



ENTERPRISE PRODUCTS PARTNERS L.P.  
LONG ANALYST REPORT

2017 – 2018 STUDENT MANAGED FUND  
UNIVERSITY OF CONNECTICUT

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# Report Highlights

Current Price	Price Target	52-Week High	52-Week Low	P/E	Market Cap.	Recommendation
\$ 25.76	\$ 32.90	\$ 23.10	\$ 29.51	19.93x	55.9B	Buy

## Basis for Recommendation

We recommend a **BUY** rating for Enterprise Products Partners based on a target price of \$32.90 per share, offering a 27.7% margin of safety over the current closing price of \$25.76 on April 13, 2018. Our recommendation is primarily driven by three factors:

Figure 1: Buy Recommendation



### *Strong Market Positioning*

As a result of their market-leading pipeline network and diverse array of service offerings, EPD is positioned as the operator with the best combination of pipeline quantity, quality, and operating flexibility. This strength will serve as a chief competitive advantage for EPD going forward.

### *Growth Projects*

EPD has a history of successful execution of organic growth projects and accretive mergers and acquisition activity. Since their IPO in 1998, EPD has generated more than \$38 billion of organic growth and contributed an additional \$26 billion through acquisitions. Over the next two years specifically, EPD has given guidance for an additional \$5.2 billion worth of organic growth projects.

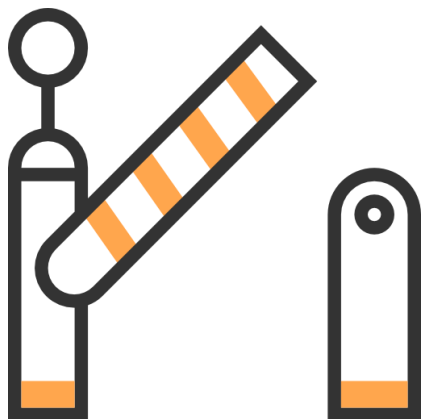
### *Innovation*

Enterprise Products Partners is an innovative company with a history of inventing new solutions within the energy space to save time, increase efficiency, and preserve capital. This bent toward inventiveness will enable EPD to outperform competitors in an uncertain future.



# Industry Outlook and Business Analysis

**Figure 2: Toll-road Strategy**



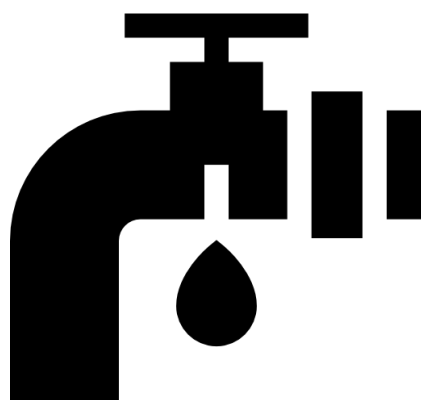
## **Business Description**

Enterprise Products Partners (EPD) is an integrated midstream energy company with assets that link producers of natural gas, NGLs and crude oil from some of the largest supply basins in the United States, Canada and the Gulf of Mexico with domestic consumers and international markets. EPD's midstream energy capabilities currently include: gathering, treating, processing, transporting, fractionating, refining, importing, exporting and storing various hydrocarbon products. These products define their four business units, which include:

- (i) NGL Pipelines & Services
- (ii) Crude Oil Pipelines & Services
- (iii) Natural Gas Pipelines & Services
- (iv) Petrochemical & Refined Products.

Enterprise Products Partners is best thought of like a toll-road operator. They primarily build pipelines and charge hydrocarbon producers a fee for using their transportation capabilities. As such, even though EPD operates in the energy business, their success as an organization is not directly tied to fluctuations in the prices of oil or other related commodities. Rather, EPD's fortunes are dependent upon volume. The more pipelines they can operate to transport various energy products, the more money they make.

**Figure 3: Hydrocarbon Pipe**



## **Industry Outlook**

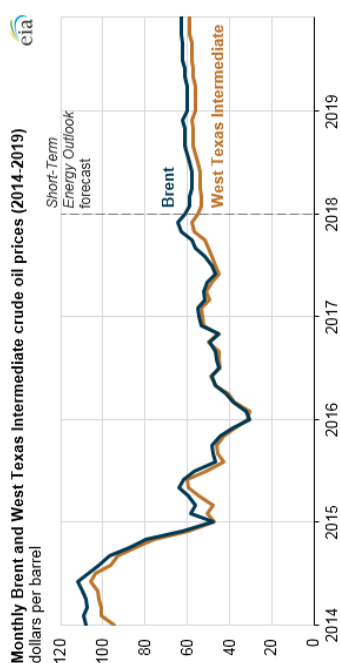
As a result of significant advances in non-conventional drilling and production technology, North American reserves and production of hydrocarbons, primarily from shale resource basins such as the Permian Basin in West Texas, the Eagle Ford in South Texas and the Appalachia Basin in the Northeast U.S., increased substantially in recent years. This noteworthy increase in U.S. hydrocarbon supplies has led to lower prices, a reduction in imports, and significantly increased exports due to the price advantage U.S. based hydrocarbon producers now enjoy in the global energy market. As a result, the U.S. is rapidly turning into a major exporter of various hydrocarbons including natural gas, NGLs, crude oil, petrochemicals and refined products.

