Pembina Pipeline Corporation

Annual Meeting of Shareholders

TSX: PPL; NYSE: PBA

May 12, 2016

Building Something **Extraordinary**

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 and in the United States at 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 measures, see the Appendix to this presentation. All financial information is expressed in Canadian dollars unless otherwise specified.

Pembina's vision

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

See "Forward-looking statements and information."

We are 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**

Our strategy drives long-term thinking resulting in stable and growing returns

See "Forward-looking statements and information."

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%[1,2] 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

[1] 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.
[2] 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 measures." & "Forward-looking statements and information."

Pembina's strategic investment criteria

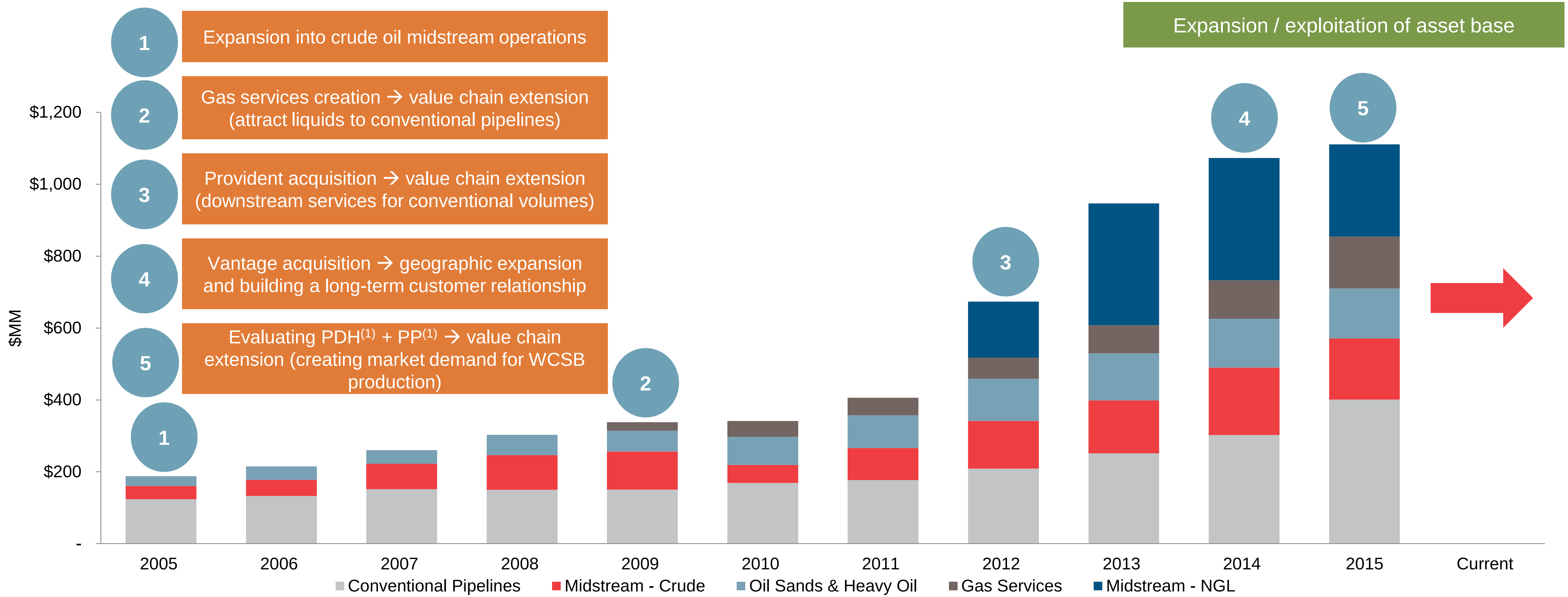
1. Mitigate risk even if the results have modest returns
2. Longevity (capture long-life economic hydrocarbon reserves)
3. Ensure competitive advantage
4. Exploit scale / resource intensity
5. Ensure technical competency exists
6. Integration with the existing value chain
7. Maintain or enhance customer 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

Strategic investment criteria is outlined in no particular order.
See "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

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

Pembina's major highlights since our last AGM

- ✓ Increased monthly dividend by **4.9%** → **$1.92** per share annualized
- ✓ Secured **over $550 million** in new projects + **completed ~$600[2] million Kakwa River acquisition** (250 mmcf/d sour gas processing plant and supporting infrastructure)
- ✓ Raised over **$2.1[1] billion** in debt and equity capital and increased our credit facility to **$2.5 billion,** all in support of our growth initiatives
- ✓ Received regulatory approval for over **$3 billion** of major projects → Phase III, RFS III, Vantage Expansion, CDH and NWR Sturgeon terminal
- ✓ Announcement of a feasibility study for a world-scale, Alberta based integrated PDH and PP facility
- ✓ Built on a strong commitment to the communities we operate in → investing ~$3.4 million across a wide range of programs and chartable organizations

These broad based successes further demonstrate that our strategy continues to pay off

[1] Acquisition cost inclusive of $35 million debottlenecking initiative.
[2] Total capital raised inclusive of proceeds from Pembina's dividend reinvestment plan (May 2015 through March of 2016).
See "Forward-looking statements and information" and "Non-GAAP measures."

