



Forward-Looking Statements / Disclaimers

The information contained in this presentation has been prepared to assist you in making your own evaluation of the company and does not purport to contain all of the information you may consider important. Any estimates or projections with respect to future performance have been provided to assist you in your evaluation but should not be relied upon as an accurate representation of future results. Certain statements, estimates and financial information contained in this presentation constitute forward-looking statements.

Such forward-looking statements involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from the results implied or expressed in such forward-looking statements. While presented with numerical specificity, certain forward-looking statements are based (1) upon assumptions that are inherently subject to significant business, economic, regulatory, environmental, seasonal and competitive uncertainties, contingencies and risks including, without limitation, our ability to maintain adequate liquidity, to realize the potential benefit of our net operating loss tax carryforwards, to obtain sufficient debt and equity financial, our capital costs, well production performance, and operating costs, anticipated commodity pricing, differentials or crack spreads, anticipated or projected pricing information related to oil, NGLs, and natural gas, realize the benefit of our investment in Laramie Energy, LLC, including completion activity and projected capital contributions, Laramie Energy, LLC's financial and operational performance and plans, including estimated production growth and Adjusted EBITDAX, our ability to meet environmental and regulatory requirements, our ability to evaluate and pursue strategic and growth opportunities, our estimates of anticipated Adjusted EBITDA, Adjusted Net income per share, and Adjusted Net income per share and Adjusted EBITDA, Adjusted Net income per share and Adjusted EBITDA, Adjusted Net income per share and adjusted EBITDA, and next 12 months turnaround schedule and expenditures and turnaround activities, estimates regarding our diesel hydrotreater project, Washington renewable fuels project, other maintenance and growth capital projects, anticipated 10 year and next 12 months turnaround schedule and expenditures, including costs, timing, and benefits, anticipated throughput, production costs, on-island and export sales expectations in Hawaii, anticipated throughput and distillate yield expectations in Wyoming, our estimates related

There can be no assurance that the results implied or expressed in such forward-looking statements or the underlying assumptions will be realized and that actual results of operations or future events will not be materially different from the results implied or expressed in such forward-looking statements. Under no circumstances should the inclusion of the forward-looking statements be regarded as a representation, undertaking, warranty or prediction by the company or any other person with respect to the accuracy thereof or the accuracy of the underlying assumptions, or that the company will achieve or is likely to achieve any particular results. The forward-looking statements are made as of the date hereof and the company disclaims any intent or obligation to update publicly or to revise any of the forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by applicable law. Recipients are cautioned that forward-looking statements are not guarantees of future performance and, accordingly, recipients are expressly cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein.

This presentation contains non-GAAP financial measures, such as Adjusted EBITDA, Adjusted Net Income (loss), and Laramie Energy Adjusted EBITDAX. Please see the Appendix for the definitions and reconciliations to GAAP of the non-GAAP financial measures that are based on reconcilable historical information.



Company Highlights

- Owner & operator of essential energy infrastructure in growing PADD IV and V markets
- 208,000 bpd petroleum refining capacity
- Multimodal integrated logistics network with 9 MMbbls of storage, and marine, rail and pipeline assets
- 124 fuel retail locations in Hawaii and the Pacific Northwest
- 46% ownership interest in Laramie Energy, a natural gas E&P company
- \$1.4 billion in federal tax attributes as of December 31, 2019



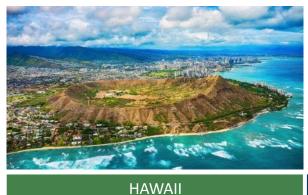








Demonstrated Operating Improvements and Growth







Operating Strategy

- Improved crude selection and mechanical reliability
- Aggressive in-state commercial strategy
- Creative working capital strategy

WYOMING

- Increased annual throughput
- Developed rail transport capability
- Increased distillate yield through facility modifications

WASHINGTON

- Optimizes product flows between Hawaii, Northwest Retail, and Wyoming business units
- Improved crude selection
- Increased logistics capability

Organic Growth Investments

- \$27 million diesel hydrotreater project
- Refined product tanks enhance seasonal positioning
- Renewable fuels logistics project
- Butane sweetening project reduces gasoline pool sulfur content
- Improved flexibility enables increased crude throughput and optimized product yields



Financial Metrics

	Full Year 2017	Full Year 2018	Full Year 2019 ¹
Adjusted EBITDA (\$ millions)			
Refining	\$114	\$92	\$169
Logistics	40	40	76
Retail	31	46	59
Corporate & Other	(44)	(46)	(44)
Adjusted EBITDA	\$ 141	\$132	\$260
Diluted Adjusted Net Income per Share	\$1.37	\$1.06	\$1.79
Operating Cash Flow Excluding Working Capital Impacts	\$123	\$101	\$189

	As of Feb 18, 2020
Share Price	\$19.91
Enterprise Value ²	\$1,567
Net Debt ³	\$509
Liquidity ⁴	\$241



¹ 2019 results include contribution from the Washington Refinery Acquisition, which closed on January 11, 2019.

² Equity value of approximately \$1,063 MM reflects outstanding share count of approximately 53,375,501 as of February 18, 2020.

³ Net debt is based on \$635 MM principal amount of debt as of December 31, 2019 less \$126 MM of cash as of December 31, 2019.

⁴ Liquidity is based on cash and availability as of December 31, 2019.

