- Announcement of project development
- Awarded major engineering, mechanical and civil works contracts
- Commenced initial earthwork and site construction work
- Submitted project regulatory applications

#### Key Activities in 2016

- Award remaining project contracts
- Received project regulatory approval
- Progressed key procurement activities
- Started site construction work

#### Other Project Updates

- Engineering is ~60% complete
- Procurement is ~90% complete



Creating value for our customers by leveraging our existing integrated suite of assets

### Project overview

- Large-scale diluent terminal designed to accommodate contracted diluent supply from Pembina's integrated value chain
- Capital cost of \$250 million, reduced from previously announced \$350 million through project scope optimization and lower forecast costs
- Full service facilities with initial aggregate take-away capacity in excess of 400 mbpd are expected to be in-service mid-2017

### Construction update

#### CDH I: Existing

- Continued success in existing condensate business associated with Peace, Drayton Valley condensate and RFS production

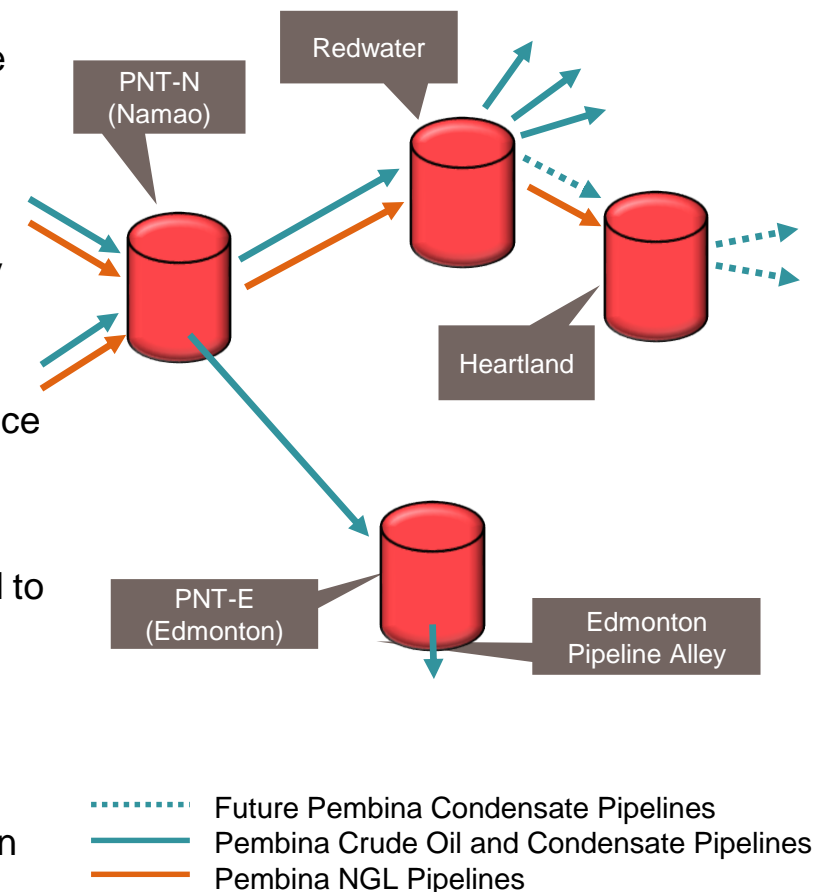
#### CDH II: Under Construction

- Increase optionality for Peace shippers by connecting the pipeline to Access, Cold Lake and FSPL pipelines
- Construction underway and target in-service of Q4 2016

#### CDH III: Under Development

- Terminal expansion at Pembina Heartland to enable significant egress capacity to multiple pipelines for RFS and Peace condensate
- Awarded major engineering contracts
- Commence earthworks and construction in 2016

### Canadian Diluent Hub



Growing regional supply + increasing demand create ideal conditions for CDH development