What is next: exploit and grow existing business + extend value chain

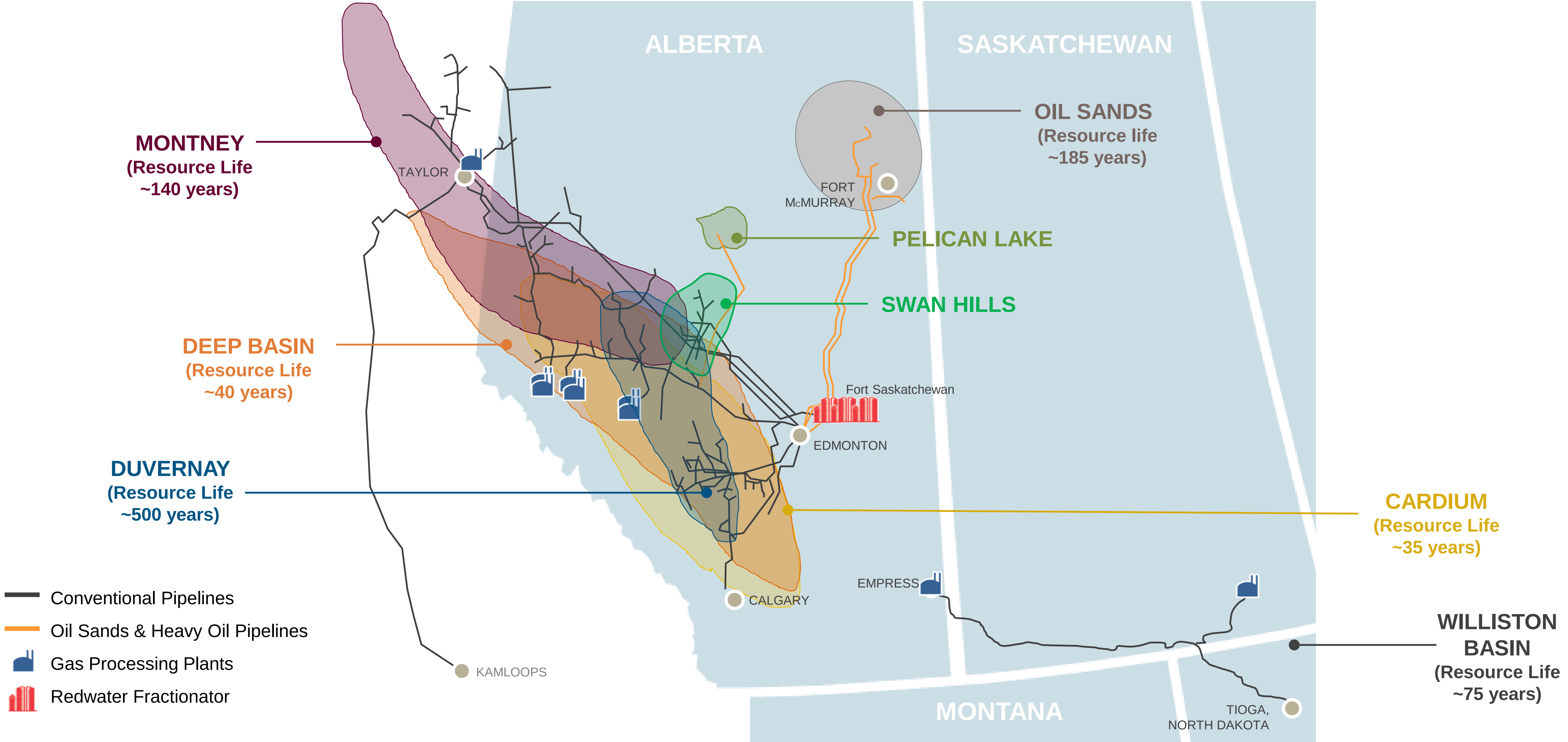
PEMBINA

	Pembina's Integrated NGL Value Chain	Initial Investment	Follow-on Investment	Growth Results
1954 - 2009	Feeder Pipelines	Drayton Valley System (1954)	$3 BB+	• Largest NGL feeder system in WCSB • Largest crude feeder pipeline system in WCSB
2009+	Feeder Pipelines; Gathering, Processing, Field Extraction	**$300 MM** Acquisition of Cutbank Complex (2009)	$1.5 BB+	• One of the largest third-party gas processor in WCSB • ~1.8 Bcf/d in total field gas processing from 305mmcf/d at acquisition
2012+	Feeder Pipelines; Gathering, Processing, Field Extraction; Mainline Extraction; Terminalling & Marketing; Fractionation; Logistics & Distribution	**$3.2 BB** Acquisition of Provident Energy (2012)	$2+ BB	• Largest fractionation complex in Canada • Expanding RFS from initial 64 mbpd capacity to over 200 mbpd
2020+	Feeder Pipelines; Gathering, Processing, Field Extraction; Mainline Extraction; Terminalling & Marketing; Fractionation; Logistics & Distribution; PDH & PP Complex; Propane Export	**$1.5 - $2.5 BB (PDH + PP)** **$0.7 BB - $1 BB+ (Propane Export)**		• PDH and PP feasibility study announced • Continuing to work on west coast propane export terminal • Longer term development opportunities → 2020+ initiatives

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

See "Forward-looking statements and information."

Our business operates in prolific geology



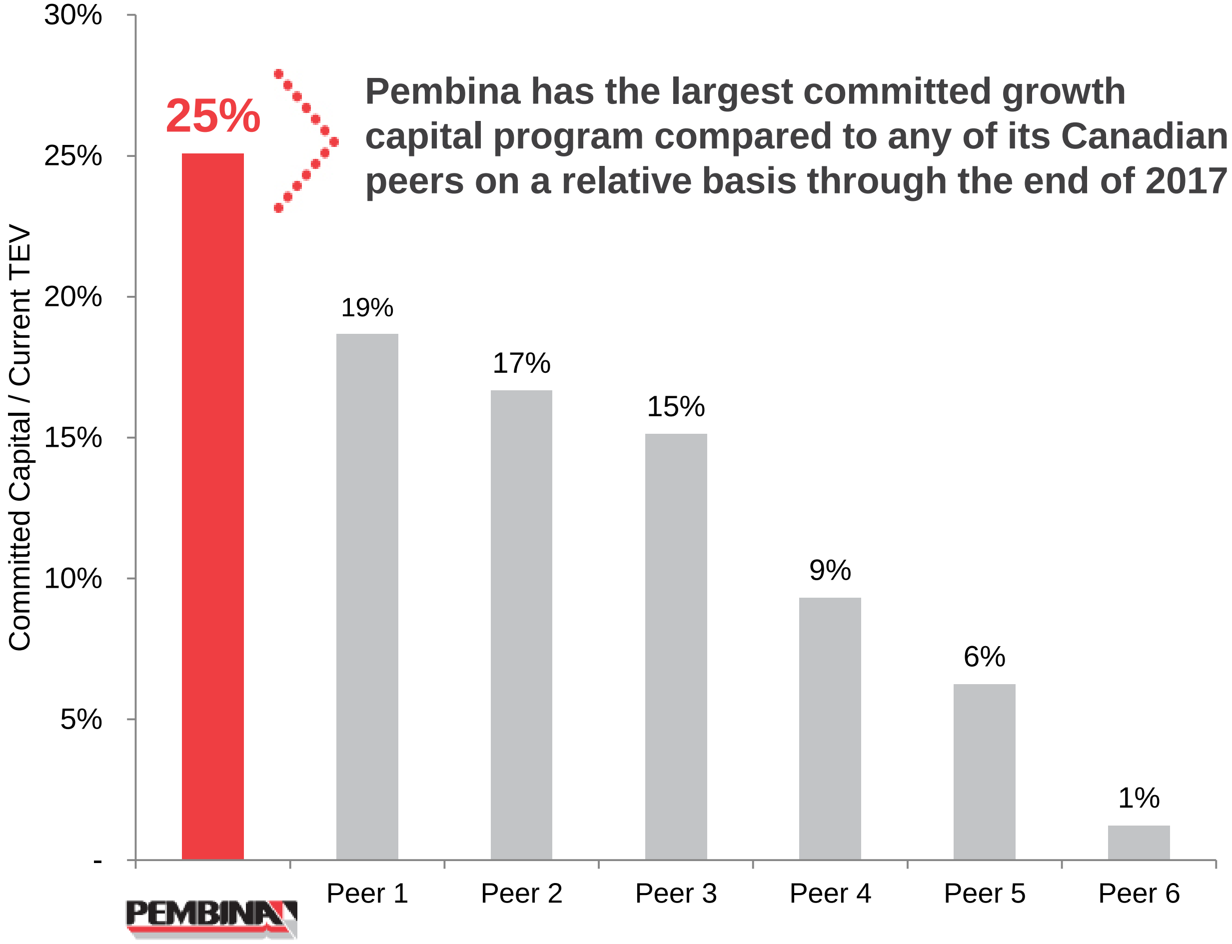
Strong franchise areas create competitive advantages supported by long-life, economic hydrocarbon reserves