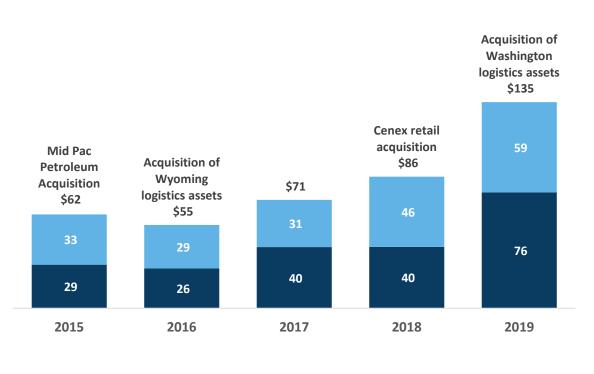
Integrated Downstream Network

- Well-positioned in growing markets
- Advantaged access to inland crudes
- Dedicated shipping to handle Hawaii – West Coast movements
- Rail fleet to move refined products between markets

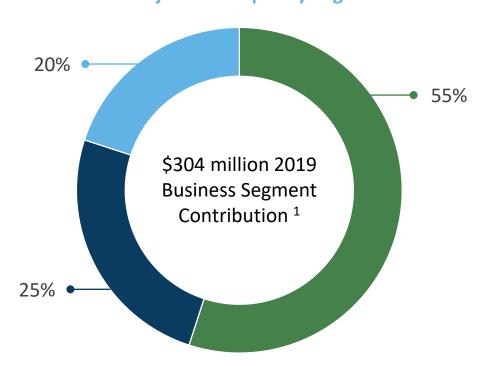


Growing Retail and Logistics Segments Balance Refining

Trending Retail & Logistics Adj. EBITDA (\$MM)



2019 Adj. EBITDA Split by Segment



Logistics Retail Refining



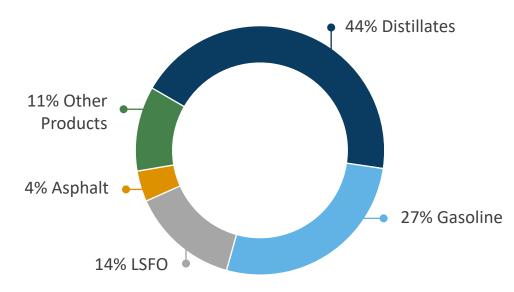
Refining Overview

Refining Segment Highlights

- Focus on process safety, environmental compliance and operational reliability
- 208,000 bpd petroleum refining capacity
- Distillate-oriented yield profile
- Throughput and yield optimized to serve local market needs
- 2019 system-wide production cost reduced to \$3.86 per barrel

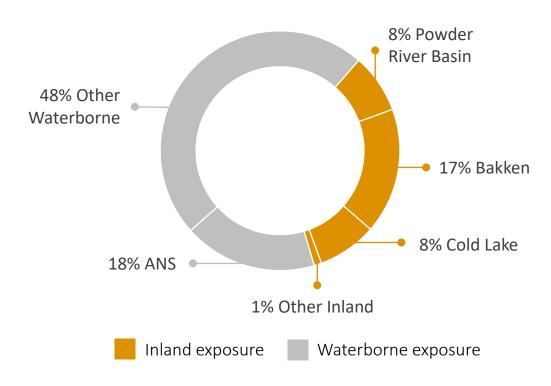
2019 Combined Product Yield

Refinery Crude Capacity	Mbpd
Par Hawaii East	94
Par Hawaii West	54
Washington	42
Wyoming	18
Par Pacific System	208



Crude Sourcing

2019 Inland vs. Waterborne Crude Exposure



- Access to discounted Western Canadian, Powder River Basin, and Bakken crudes
- Increased exposure to favorable WTI-Brent spread from Washington refinery

WCS and Bakken (Clearbrook) Diffs

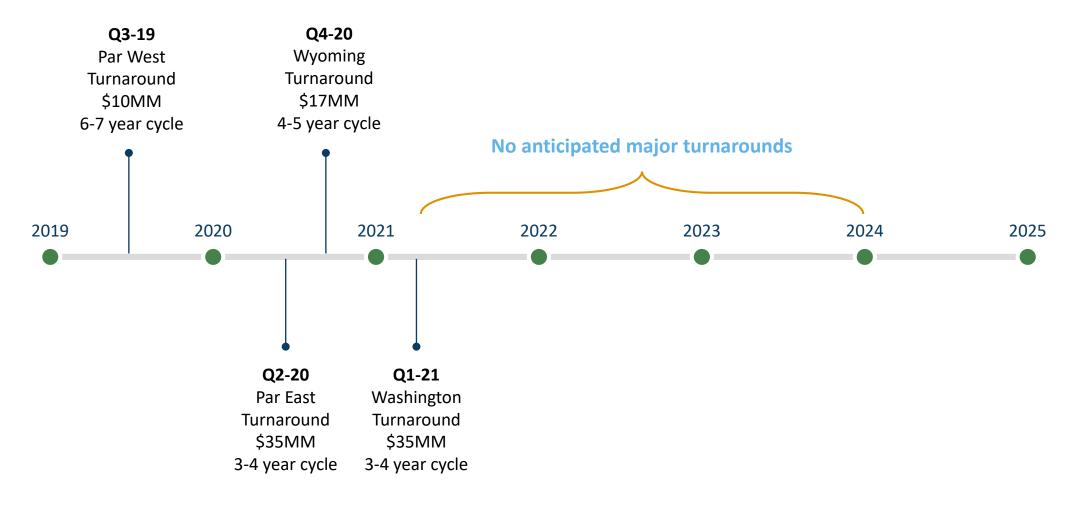


\$/bbl	WCS – WTI	Bakken (Clearbrook) – WTI
Q4 2019	\$(19.11)	\$(1.50)
12-Mo Future Avg.	\$(17.89)	\$(3.15)

Source: CME & Platts historical data, CalRock forward data (avg. forward prices from 2/3/20 to 2/18/20). 12 month future averages reflect Mar-20 to Feb-21 forward data.