This industry trend is beneficial for midstream pipeline operators such as Enterprise Product Partners, because it means hydrocarbon producers are increasing throughput to help meet global demand. When volume of hydrocarbons transported increases, EPD is a main beneficiary.

While EPD's business is not directly impacted by significant changes in oil prices, the business of both their customers on

# Industry Outlook and Business Analysis

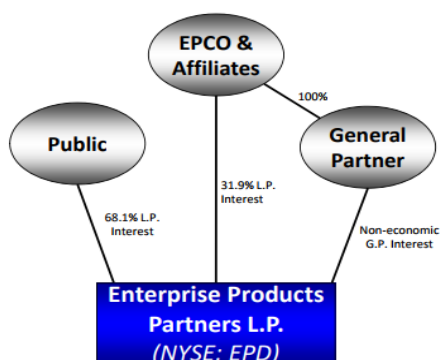
**Figure 4: Historic Oil Prices**



both sides of the value chain are. Thus an understanding of oil and commodity prices is necessary in order to fully grasp the forces at play affecting EPD's business. Oil is currently priced at around \$67 a barrel, up from a low of \$26 per barrel in 2016, but still far from the market equilibrium of around \$90 per barrel in 2014. Suppressed oil prices over the past 3+ years have materially affected consumer energy consumption patterns in the U.S. and across the globe, representing an increase in global energy demand.

At the same time, innovations born out necessity during of the 2016 lows have enabled hydrocarbon producers to remain profitable at oil prices around \$50 per barrel. With consensus estimates projecting the prices well north of \$50 and even \$60 per barrel in 2018 and beyond, midstream operators like Enterprise Products Partners can rest assured their throughput volumes are not in jeopardy for the near term. Long term, any material decrease in energy prices is expected to be met with strategic innovation on the part of hydrocarbon producers to guarantee the stability of their business, and thereby strengthening that of EPD in the process.

**Figure 5: Operating Structure**



## Operating Structure

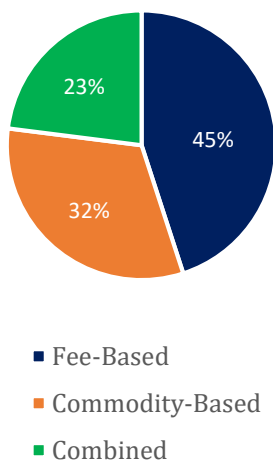
Enterprise Products Partners operates as a holding company for Enterprise Products Operating LLC, the organization which conducts the above described business. As a result, Enterprise Products Partners itself has no employees and is merely managed by a group of "General Partners" with zero direct economic controlling interest in EPD. However, the General Partners do own 100% of Enterprise Products Company, EPCO, a separate LLC with a 31.9% ownership stake in EPD itself. While confusing, this ownership structure enables unitholders of EPD to shield themselves from certain liabilities. Additionally, the General Partners ownership structure enables Enterprise Products Partners to take a long-term view when operating the business. In conjunction with tax advantages, these benefits serve to justify the current operating structure.

## Revenue Mix

For the 12 months ended September 30, 2017 EPD generated \$5.5 billion of total gross operating margin. This margin was

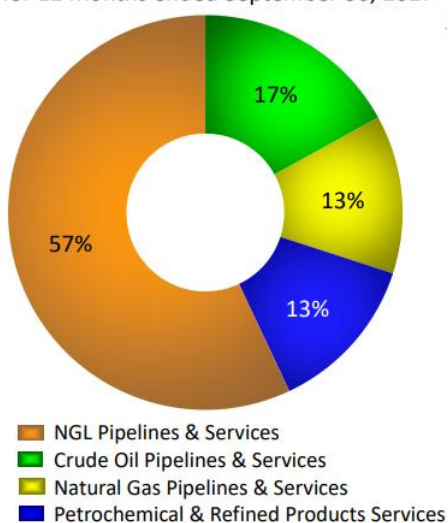
# Industry Outlook and Business Analysis

**Figure 6: Revenue Mix 1**



**Figure 7: Revenue Mix 2**

\$5.5 Billion Total Gross Operating Margin for 12 months ended September 30, 2017



procured via EPD's four main business segments with payment terms falling into one of three categories:

- (i) Fee-Based (45%)
- (ii) Commodity-Based (32%)
- (iii) Combined (23%)

## *Fee-Based Revenue*

Fee-Based revenue is purely volume driven and represents 45% of their revenue. Energy producers pay a pre-determined fee for a given volume of hydrocarbons to be transported, and EPD collects the fee in cash or credit.