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

We are pursuing a fee-for-service growth portfolio

Secured Growth Projects	In-Service	Capital Cost ($MM)
Phase III Pipeline Expansions	Mid 2017	$2,440
NEBC Expansion[1]	Late 2017	$220
Vantage Expansion	Late 2016	$85
Laterals	Various	$320
Conventional Pipelines	**Subtotal**	**$3,065**
Musreau III Facility	Mid 2016	$100
Resthaven Expansion	Mid 2016	$105
Duvernay I[1]	H2 2017	$125
Gas Services	**Subtotal**	**$330**
Cavern 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[1]	Various	$270
Midstream	**Subtotal**	**$1,805**
Horizon Expansion	Mid 2016	$125
Cheecham Expansion	Mid 2016	$15
Oil Sands & Heavy Oil	**Subtotal**	**$140**
Committed Capital		**$5,340**
Cost Savings + Scope Optimization		**($340)**
Revised Secured Capital		**$5,000**
Proposed Marine Terminal[2]		**$700 - $1,000**
Uncommitted Opportunities		**$1,200**
Total Unrisked Capital Opportunities		**$6,900 - $7,200**

Relative Growth Project Portfolio



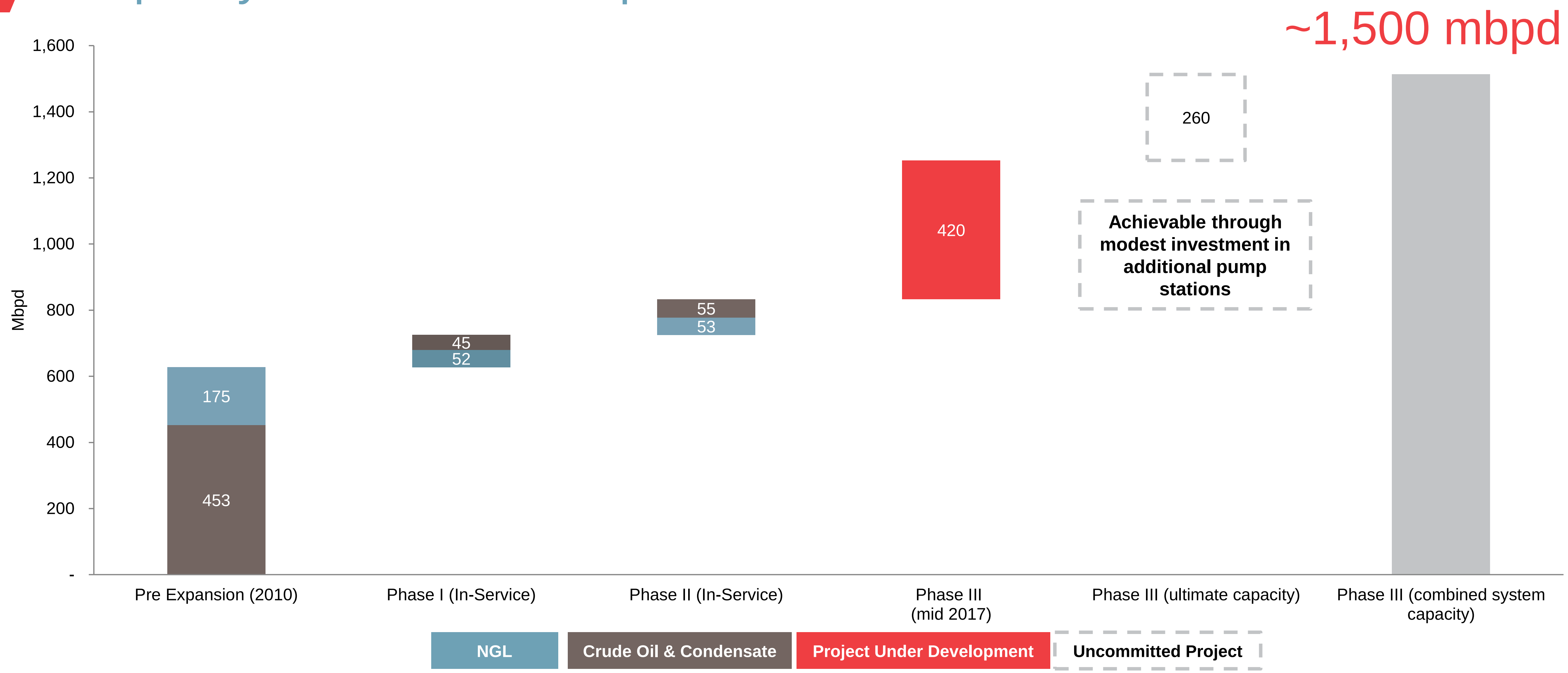
Source: Company filings, Street Research (peers include: ALA, ENB, IPL, KEY, TRP, VSN).

Over $5 billion in committed projects underway

[1] Subject to regulatory and environmental approval.
[2] 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 measures."