# Commitment to Safe & Reliable Operations for our Stakeholders



# Our priority is focused on asset integrity, safety and reliability



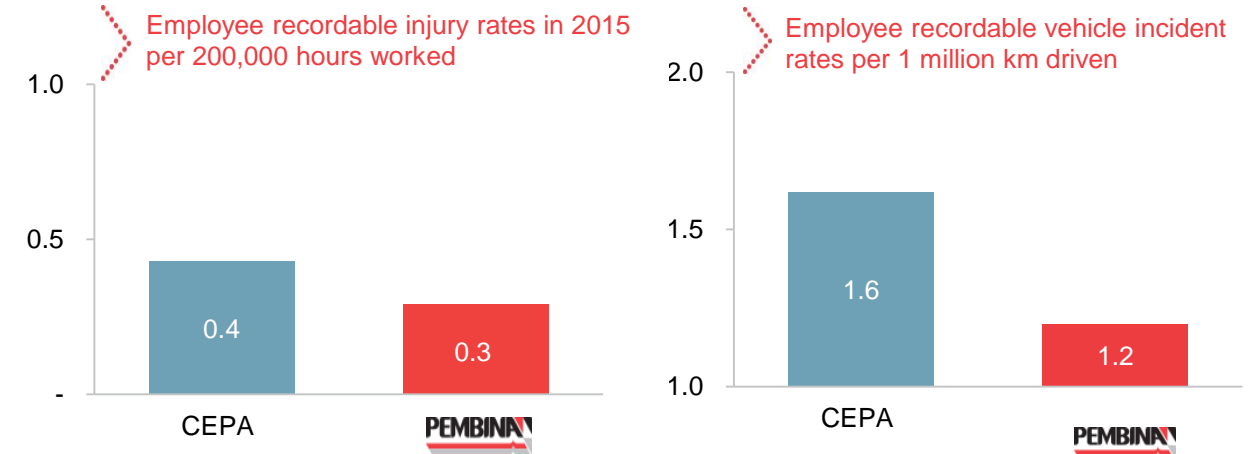
## Robust and continuous integrity management program

- Continue to evaluate all threats to our pipelines and facilities (corrosion, geohazards, crack, geometry, etc.)
- Using (developing) new technologies to enhance detection and analysis of threats
- Smaller diameter crack tools
- Larger diameter inspection tools (tube storage)
- Continue development of Pembina's Geographic Information System

### 2016 FOCUS:

- Continuing completion of integrity programs for expansion projects
- Tube inspection program with new technology
- Expanding our circumferential stress-corrosion cracking program
- Continuing implementation of new Maintenance and Integrity Management Program

## Committed to safety (2015 track record)



- Over 1,200 employees achieved zero lost-time injuries in 2014 and 2015 – working over 5.1 million hours since 2014 and 18% more hours in 2015
- Employee Positive Safety reporting increased by 63% in 2015
- Employees drove over 15.8 million kilometers in 2015 and achieved lower recordable vehicle incidents compared to peers
- Mandatory AMA Collision Avoidance program for employees who drive Pembina Registered vehicles on public roadways

Keep doing the important things right

# Working hard to support our key stakeholders

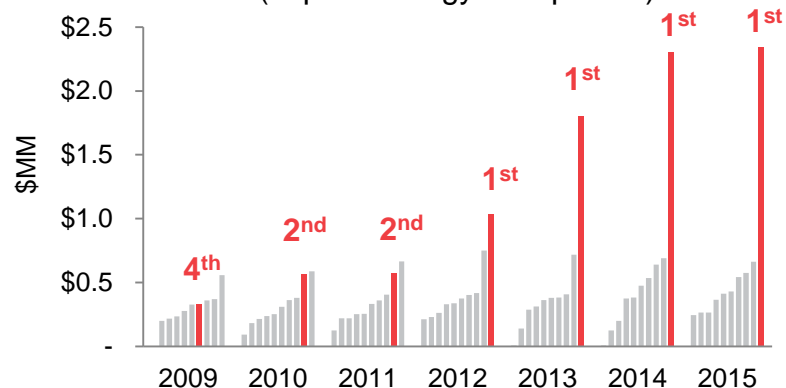


Dedicated to supporting Pembina's operating communities

Committed to being a leader in Aboriginal relations

Recognized for being a top employer & having strong leadership

Pembina United Way Benchmarking  
(Top 10 Energy Companies)



- Pembina is a United Way leader → donating a record **\$2.7 MM** in 2015 company wide (\$2.3 MM in Calgary)
- Funded over 460 organizations in 85 communities in 2015

- Awarded the 2015 Aboriginal Employer of the Year
- Successfully launched an employment and training program to increase full time Aboriginal employment within Pembina → hired 26 individuals for contract and permanent positions

- ~1,120 employees (compared to 430 employees as at the end of 2010)
- Average years of service: entire company → 6 years, Field offices → 8 years
- 3.4% turnover ratio for 2015
  - ✓ Low relative to industry average

Pembina is committed to its stakeholders and being a top employer