## *Commodity-Based Revenue*

Commodity-Based revenue is also revenue driven, but rather than being paid in cash EPD receives a portion of the hydrocarbons they transport in exchange for their services. As a quick example, if EPD transports 1 million cubic feet of natural gas for producer X, they may take 30,000 cubic feet for themselves. While this payment structure may imply EPD is subject to changing commodity prices, they generally already have pre-signed contracts in place to trade their commodity-based earnings with other consumers in exchange for cash at the spot price. Thus, even commodity-based revenue is quickly turned into cash or credit.

## *Combined Revenue*

Combined revenue is realized when EPD receives some cash or credit compensation as well as some commodity-based compensation for a single service.

For the 12 months ended September 30, 2017 EPD's revenue breakdown by business segment was as follows:

- (i) NGL Pipelines & Services (57%)
- (ii) Crude Oil Pipelines & Services (17%)
- (iii) Natural Gas Pipelines & Services (13%)
- (iv) Petrochemical Pipelines & Services (13%)

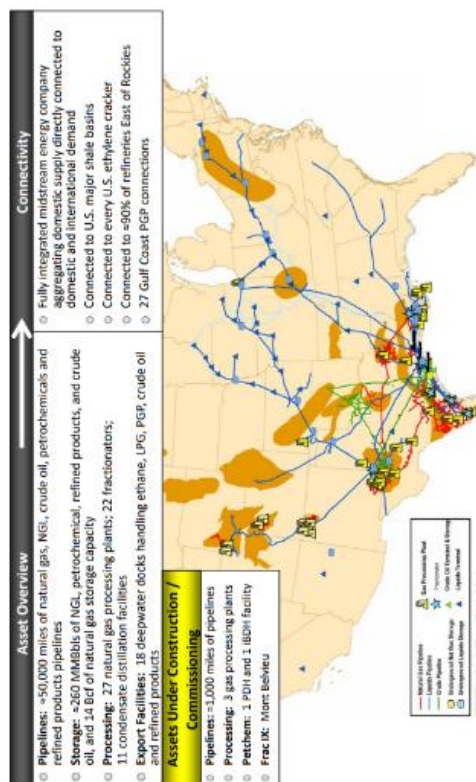
This revenue breakdown has remained proportionally steady in recent years.

## **Asset Profile**

Enterprise Products Partners operates over 50,000 miles of natural gas, NGL, crude oil, petrochemicals, and refined products pipelines in the United States. These pipelines

# Industry Outlook and Business Analysis

**Figure 8: Asset Overview**



**Figure 9: Management**



Randa Williams



James Teague



Randall Fowler

represent connectivity to over 90% of all refineries east of the Rocky Mountain Range. In addition to pipelines, EPD offers customers storage capacity in excess of 260 million barrels of hydrocarbons as well as 14 billion cubic feet of natural gas.

They have 22 natural gas processing plants, 22 fractionators, 11 distillation facilities, and 18 deep water export loading docks. Altogether, these assets make EPD one of the three largest midstream pipeline companies in the industry.

## Management Overview

Enterprise Products Partners' management is comprised of experienced energy professionals with a proven track record of operational excellence.

### *Randa Duncan Williams*

Director and Chairwoman of the Board Randa Duncan Williams served as CEO of EPD from 1994 to 2001 and received her JD from the University of Houston Law School.

### *A. James Teague*

CEO of EPD since 2010, A. James Teague also brings over 20 years of executive experience at energy companies like Shell and Dow Chemical.

### *W. Randall Fowler*

Director and President at EPD for over 15 years, W. Randall Fowler has also served at EPCO CEO and CFO, and he brings knowledge from his time as a Certified Public Accountant.

By all accounts, Enterprise Products Partners has one of the most well-respect leadership teams in the pipeline industry.

## Investment Thesis

Enterprise Products Partners is positioned to provide long run value in excess of the returns generated from the S&P 500 Index due to its:

- (i) Strong Market Positioning
- (ii) Growth Projects
- (iii) Innovation

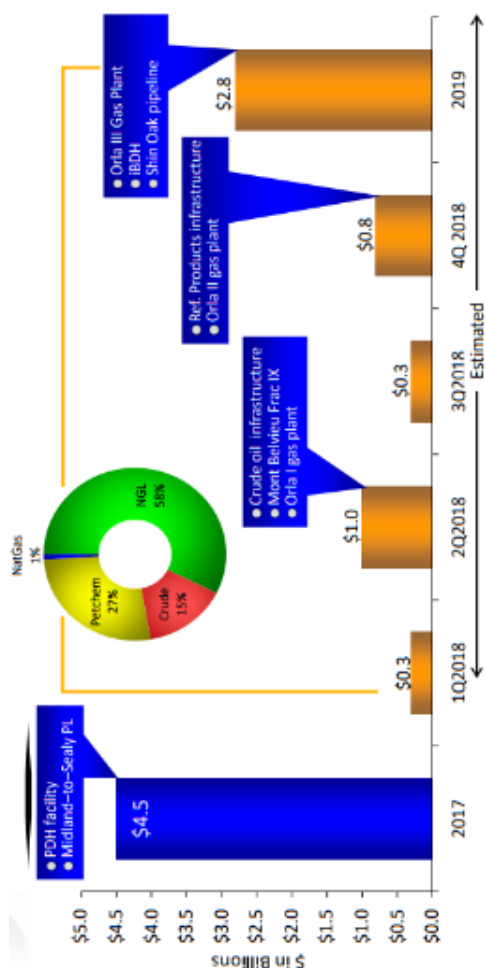
### Strong Market Positioning

With their expansive network of pipelines, storage facilities, natural gas processing plants, fractionators, distillation facilities



# Investment Thesis

**Figure 10: Growth Projects**



and deep water export loading docks, Enterprise Products Partners is operating from a position of strength in the midstream pipeline industry. No pipeline competitor offers more access to refineries east of the Rocky Mountains, the U.S.'s largest energy market. In fact, only Energy Transfer Partners and Kinder Morgan offer more pipelines than EPD does, and ETP's pipelines are specific to transporting natural gas and propane, while Kinder Morgan does not actually hold a controlling ownership in many of the pipelines they operate. As a result, EPD is positioned as the operator with the best combination of pipeline quantity, quality, and operating flexibility. This strength will serve as a chief competitive advantage for EPD going forward.

## Growth Projects

EPD has a history of successful execution of organic growth projects and accretive mergers and acquisition activity. Since their IPO in 1998, EPD has generated more than \$38 billion of organic growth and contributed an additional \$26 billion through acquisitions. Moving forward EPD's experienced management team is trusted to continue the organizations positive acquisition performance. Additionally, over the next two years EPD has given guidance for an additional \$5.2 billion worth of organic growth projects. Significant contributions to this both \$5.2 billion in growth and M&A activity include:

### Ethylene Export Dock in Galveston, TX

In January 2018, EPD announced the formation of a new 50/50 joint venture with Navigator Holdings Ltd. ("Navigator") to construct, own and operate an ethylene export facility along the U.S. Gulf Coast. The export facility is expected to have the capacity to export approximately 1 million tons of ethylene per year, with loading rates of approximately 1,000 tons per hour. In addition, the facility is expected to include refrigerated storage for 30,000 tons of ethylene.

### Orla II

In January 2018, EPD announced plans to add 300 MMcf/d of incremental capacity at their cryogenic natural gas processing facility under construction near Orla, Texas in Reeves County. The addition of a third processing train at Orla ("Orla III") would

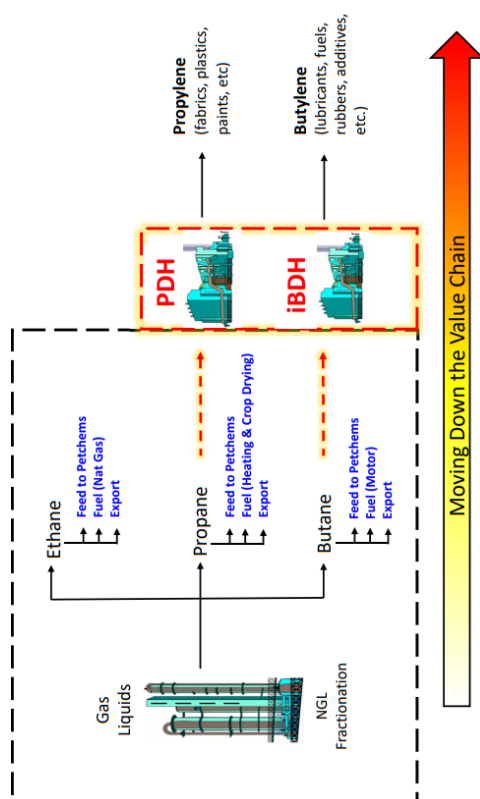


# Investment Thesis

**Figure 11: M&A Activity**



**Figure 12: Innovation**



increase inlet volume capacity to 900 MMcf/d and allow them to expand NGL extraction capabilities by an incremental 40 MBPD to 120 MBPD. Orla III is expected to begin service in the third quarter of 2019.