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

PEMBINA

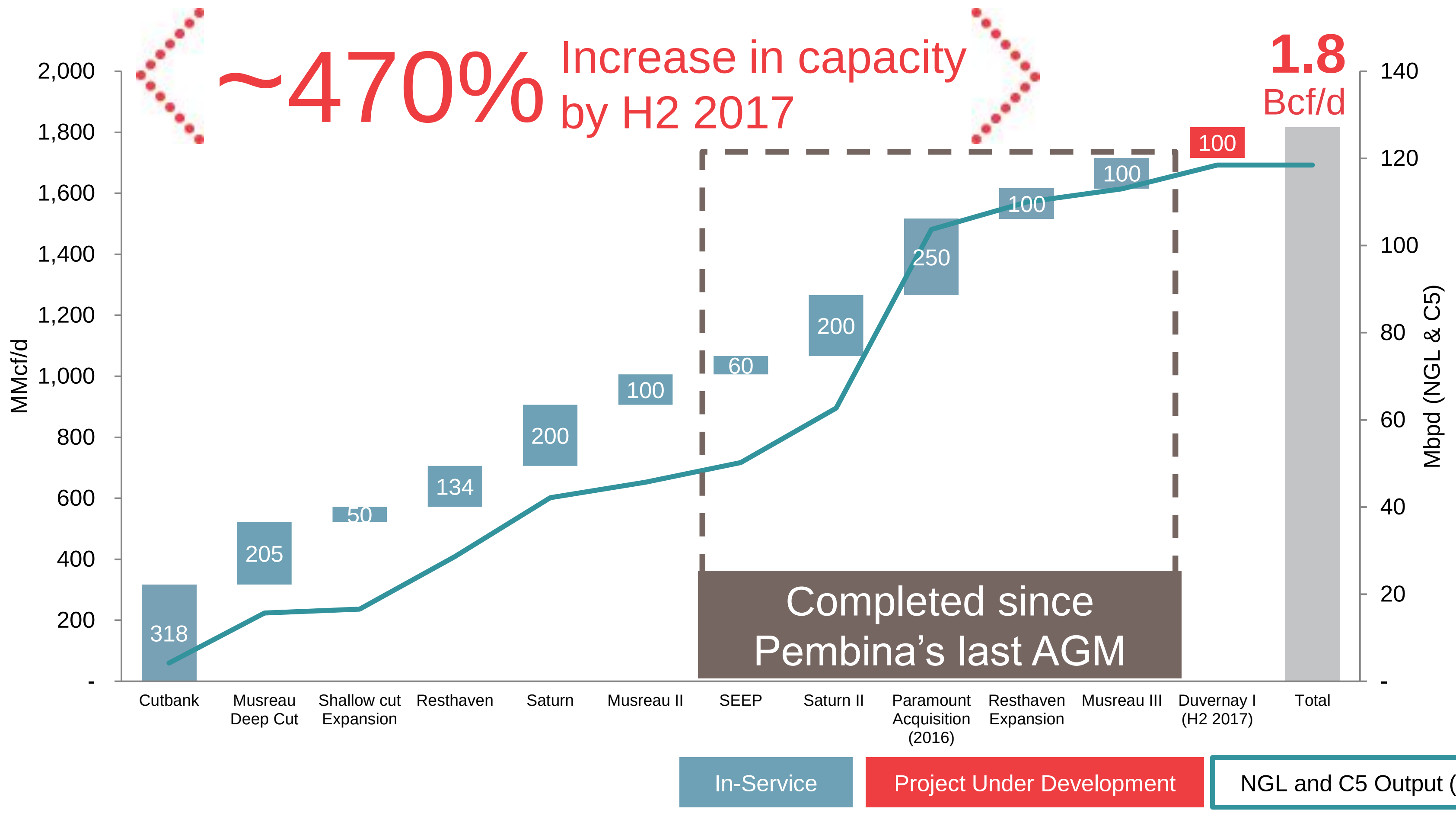


Significant growth completed and underway within Pembina's conventional pipelines business

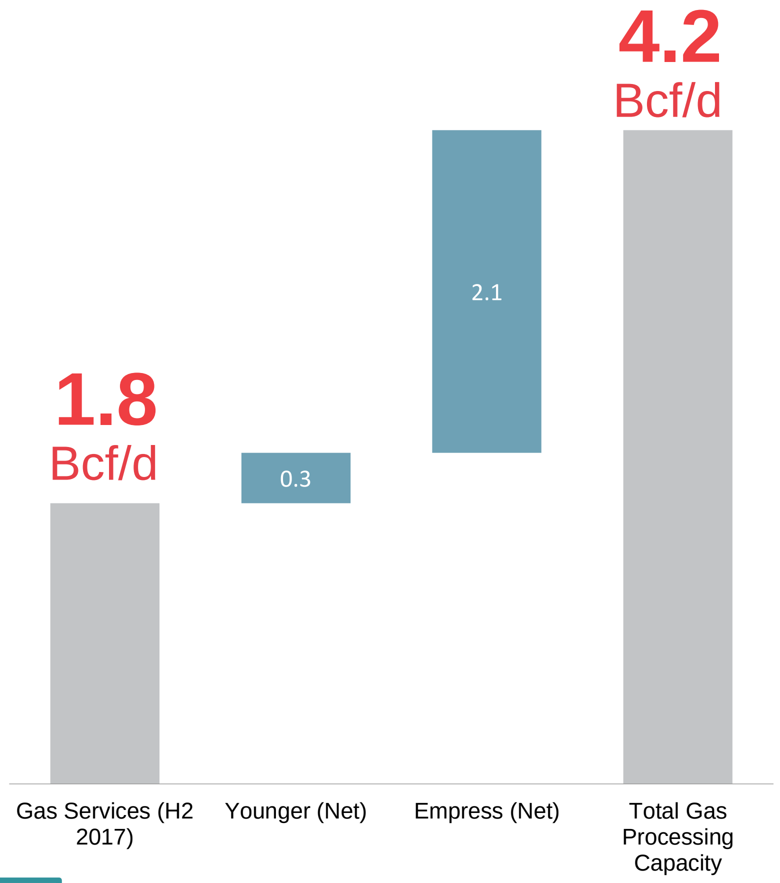
See "Forward-looking statements and information."