Upcoming Turnaround Schedule



Our 10 year estimated turnaround outlay is \$200 million



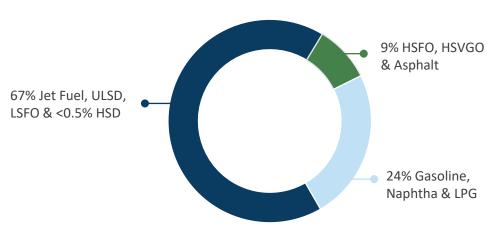
Hawaii Performance Drivers

- Market recently became balanced; expect minimal exports going forward
- 67% distillate and LSFO yield
- Outperforms in over-supplied crude market environment
- Annual performance generally back-end weighted
- Anticipated \$1 per barrel benefit through operational and commercial improvements

Hawaii Production Cost (\$/bbl)

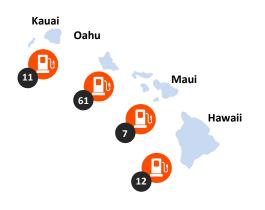


2019 Hawaii Refinery Yield





Leading Retail Position in Attractive Markets



Hawaii Retail

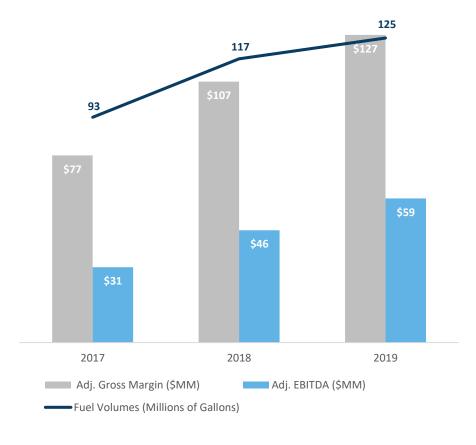
- 91 locations across four islands including "76" and Hele branded locations
- High real estate costs, scarcity of land, and logistics complexity strengthen competitive position



Northwest Retail

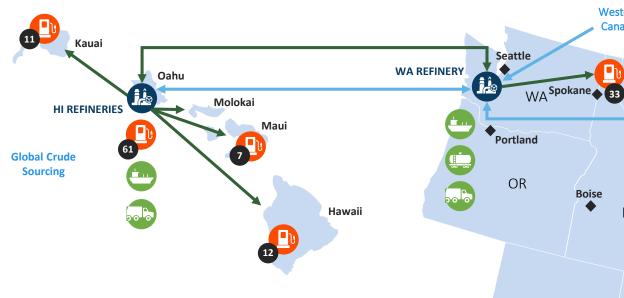
- 33 Cenex® Zip Trip branded locations in Washington and Idaho
- Washington and Wyoming refineries well-positioned to supply the region

Retail Segment Growth





Multimodal Logistics System



Asset Detail

	Hawaii ⁽¹⁾	Wyoming	Washington	Par Pacific
Storage Capacity (MMBbls)	5.4	0.7	2.9	9.0
Marine Assets (2)	4	-	3	7
Miles of Pipeline	27	138	14	179
Rail Facility		✓	\checkmark	2
Marine Terminal	✓		✓	2
Truck Rack	✓	✓	✓	3

Diverse logistics assets enable flexibility and development of integrated downstream system



Refined Products Inflows/Outflows

Western Canada





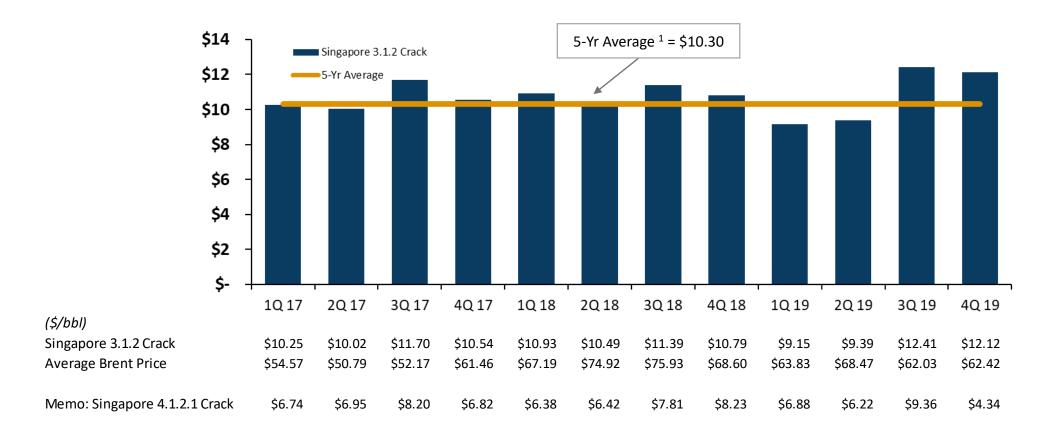
¹ Owned storage capacity.

² Leased marine barges and ships.