## *Shin Oak NGL Pipeline*

In April 2017, EPD announced plans to build Shin Oak, a 24-inch diameter pipeline, to transport growing NGL production from the Permian Basin to its NGL fractionation and storage complex located in Mont Belvieu, Texas. The Shin Oak NGL Pipeline is expected to have an initial design capacity of 250 MBPD and be expandable up to 600 MBPD. The project is supported by long-term shipper commitments and is expected to be placed into service during the second quarter of 2019.

## *Azure Acquisition*

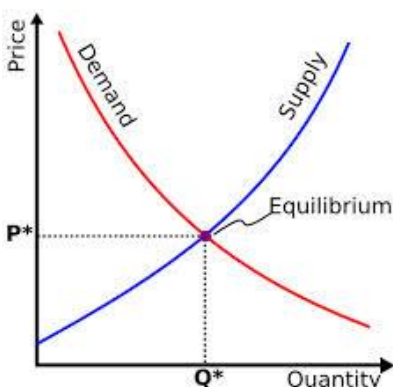
In April 2017, EPD closed on the acquisition of a midstream energy business from Azure Midstream Partners, LP for \$191.4 million in cash. The acquired business assets, which are located primarily in East Texas, include over 750 miles of natural gas gathering pipelines and two natural gas processing facilities with an aggregate processing capacity of 130 MMcf/d. The acquired business serves production from the Haynesville Shale and Bossier, Cotton Valley and Travis Peak formations.

## **Innovation**

Enterprise Products Partners is an innovative company with a history of inventing new solutions within the energy space to save time, increase efficiency, and preserve capital. One example of such ingenuity is their recent restructuring of their NGL processing process. In traditional NGL fractionation, gas liquids are turned into ethane, propane, and butane. The production of propane and butane released impure byproducts propylene and butylene. Previously these byproducts were considered waste products, but in 2017 EPD announced a fractionation process restructuring that would enable these by products to be purified and sold or used internally as feedstock. As a result, internal isobutylene isomerization is expected to increase by 26% through 2019, representing a material cost saving or revenue generating opportunity for the business. This is just one of many examples that highlight EPD's ability to innovate, which sets it apart in this marketplace.

# Investment Risks

**Figure 13: Supply & Demand**



**Figure 14: Pipeline Rupture**



## **Increasingly Attractive Domestic & International Supply & Demand Picture**

For the first time in years, Enterprise faces an attractive set of supply and demand dynamics. On the supply side, American energy production is increasingly supplanting OPEC as the swing producers in global energy markets. By taking advantage of increasingly efficient technology, American producers were able to survive OPEC's attempt to swing the pendulum of control back to their side. Even as the quantity of wells has not recovered to mid-2014 levels, volume has reached new records, as fracking techniques have improved. Additionally, drilled but uncompleted well inventory has markedly increased over the past 12 months. Even without a partial release of this pent-up supply, increased well yields are very likely to drive volumes up, and Enterprises' well positioned assets stand to directly benefit. On the demand side, not only is Enterprise benefiting from increased international demand for US NGLs and LNG, they also stand to benefit from world-scale ethylene capacity rapidly coming online. Major players, such as Dow Chemical and Chevron Phillips Chemical are in the midst of building incremental capacity of 770 MBPD, and each of these plants will become an instant source of ethane demand, and once again, Enterprises' assets are competitively positioned to satisfy this demand.

Finally, certain areas of the Permian Basin are still underserved by midstream infrastructure. Both the Orla and Midland to Sealy pipeline systems, which very recently came online will take advantage of this favorable imbalance.

## **Pipeline Safety**

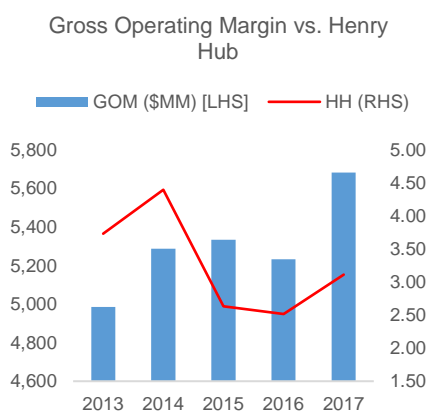
Maintaining thousands of miles of pipeline is the greatest logistical challenge that Enterprise Products Partners faces. Not do failures bring significant financial cost, but the damage done to the environment and reputation of the company can be critical. As such, Enterprise endeavors to do its utmost to limit the impact its business activities have on the environment. They not only have deployed technological measures to assess the condition of their assets, they also deploy man-power to check key segments of the pipeline. This has led to immaterial costs related to environmental litigation over the last several years.

# Valuation

**Figure 15: The Federal Energy Regulatory Commission**



**Figure 16: Operating Performance Over Time**



## Financial Complexity / Index Exposure

Due to Enterprise's nuanced ownership structure, its organization as an MLP, it gets lumped together with comparable companies, many of which are managed in an inferior way. However, due to passive fund activity, poor, unrelated business performance from competitors can have an adverse impact on the performance of Enterprise's units due to index fund selling. As Enterprise's units do not trade on high volume, such selling could have an overstated impact on unit price.