Expanding to meet customer demand

Gas Services secured growth projects



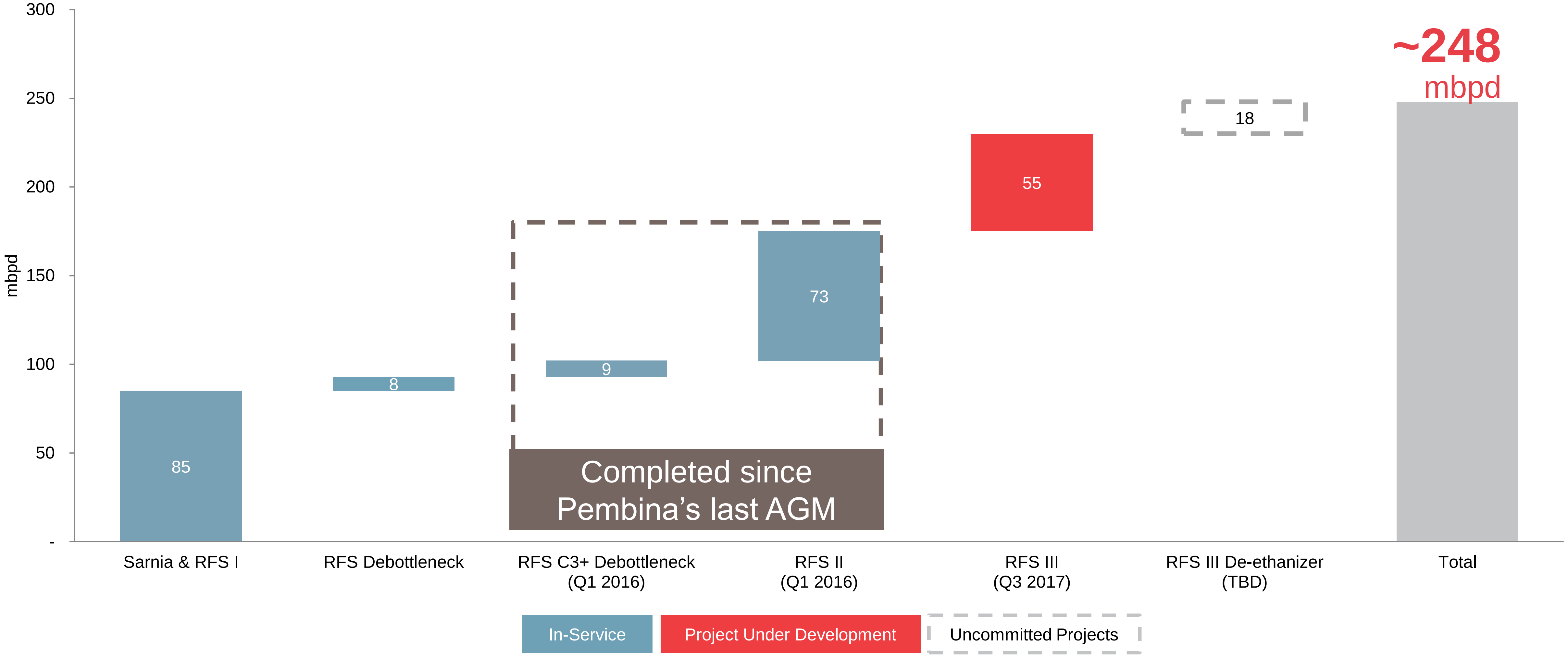
Total gas processing capacity (bcf/d)



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

(1) Depends on plant utilization and gas composition.
See "Forward-looking statements and information."

Significantly growing our NGL fractionation capacity



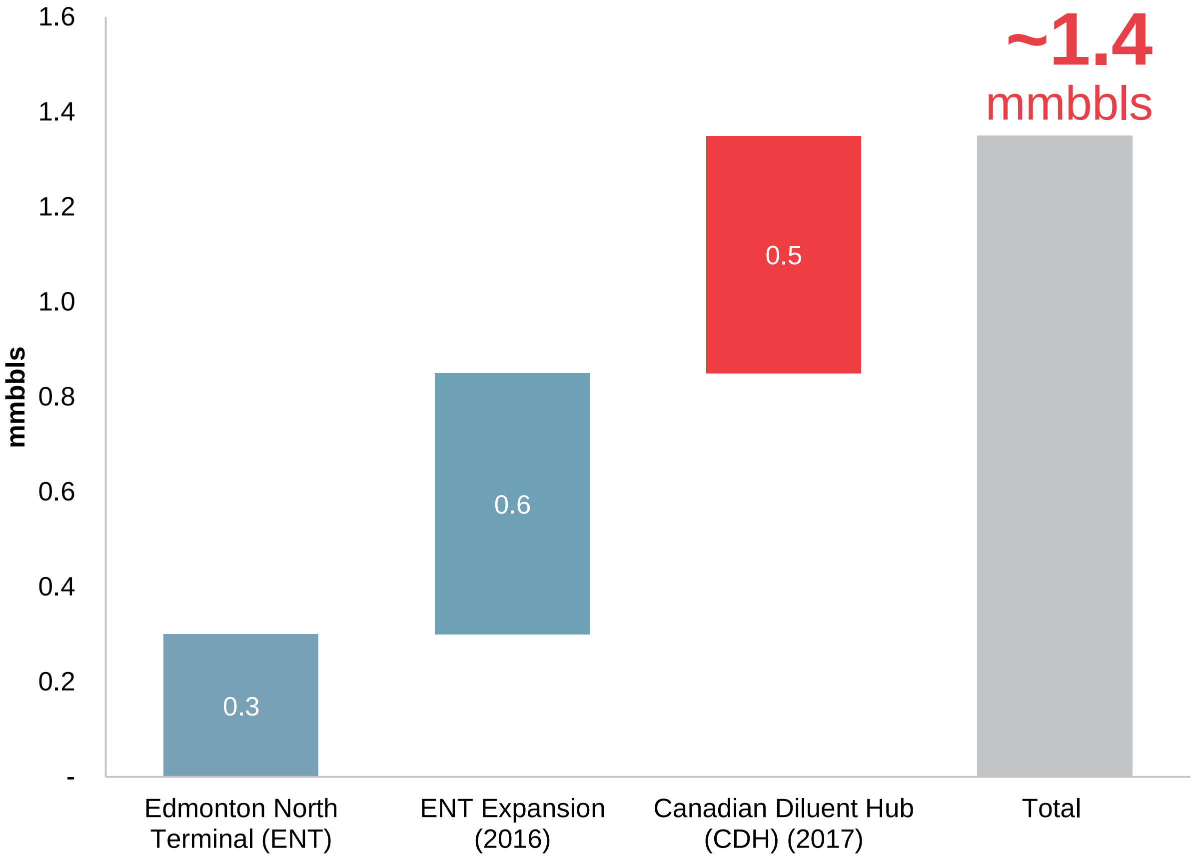
Tripling Pembina's fractionation capacity at Redwater with RFS III

See "Forward-looking statements and information."