Appendix



Singapore 3.1.2 Crack Spread



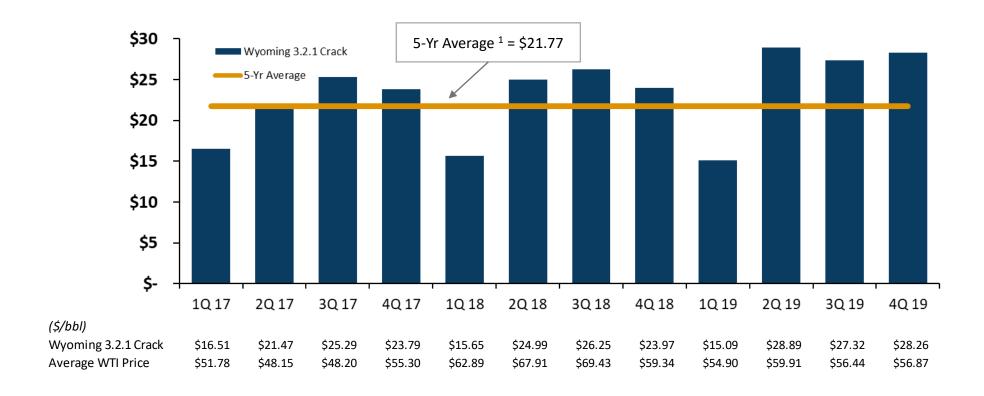
¹ Company calculation based on a rolling five-year quarterly average

Singapore 3-1-2 Daily: computed by taking 1 part gasoline (RON 92) and 2 parts middle distillates (Sing Jet & Sing Gasoil) as created from a barrel of Brent Crude. Month (CMA): computed using all available pricing days for each marker.

Quarter/Year: computed using calendar day weighted CMAs for each marker.



Wyoming 3.2.1 Crack Spread



Rapid City Daily: Computed by taking 2 part gasoline and 1 part distillate (ULSD) as created from three barrels of West Texas Intermediate Crude (WTI). Denver Daily: Computed by taking 2 part gasoline and 1 part distillate (ULSD) as created from three barrels of WTI.

Wyoming 3-2-1 Daily: computed using a weighted average of 50% Rapid City and 50% Denver.

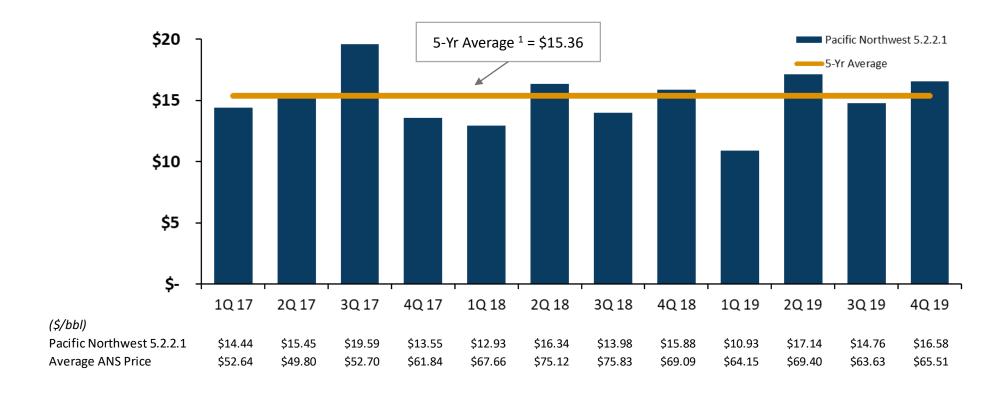
Month (CMA): computed using all available pricing days for each marker.

Quarter/Year: computed using calendar day weighted CMAs for each marker.



¹ Company calculation based on a rolling five-year quarterly average

Pacific Northwest 5.2.2.1 Crack Spread



Pacific Northwest 5-2-2-1 Daily: computed by taking 2 part gasoline (PNW Suboctane), 2 parts middle distillates (PNW ULSD & PNW Jet), and 1 part fuel oil (SF 180 Waterborne) as created from a barrel of Alaskan North Slope Crude.

ANS price: calculated using the Argus ANS-Brent differential beginning in July 2017. Prior to July 2017, a blended Platts and Argus ANS-WTI differential was used.

Month (CMA): computed using all available pricing days for each marker.

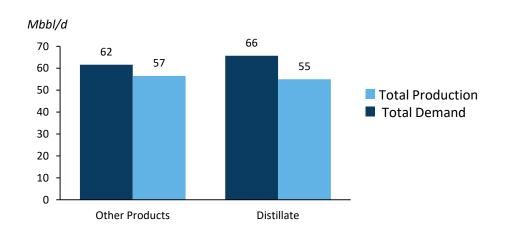
Quarter/Year: computed using calendar day weighted CMAs for each marker.

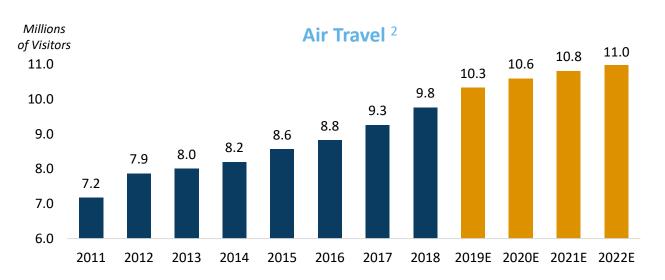


¹ Company calculation based on a rolling five-year quarterly average.

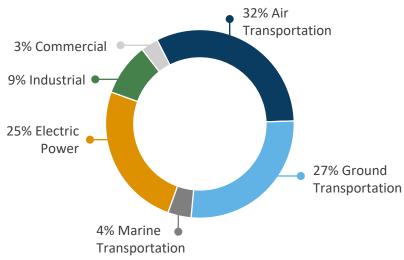
Hawaii Market Fundamentals

Refined Product Demand 1

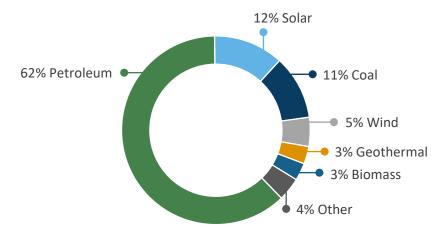




Petroleum Use ²



Electricity Production by Source ^{2, 3}



² Source: EIA and Department of Business, Economic Development and Tourism ("DBEDT") as of Q4-19. Totals may not sum to 100% due to rounding. Air travel estimates are calculated as DBEDT total Hawaii visitor arrivals forecast less 10 year avg of cruise ship visitor arrivals.