## Regulatory Changes

Enterprise is regulated by a number of agencies, including the Federal Energy Regulation Commission (FERC). Changes to rules that govern Enterprise, such as the use of meaningful tax credits can have a material impact on the business. Although the current administration seems to share a more favorable view towards fossil fuels, that may not always be the case during our investment horizon. Keeping a close eye on the leadership of relevant regulatory bodies will be important in senior management decision making process.

## Background

Financially, the last several years have been a trying time for companies within the commodities complex. During the period between June 2014 to February 2016, oil prices fell from well above \$120/barrel to south of \$30/barrel. What's more, this precipitous fall in prices was reflected across a broad set of commodities, including natural gas and related liquids.

Companies that invested heavily during peak price years found themselves short on cash, leading to many restructuring efforts, along with distressed sales. Despite this difficult environment, not only did Enterprise Products Partners demonstrate the durability of their business model, they continued to display the factors we believe will lead to generating superior long-term, risk-adjusted returns, namely dedication to operational excellence and a distaste for excessive financial risk. Between 2014 (peak commodity prices) and 2016 (nadir prices), gross operating margin, the relevant proxy for cash flow, fell from \$5.29Bn to \$5.23Bn, a drop of only 1.1%. Driving this performance was a 106% expansion to gross operating margin.

# Valuation

**Figure 17: Reconciliation to Gross Operating Margins**

Operating Income to Gross Operating Margin	
Operating income	
Adjustments:	
Add D&A in operating costs and expenses	
Add asset impairment and related charges	
Add net losses and subtract net gains attributable to asset sales and insurance recoveries	
Add general and administrative costs	
Adjustments for make-up rights on certain new pipeline projects:	
Add non-refundable payments received from shippers attributable to make-up rights	
Subtract the subsequent recognition of revenues attributable to make-up rights	
<b>Gross Operating Margin</b>	

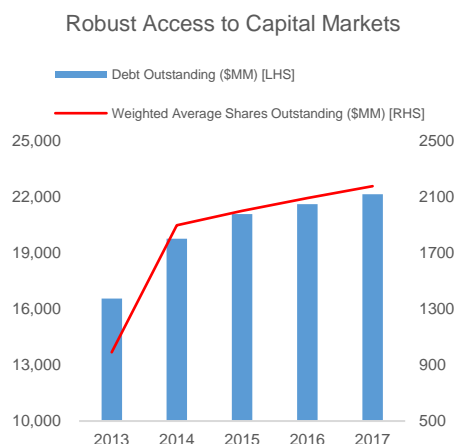
At the same time Henry Hub (natural gas) prices fell 42.7%. This durability is due not only to Enterprise's fee-based business model, but also by their operational discipline, exemplified by a 25% decrease in general and administrative costs during this time.

## Recent Performance

In 2017, Enterprise Products Partners success continued, with gross operating margin reaching an all-time high of nearly \$5.7Bn. Performance in 2017 was largely driven by acceleration in the NGL Pipelines & Services (+9.0%, representative of 57.4% total gross operating margin) and Crude Oil Pipelines & Services (+15.5%, representative of 17.4% total gross operating margin). It is important to stress the importance of assessing the business based on gross operating margin and not revenue. As revenues reflect commodity prices, they are prone to exhibit a high level of volatility, while gross operating margin better reflects the economics of the business.

We expect gross operating margin to continue to expand at a rate of between 8.0% and 11.0% during fiscal year 2018 and 2019, reflecting new assets coming online (most notably Orla II and III, Midland to Sealy), as well as pent-up demand in the Permian Basin for midstream infrastructure. Catalysts also including the burgeoning export opportunities Enterprise has been able to capitalize on, as well as downstream ethane capacity coming online.

**Figure 18: Debt and Dilution**

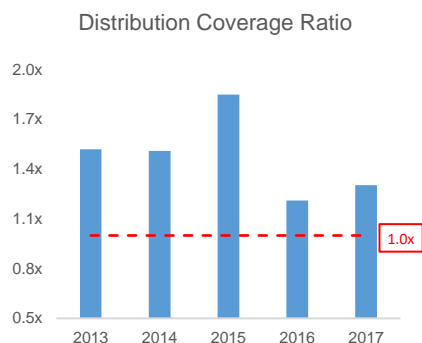


## Financial Innerworkings

Understanding Enterprise Products Partners' balance sheet is critical for assessing the health of the business. As a midstream energy company, it is critical that the company maintains a healthy balance of funding sources. Historically Enterprise Products has relied on both the equity and debt markets to fuel its growth, as it pays out a substantial amount of it internally generated cash flow as a dividend to its unitholders. This practice is standard, as Master Limited Partnerships (MLPs) are required by law to distribute 90% of their cash to unitholders in order to sustain their attractive tax attributes. During the industry-wide downturn during 2015 and 2016, many of these MLPs ran into financial distress, as equity and debt markets proved inhospitable towards energy companies. This led many