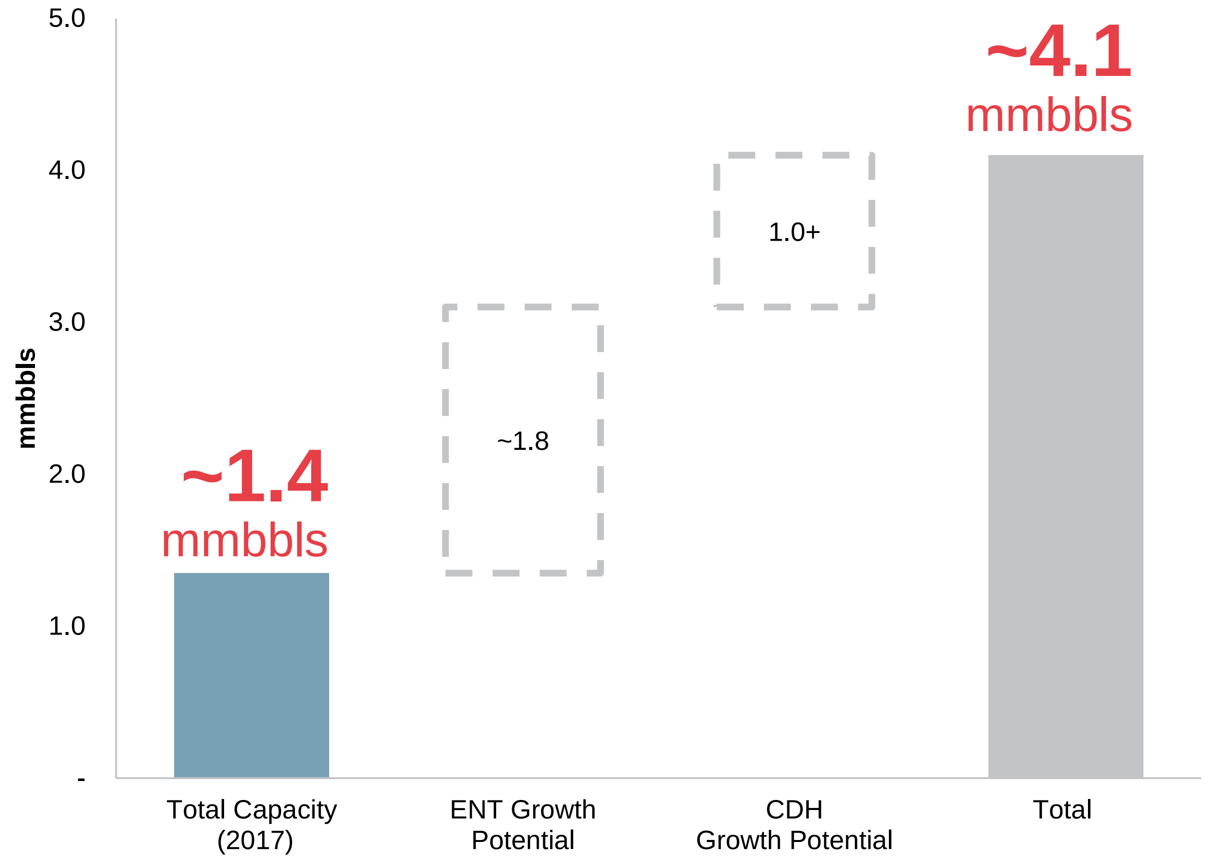
Growing our above ground storage capacity

PEMBINA

Above ground storage capacity



Above ground storage potential



In-Service | Project Under Development | Uncommitted Projects

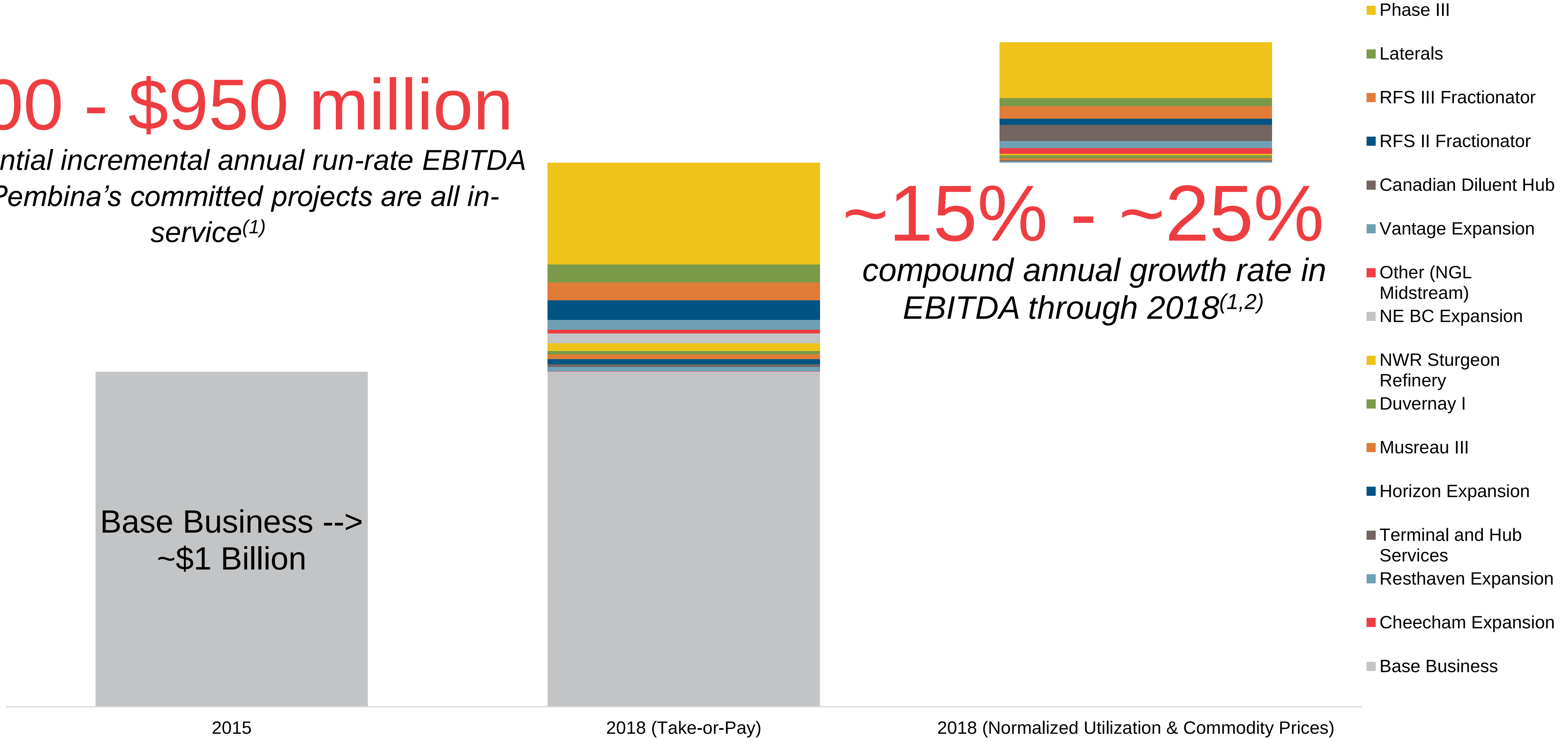
Strategically expanding Pembina's midstream asset base

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[1]