³ Includes EIA estimate for rooftop solar of 10%.



¹ Source: Par Pacific internal estimates as of 2019.

Capital Expenditure and Turnaround Summary

MAINTENANCE / REGULATORY

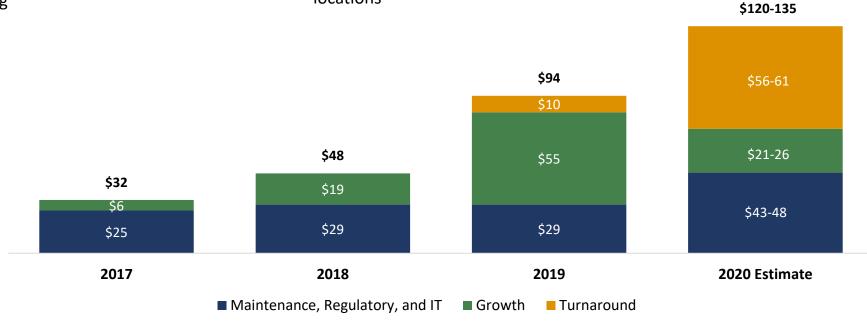
- Expected annual recurring base maintenance capital expenditures of \$35-40 MM
- 2020 spend is expected to be higher than normal run-rate to rebuild process equipment and maintain tank farm in Wyoming

GROWTH

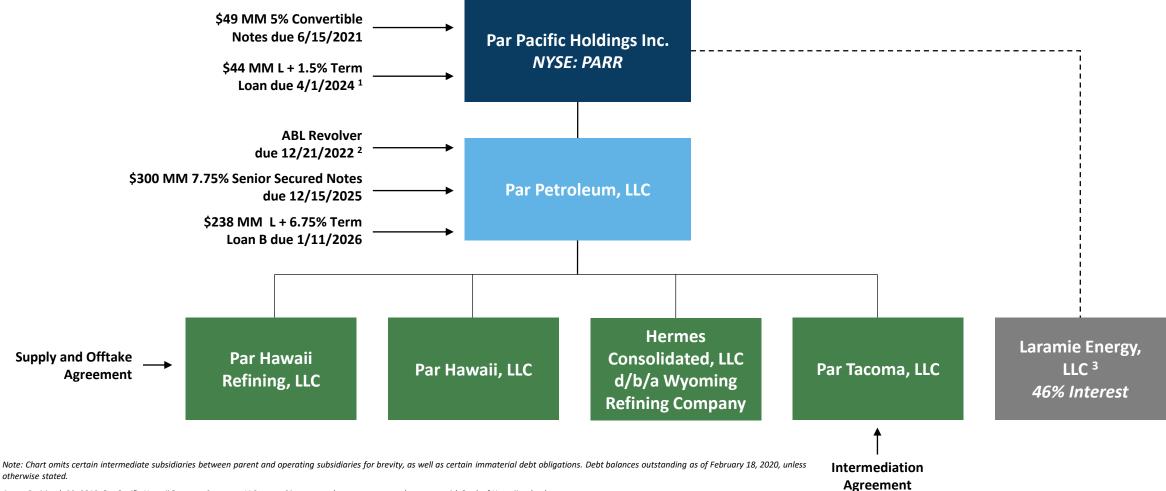
- Anticipated 2020 growth projects include:
- Completion of Washington NextGen renewable fuels logistics project
- Debottlenecking projects in Washington and Wyoming
- Rebranding of Northwest retail locations

TURNAROUND

- \$35MM Par East turnaround in late Q2
- \$17MM Wyoming turnaround in early Q4
- ~\$10MM Pre-spend for 2021 Washington turnaround expected in Q4



Corporate Structure



otherwise stated.

- On March 29, 2019, Par Pacific Hawaii Property Company, LLC entered into a term loan agreement as borrower, with Bank of Hawaii as lender.
- \$85 mm ABL Revolver with availability of \$57 mm as of December 31, 2019. Co-borrowers are Par Petroleum, LLC, a Delaware limited liability company, Par Hawaii, LLC, a Delaware liability company, Par Hawaii, LLC, a Delaware liability company, Par Hawaii, LLC, a Delaware liability compan Consolidated, LLC (d/b/a Wyoming Refining Company), a Delaware limited liability company, and Wyoming Pipeline Company LLC, a Wyoming limited liability company.
- Laramie Energy has a \$400 mm reserve based revolving credit facility with a borrowing base set at \$220 mm as of December 31, 2019. Recourse limited to pledge of equity interest of Par Piceance Energy Equity, LLC.



Trended Capital Structure

	Year Ended December 31,					
	2017	2018	2019			
Debt (\$ millions)						
7.75% Senior Secured Notes	\$300	\$300	\$300			
Term Loan B	-	-	241			
Other Loans	-	1	45			
Total Secured Debt	300	301	586			
5% Convertible Note	115	115	49			
Total Debt	415	416	635			
Cash	118	75	126			
Net Debt	297	341	509			
LTM Adj. EBITDA	141	132	260			
Net Debt to Adj. EBITDA	2.1 x	2.6 x	2.0 x			
Total stockholders' equity	\$448	\$512	\$648			
Net debt to total capitalization ¹	40%	40%	44%			



¹ Excluding 2019 Laramie impairment, net debt to total capitalization is 41% at December 31, 2019.