# Valuation

**Figure 19: Distribution Coverage**

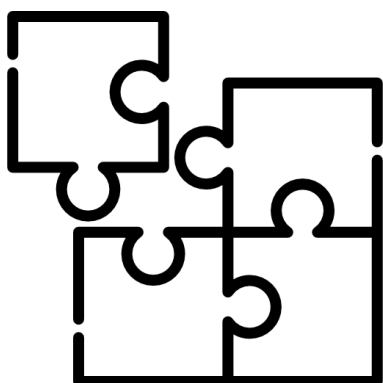


companies to restructure, as their capital structure was unsustainable. Enterprise however was able to weather this storm, its industry leading credit rating giving it the ability to access the debt markets, and their precision at the market equity issuing program finding opportunities to raise equity capital.

The company's ability to durably produce cash, even during stressed times allowed it to generate more than enough cash to continue to raise its dividend. Its distribution coverage ratio has stayed well above 1.0x and is trending upwards. During the coming years we expect the company to reduce its reliance on the equity capital markets, in line with comments management has made on multiple occasions. This shift, along with a well-articulated dividend growth path (3.4% expansion during the coming years) adds to the attractiveness of Enterprise.

To test the financial viability of the business during the duration of our projected hold period of ten years, we constructed a full financial statement model, complete with an income statement, balance sheet, cash flow statement and debt schedule. This gave us the ability to analyze the outcomes of our assumptions on the financial position of the company. From a leverage perspective, the model included not only Enterprise's existing 32 tranches of debt, but also required us to factor in re-leveraging (see Appendix for further explanation).

**Figure 20: Methodologies**



## Overview of Methodologies

In valuing the Enterprise Products, we relied on a variety of methodologies, including two forms of the discounted cash flow analysis, and various forms of comparable company analysis. In reaching a price target we believe that it is best to use a variety of methodologies in order to triangulate a rough estimation of value, believing that no single methodology is unambiguously superior than the other.

## Discounted Cash Flow Analyses (DCF) [70% weight]

Our DCF analysis largely consisted of the assumptions we applied in our standalone financial model. Instead of applying a broad revenue growth rate, we aggregated each segment's growth rate. Though each business is largely driven on volume, there are nuances that led us to assign differing growth rates.

# Valuation

**Figure 21: Exit Multiple Method Discounted Cash Flow Analysis Sensitivity**

Share Price Sensitivity

		WACC		
		6.8%	7.3%	7.8%
Exit Multiple	13.6x	\$31.51	\$29.71	\$28.00
	14.6x	\$33.65	\$31.74	\$29.93
	15.6x	\$35.79	\$33.77	\$31.86

Over the ten-year projection period we stepped growth down over time, as we see the structural improvements to midstream occurring mostly during the next five years. We determined our exit multiple by using the median comparable company aggregate value to EBITDA (AV/EBITDA) multiple of 14.5x. For the sake of maintaining methodological rigor, we discounted cash flows using the mid-year convention and supplanted it with a function that measured the remaining fraction of time until the mid-year. We calculated our discount rate manually, using the classic CAPM to measure cost of equity and existing debt analysis we had previously conducted to find cost of debt. This process yielded a 7.3% weighted average cost of capital. Our median price target from the exit multiple method is \$31.74, 23.2% above where Enterprise closed on Friday, April 13.

We also conducted a perpetual growth method discounted cash flow analysis. Into perpetuity we project that the company will grow at 2.5%, a rate we believe to be conservative. Utilizing the aforementioned methodology, we came to a median value per share of \$35.39, 37.4% above where Enterprise closed on Friday, April 13.

**Figure 22: Perpetual Growth Method Discounted Cash Flow Analysis Sensitivity**

Share Price Sensitivity

		WACC		
		6.8%	7.3%	7.8%
Perpetual Growth Rate	2.0%	\$37.33	\$32.09	\$27.79
	2.5%	\$41.61	\$35.39	\$30.40
	3.0%	\$47.03	\$39.47	\$33.55

We determined that the perpetual growth rate better approximates intrinsic value, given the inherent discrepancies in relying on comparable companies to assign terminal value, especially to a company that has consistently shown superior operating capability and financial discipline.

## Comparable Company Analysis (30% weight)

Our comparable company set consisted of Kinder Morgan, Williams Partners, Oneok, Energy Transfer Partners, and MPLX. Each of these companies is involved in the transfer of either oil, gas, or their derivatives. Though each is different, we believe these companies to be the best publicly traded proxies to Enterprise Products Partners. For valuation purposes, we relied on adjusted median aggregate value to EBITDA (AV/EBITDA) [15.0%] and adjusted median price to earnings (P/E) [10.0%] multiples, with a smaller allocation to adjusted median price to sales (P/S) [5.0%].