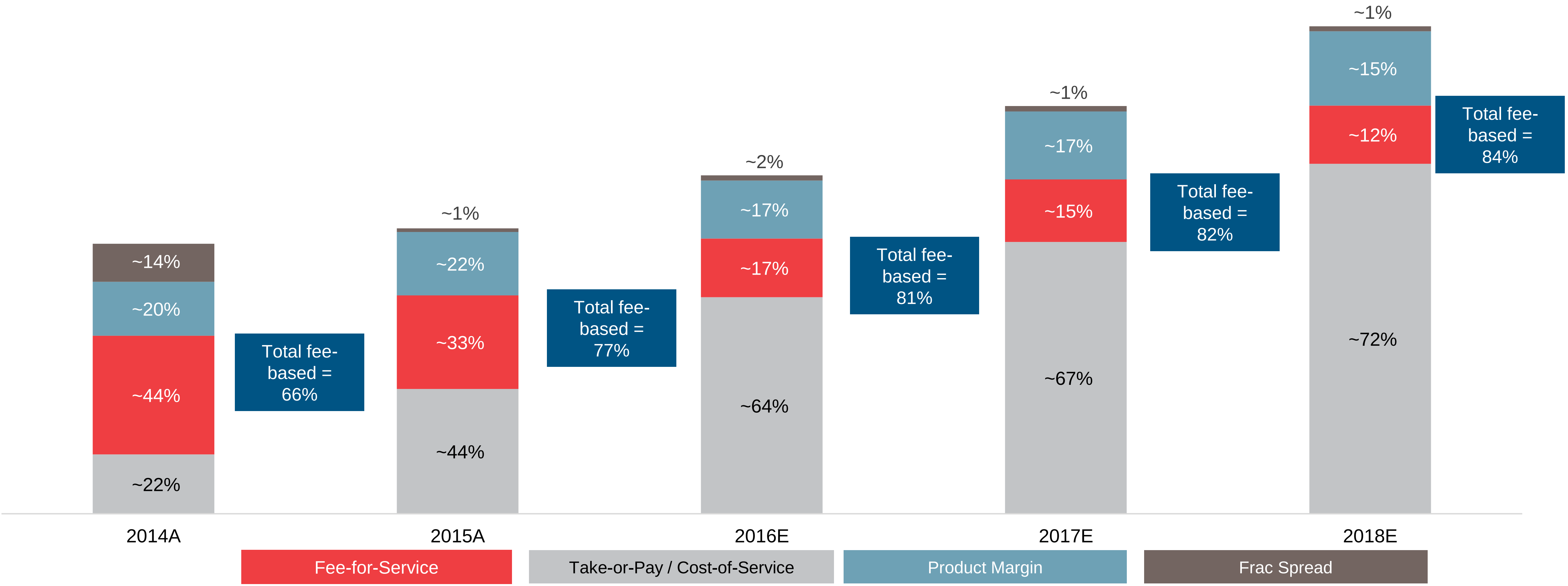


Pembina's secured growth projects are expected to drive significant growth in EBITDA

[1] 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.
[2] Illustrative compound annual growth rate calculations assume Pembina's underlying business remains constant.
See "Non-GAAP measures." & "Forward-looking statements and information."

We are committed to a low-risk business platform

Summary of operating margin by type ($MM)[1]

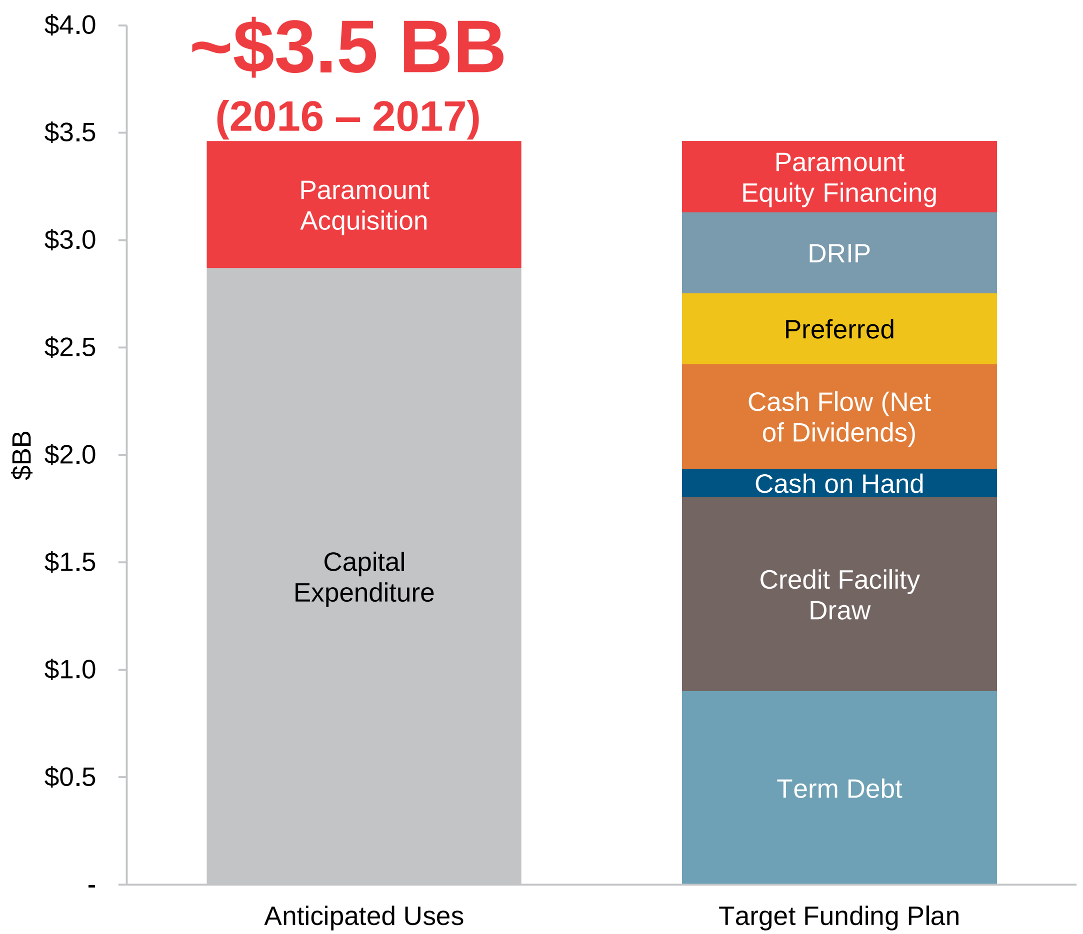


80%+ of operating margin is expected to be generated from fee-for-service contracts in 2018