Non-GAAP PV10 and PV20 Disclosures

Non-GAAP PV10 and PV20 Disclosure

PV10 and PV20 are considered non-GAAP financial measures under SEC regulations because they do not include the effects of future income taxes, as is required in computing the standardized measure of discounted future net cash flows. However, our PV10/PV20 and our standardized measure of discounted future net cash flows are equivalent as we do not project to be taxable or pay cash income taxes based on our available tax assets and additional tax assets generated in the development of reserves because the tax basis of our oil and gas properties and NOL carryforwards exceeds the amount of discounted future net earnings. PV10/PV20 should not be considered a substitute for, or superior to, measures prepared in accordance with U.S. generally accepted accounting principles. We believe that PV10 and PV20 are important measures that can be used to evaluate the relative significance of our natural gas and oil properties to other companies and that PV10 and PV20 are widely used by securities analysts and investors when evaluating oil and gas companies. PV10 and PV20 are computed on the same basis as the standardized measure of discounted future net cash flows but without deducting income taxes.

Laramie Energy Reserves

Year End 2019 Reserves and PV10 Summary – 100% of Laramie Energy

NSAI RESERVE REPORT

SEC Price Deck and Parameters							
	PV10 ⁽³⁾	PV20 (3)					
(BCF) (MMBBL) (BCFE) (1) (\$MM							
PDP	518	2	12	601	\$304	\$217	
PDNP	0	0	0	0	\$0	\$0	
PUD (4)	<u>48</u>	<u>0</u>	<u>2</u>	<u>60</u>	<u>\$6</u>	<u>-\$3</u>	
Total Proved (1P)	566	2	14	661	310	213	

NYMEX Price Deck and Parameters							
	Gas	Oil	PV10 ⁽²⁾	PV20 ⁽²⁾			
	(BCF)	(MMBBL)	(MMBBL)	(BCFE) (1)	(\$MM)	(\$MM)	
PDP	510	2	12	592	\$266	\$188	
PDNP	0	0	0	0	\$0	\$0	
PUD ⁽⁴⁾	<u>46</u>	<u>0</u>	<u>2</u>	<u>57</u>	<u>\$3</u>	<u>-\$5</u>	
Total Proved (1P)	556	2	13	648	\$268	\$182	
Probable ⁽⁵⁾	<u>309</u>	<u>1</u>	<u>9</u>	<u>371</u>	<u>\$30</u>	<u>-16</u>	
Total Proved + Probable (2P)	865	4	22	1,019	\$298	\$166	

Assumed Strip Pricing								
Gas Price (\$/MMBTU) Condensate (\$/BBL)								
Average Annual Price	YE19 SEC	YE19 NYMEX	<u>YE19 SEC</u>	YE19 NYMEX				
2020	\$2.04	\$2.28	\$55.85	\$59.03				
2021	\$2.04	\$2.42	\$55.85	\$54.38				
2022	\$2.04	\$2.42	\$55.85	\$52.09				
2023	\$2.04	\$2.46	\$55.85	\$51.31				
Thereafter	\$2.04	\$2.49	\$55.85	\$51.44				

Note: Par Pacific Holdings owns 46.0% of Laramie Energy, LLC as of 12/31/2019

Reserve information based on year end 2018 reserve report of Netherland, Sewell & Associates, Inc.



¹ NGLs and Oil converted to gas based on 6:1 ratio.

² Based on NYMEX strip pricing as of December 31, 2019 held flat after five years and adjusted for location basis of (\$0.449). See "Non-GAAP PV10 and PV20 Disclosure" for additional discussion.

³ Based on CIG SEC pricing as of December 31, 2019 adjusted for basis of \$0.060. See "Non-GAAP PV10 and PV20 Disclosure" for additional discussion.

⁴ All PUD locations listed are based on SEC standards.

⁵ Laramie Energy, LLC internal reserves based on PV10 discounting.

Laramie Energy Adjusted EBITDAX

Twelve Months Laramie Energy Net Income (Loss) Reconciliation to Adjusted EBITDAX (1) (\$ in thousands)

Twelve	Months	Ended	December	31,
--------	--------	-------	----------	-----

	2017	2018	2019
Net income (loss)	30,837	6,347	(380,474)
Commodity derivative loss (gains)	(35,531)	13,571	1,193
Loss / (gain) on settled derivative instruments	(10,710)	(9,509)	(5,476)
Interest expense	5,954	9,726	11,879
Non-cash preferred dividend	4,166	4,689	4,115
Depreciation, depletion, amortization, and accretion	52,091	68,961	85,189
Impairment loss	-	-	355,220
Exploration and geological and geographical expense	421	351	330
Bonus accrual, net	105	554	(2,154)
Equity based compensation expense	6,195	3,248	122
(Gain) / loss on disposal of assets	(50)	(809)	1,478
Pipeline deficiency accrual	(254)	(11)	(1,162)
Abandoned property and expired acreage	1,937	4,019	3,536
Total adjusted EBITDAX	55,159	101,137	73,796

⁽¹⁾ Laramie Adjusted EBITDAX is defined as net income (loss) excluding commodity derivative (gains)/losses, losses on settled derivative instruments, interest expense, non-cash preferred dividends, depreciation, depletion, amortization, and accretion, impairment loss, exploration and geological and geographical expense, bonus (payment) accrual, net, equity-based compensation expense, loss (gain) on disposal of assets, pipeline (payment) deficiency accrual, and expired acreage (non-cash). We believe Adjusted EBITDAX is a useful supplemental financial measure to evaluate the economic and operational performance of exploration and production companies such as Laramie Energy. Adjusted EBITDAX presented by other companies may not be comparable to our presentation as other companies may define these terms differently.