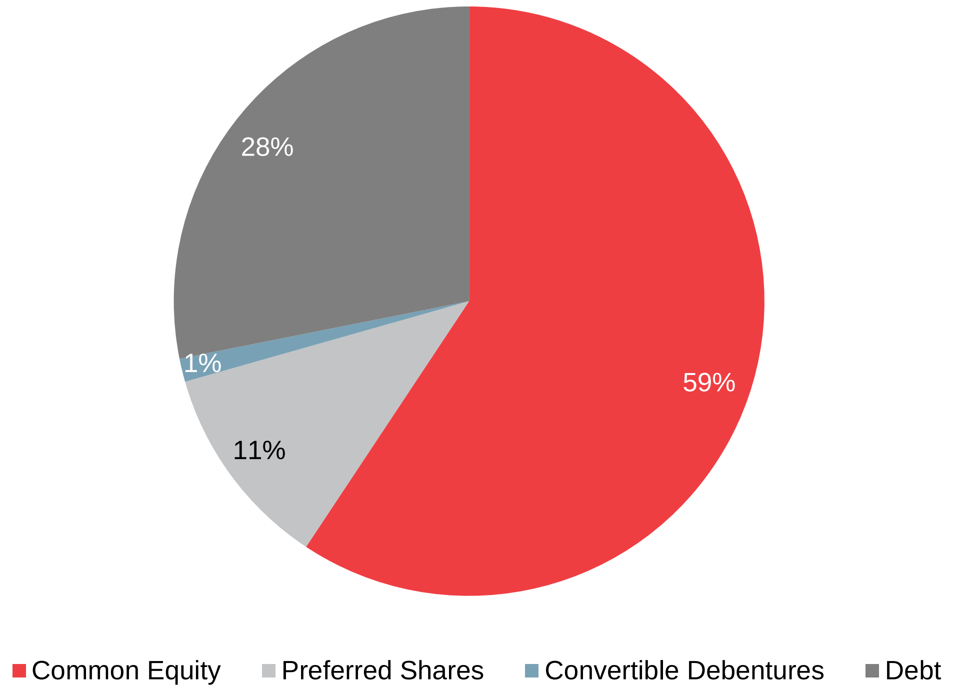
(1) 2014 and 2015 figures based on actual results, while forward years are based on Pembina's current long-term forecast and actual results may vary depending on asset utilization, commodity pricing and other factors. See "Non-GAAP measures." & "Forward-looking statements and information."

Funding plan and capital structure are equipped for growth

Funding plan (2016 - 2017)(1)



Book value capital structure (March 31, 2016)



- Proven access to diversified sources of capital
- Top quartile balance sheet strength (least levered compared to peers)
- 'Strong' BBB credit rating

Well thought out financing plan and proven access to capital

(1) Funding plan is as of the end of February 2016.
See "Forward-looking statements and information."

Our priority is focused on asset integrity, safety and reliability

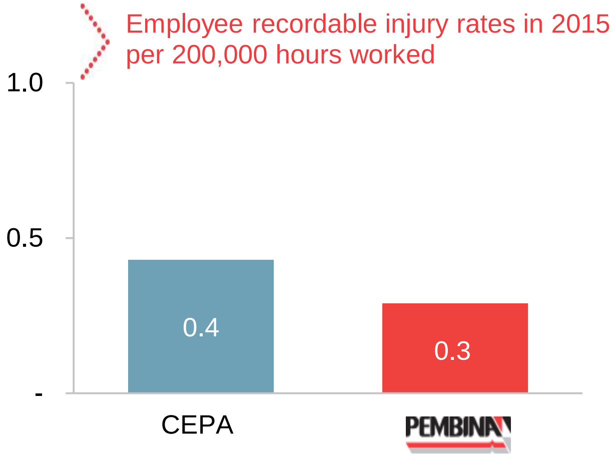
Robust and continuous integrity management program

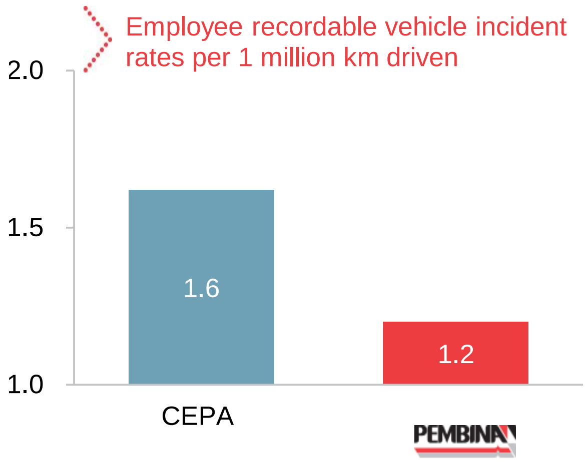
- Continue to evaluate all threats to our pipelines and facilities (corrosion, geohazards, crack, geometry, etc.)
- Using (developing) new technologies to enhance detection and analysis of threats
  - Smaller diameter crack tools
  - Larger diameter inspection tools (tube storage)
  - Tube inspection program with new technology

2016 Outlook:

- Focus → A 'fully matured' integrity program

Committed to safety (2015 track record)





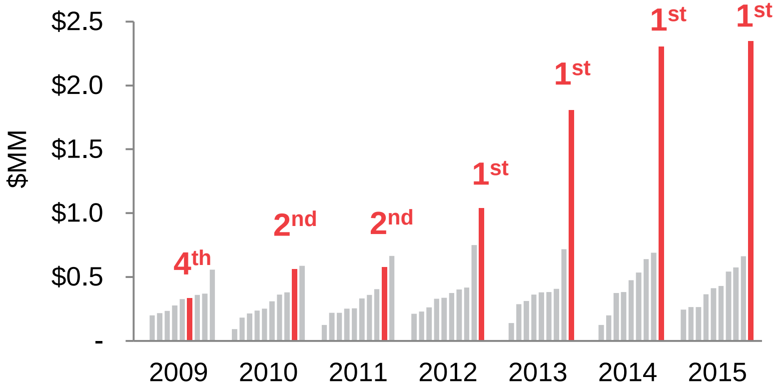
- Over 1,200 employees achieved zero lost-time injuries in 2014 and 2015 – working over 5.1 million hours since 2014 and 18% more hours in 2015
- Employees drove over 15.8 million kilometers in 2015 and achieved lower recordable vehicle incidents compared to peers

Keep doing the important things right

Working hard to support our key stakeholders

Dedicated to supporting Pembina's operating communities

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

Committed to being a leader in Aboriginal relations

- 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

Recognized for being a top employer & having strong leadership

Alberta's TOP 70 EMPLOYERS 2015

AON BEST EMPLOYERS

Alberta Advanced Education

SUITE Energy Executive Awards

- ~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

See "Forward-looking statements and information."

We continue driving shareholder value (10 year results)

380 % total shareholder return*

*Jan 1, 2006- May 2, 2016, inclusive of dividends reinvested.

5.0 % CAGR in dividends per share*

* 2006 - 2015

$4.2 billion in dividends paid since inception*

* To April 2016, Pembina began paying dividends in 1997.

8.5 % CAGR in adjusted cash flow per share*

* 2006 - 2015

16 % average compound annual return*

*Jan 1, 2006- May 2, 2016, inclusive of dividends reinvested.

Proven long-term track record of shareholder value creation

See "Non-GAAP measures."

Thank You!

to our employees, Board of Directors,
communities, service providers
and shareholders.

Questions & Answers

Non-GAAP 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 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 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 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 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.

CONTACT US

Pembina Pipeline Corporation

Suite 4000 – 585 8th Avenue S.W.

Calgary, Alberta T2P 1G1

www.pembina.com

investor-relations@pembina.com

Toll free: 1.855.880.7404

Phone: 403.231.3156

PEMBINA