Twelve Months Ended Consolidated Adjusted EBITDA and Adjusted Net Income Reconciliation (1) (\$ in thousands)

	2015	201	6	2017	2018	2019
Net income (loss)	\$ (39,911)	\$ (4	5,835)	\$ 72,621	\$ 39,427	\$ 40,809
Adjustments to Net Income (loss):						
Inventory valuation adjustment	6,689	2	5,101	(1,461)	(16,875)	13,441
RINs loss (gain) in excess of net obligation	_		_	_	4,544	(3,398)
Unrealized loss (gain) on derivatives	10,896	(1	2,034)	(623)	(1,497)	8,988
Acquisition and integration costs	2,006		5,294	395	10,319	4,704
Debt extinguishment and commitment costs	19,669		_	8,633	4,224	11,587
Changes in valuation allowance and other deferred tax items	(16,759)	(8,573)	_	(660)	(68,792)
Change in value of common stock warrants	3,664		2,962)	1,674	(1,801)	3,199
Change in value of contingent consideration	18,450	(1	0,770)	_	10,500	_
Severance costs	637		105	1,595	_	_
Impairments of Laramie Energy, LLC (2)	41,081		_	_	_	83,152
Par's share of Laramie Energy's unrealized loss (gain) on derivatives	5,508	1	7,278	(19,568)	1,158	(1,969)
Impairment expense	9,639		_	_	_	_
Adjusted Net Income (loss) (2)	61,569	(3	2,396)	63,266	49,339	91,721
Depreciation, depletion and amortization	19,918	3	1,617	45,989	52,642	86,121
Interest expense and financing costs, net	20,156	2	8,506	31,632	39,768	74,839
Equity losses (earnings) from Laramie Energy, LLC, excluding Par's share of unrealized loss (gain) on derivatives and impairment losses	9,394		5,103	1,199	(10,622)	8,568
Income tax expense (benefit)	(29)		661	(1,319)	 993	(897)
Adjusted EBITDA	\$ 111,008	\$ 3	3,491	\$ 140,767	\$ 132,120	\$ 260,352

⁽¹⁾ We believe Adjusted Net Income (Loss) and Adjusted EBITDA are useful supplemental financial measures that allow investors to assess: (1) The financial performance of our assets without regard to financing methods, capital structure or historical cost basis, (2) The ability of our assets to generate cash to pay interest on our indebtedness, and (3) Our operating performance and return on invested capital as compared to other companies without regard to financing methods and capital structure. Adjusted Net Income (Loss) and Adjusted EBITDA should not be considered in isolation or as a substitute for operating income (loss), net income (loss), cash flows provided by operating, investing and financing activities, or other income or cash flow statement data prepared in accordance with GAAP. Adjusted Net Income (Loss) and Adjusted EBITDA presented by other companies may not be comparable to our presentation as other companies may define these terms differently.

⁽²⁾ For the periods presented herein, there was no (gain) loss on sale of assets. Beginning in 2019, Adjusted Net Income (Loss) and equity losses (earnings) from Laramie Energy, LLC also exclude impairment expense associated with our investment in Laramie Energy.



Consolidated Adjusted EBITDA by Segment Reconciliation (1) For the year ended December 31, 2019 (\$ in thousands)

	Refining			Logistics		Retail	Corporate and Other		
Operating income (loss)	\$ 93,781			59,075	\$ 49,245		\$	(54,121)	
Adjustments to operating income (loss):									
Depreciation, depletion and amortization		55,832		17,017		10,035		3,237	
Inventory valuation adjustment		13,441		_		_		_	
RINs loss (gain) in excess of net obligation		(3,398)		_		_		_	
Unrealized loss (gain) on derivatives		8,988		_		_		_	
Acquisition and integration costs		_		_		_		4,704	
Other income/expense		_		_		_		2,516	
Adjusted EBITDA	\$	168,644	\$	76,092	\$	59,280	\$	(43,664)	

⁽¹⁾ Adjusted EBITDA by segment is defined as operating income (loss) by segment excluding unrealized (gains) losses on derivatives, inventory valuation adjustment, acquisition and integration costs, severance costs, RINs loss (gain) in excess of net obligations, and depreciation, depletion and amortization expense. We believe Adjusted EBITDA by segment is a useful supplemental financial measure to evaluate the economic performance of our segments without regard to financing methods, capital structure or historical cost basis. Adjusted EBITDA by segment presented by other companies may not be comparable to our presentation as other companies may define these terms differently. Adjusted EBITDA for the Corporate and Other segment also includes Other income, net, which is presented below operating income (loss) on our consolidated statements of operations.

Consolidated Adjusted EBITDA by Segment Reconciliation (1) For the year ended December 31, 2018 (\$ in thousands)

	ı	Refining Logistics		Retail	Corporate & Other		
Operating income (loss)	\$	73,269	\$	33,389	\$ 37,232	\$	(61,949)
Adjustments to operating income (loss):							
Depreciation, depletion and amortization		32,483		6,860	8,962		4,337
Inventory valuation adjustment		(16,875)		_	_		_
RINs loss (gain) in excess of net obligation		4,544		_	_		_
Unrealized loss (gain) on derivatives		(1,497)		_	_		_
Acquisition and integration costs		_		_	_		10,319
Other income/expense		_		_	_		1,046
Adjusted EBITDA	\$	91,924	\$	40,249	\$ 46,194	\$	(46,247)

⁽¹⁾ Please read slide 25 for the definition of Adjusted EBITDA by segment used herein.

Consolidated Adjusted EBITDA by Segment Reconciliation (1) For the year ended December 31, 2017 (\$ in thousands)

	1	Refining	Logistics	Retail	Corporate and Other		
Operating income (loss)	\$	86,016	\$ 33,993	\$ 24,700	\$	(50,748)	
Adjustments to operating income (loss):							
Depreciation, depletion and amortization		29,753	6,166	6,338		3,732	
Inventory valuation adjustment		(1,461)	_	_		_	
Unrealized loss (gain) on derivatives		(623)	_	_		_	
Acquisition and integration costs		_	_	_		395	
Severance costs		395	_	_		1,200	
Other income/expense		_	_	_		911	
Adjusted EBITDA	\$	114,080	\$ 40,159	\$ 31,038	\$	(44,510)	

⁽¹⁾ Please read slide 25 for the definition of Adjusted EBITDA by segment used herein.

Consolidated Adjusted EBITDA by Segment Reconciliation (1) For the year ended December 31, 2016 (\$ in thousands)

		Refining	Logistics	Retail	Corporate and Other		
Operating income (loss)	\$	(10,934)	\$ 21,422	\$ 22,194	\$	(52,331)	
Adjustments to operating income (loss):							
Depreciation, depletion and amortization		17,565	4,679	6,372		3,001	
Inventory valuation adjustment		29,056	_	_		(3,955)	
RINs loss in excess of net obligation		_	_	_		_	
Unrealized loss (gain) on derivatives		(12,438)	_	_		404	
Acquisition and integration costs		_	_	_		5,294	
Severance costs		_	_	_		105	
Gain on curtailment of pension obligation (2)		_	_	_		3,067	
Other income/expense		_	_	_		(10)	
Adjusted EBITDA	\$	23,249	\$ 26,101	\$ 28,566	\$	(44,425)	

⁽¹⁾ Please read slide 25 for the definition of Adjusted EBITDA by segment used herein.



⁽²⁾ Line item has been added to the Adjusted EBITDA presentation as part of the adoption of ASU 2017-07, Compensation—Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost

Consolidated Adjusted EBITDA by Segment Reconciliation (1) For the year ended December 31, 2015 (\$ in thousands)

	Refining			Logistics		Retail	Corporate and Other		
Operating income (loss)	\$	66,756	\$	25,170	\$ 27,149		\$	(63,345)	
Adjustments to operating income (loss):									
Depreciation, depletion and amortization		9,522		3,117		5,421		1,858	
Impairment expense		_		_		_		9,639	
Inventory valuation adjustment		5,178		_		_		1,511	
RINs loss in excess of net obligation		_		_		_		_	
Unrealized loss (gain) on derivatives		10,284		_		_		612	
Acquisition and integration costs		_		_		_		2,006	
Severance costs		_		_		_		637	
Gain on curtailment of post-retirement medical plan obligation (2)		4,884		280		431		_	
Other income/expense		_		_		_		(102)	
Adjusted EBITDA	\$	96,624	\$	28,567	\$	33,001	\$	(47,184)	

⁽¹⁾ Please read slide 25 for the definition of Adjusted EBITDA by segment used herein.



⁽²⁾ Line item has been added to the Adjusted EBITDA presentation as part of the adoption of ASU 2017-07, Compensation—Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost

Net Cash Provided by Operations Excluding Working Capital Impacts (1) (\$\\$in thousands)

Voor	Ended	December	21
rear	enaea	December	31.

Net cash provided by (used in) operating activities
Less: Net changes in operating assets and liabilities
Net cash provided by (used in) operations excluding working capital impacts

2015		2016		2017		2018		2019
\$ 132,357	\$	(23,393)	\$	106,483	\$	90,620	\$	105,630
 38,474		(19,156)		(16,235) (10,514)		(10,514)		(83,856)
\$ 93,883	\$	(4,237)	\$	122,718	\$	101,134	\$	189,486

⁽¹⁾ Net Cash Provided by Operations Excluding Working Capital Impacts is defined as cash provided by operations less net changes in operating assets and liabilities. We believe Net Cash Provided by Operations Excluding Working Capital Impacts is a useful supplemental financial measure to evaluate our ability to generate cash to repay our indebtedness or make discretionary investments. Net Cash Provided by Operations Excluding Working Capital Impacts should be considered in addition to, rather than as a substitute for, net income as a measure of our financial performance and net cash provided by Operations as a measure of our liquidity. Net Cash Provided by Operations Excluding Working Capital Impacts presented by other companies may not be comparable to our presentation as other companies may define these terms differently.

Diluted Adjusted Net Income per Share (in thousands, except per share amounts)

	Year Ended December 31,					
		2017		2018		2019
Adjusted Net Income	\$	63,266	\$	49,339	\$	91,721
Undistributed Adjusted Net Income allocated to participating securities (1)		765		695		984
Adjusted Net Income attributable to common stockholders		62,501		48,644		90,737
Plus: effect of convertible securities		_		_		8,978
Numerator for diluted income per common share	\$	62,501	\$	48,644	\$	99,715
Basic weighted-average common stock shares outstanding		45,543		45,726		50,352
Add dilutive effects of common stock equivalents		40		29		5,240
Diluted weighted-average common stock shares outstanding		45,583		45,755		55,592
Basic Adjusted Net Income per common share	\$	1.37	\$	1.06	\$	1.80
Diluted Adjusted Net Income per common share	\$	1.37	\$	1.06	\$	1.79



⁽¹⁾ Participating securities include restricted stock that has been issued but has not yet vested.