# Conclusion

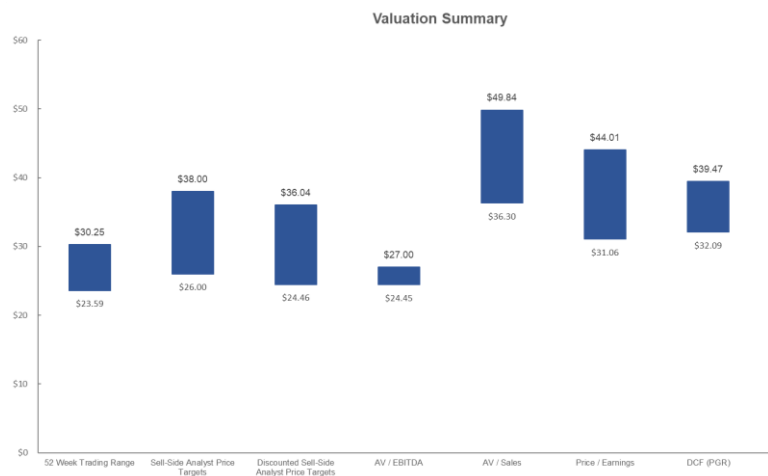
## Conclusion

We issue a **BUY** recommendation for Enterprise Products Partners with a 27.7% margin of safety.

## Final Valuation

Valuation Methods:	Median	Weight
AV / EBITDA	\$25.72	15.0%
AV / Sales	\$43.07	5.0%
Price / Earnings	\$37.54	10.0%
DCF (PGR)	\$35.39	25.0%
DCF (Exit Multiple)	\$31.74	45.0%
<b>Price Target</b>	<b>\$32.90</b>	
<b>Margin of Safety</b>	<b>27.7%</b>	

## Valuation Summary





# Appendix

## Exhibit 1: Profit & Loss Projection

### P&L Summary Output

\$MM, unless otherwise noted

	Historical					Projected					
	2013A 31-Dec	2014A 31-Dec	2015A 31-Dec	2016A 31-Dec	2017A 31-Dec	2018E 31-Dec	2019E 31-Dec	2020E 31-Dec	2021E 31-Dec	2022E 31-Dec	2023E 31-Dec
Total Revenue	47,727.0	47,951.2	27,027.9	23,022.3	29,241.5	32,731.2	35,521.6	37,630.9	39,454.7	41,106.3	42,844.4
% Growth	12.1%	0.5%	(43.6%)	(14.8%)	27.0%	11.9%	8.5%	5.9%	4.8%	4.2%	4.2%
Cost of Sales	44,238.7	44,220.5	23,668.7	19,643.5	25,518.4	28,546.6	30,960.2	32,784.3	34,376.2	35,808.5	37,315.6
% Margin	92.7%	92.2%	87.6%	85.3%	87.3%	87.2%	87.2%	87.1%	87.1%	87.1%	87.1%
Gross Profit	3,488.3	3,730.7	3,359.2	3,378.8	3,723.1	4,184.6	4,561.4	4,846.5	5,078.4	5,297.9	5,528.8
% Margin	7.3%	7.8%	12.4%	14.7%	12.7%	12.8%	12.8%	12.9%	12.9%	12.9%	12.9%
Total SG&A	188.3	214.5	192.6	160.1	181.1	202.7	220.0	233.1	244.4	254.6	265.3
% Margin	0.4%	0.4%	0.7%	0.7%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
Equity in Income of Unconsolidated Affiliates	167.3	259.5	373.6	362.0	426.0	426.0	426.0	426.0	426.0	426.0	426.0
Operating Income	3,467.3	3,775.7	3,540.2	3,580.7	3,968.0	4,407.9	4,767.4	5,039.5	5,260.1	5,469.3	5,689.4
% Margin	7.3%	7.9%	13.1%	15.6%	13.6%	13.5%	13.4%	13.4%	13.3%	13.3%	13.3%
Gross Operating Margin	4,984.9	5,286.5	5,332.1	5,230.7	5,680.4	6,307.5	6,808.9	7,187.9	7,515.6	7,812.4	8,124.7
% Margin	10.4%	11.0%	19.7%	22.7%	19.4%	19.3%	19.2%	19.1%	19.0%	19.0%	19.0%
Depreciation, Amortization & Accretion	1,148.9	1,282.7	1,428.2	1,456.7	1,531.3	1,696.9	1,821.4	1,915.3	2,011.2	2,088.5	2,169.9
% Margin	2.4%	2.7%	5.3%	6.3%	5.2%	5.2%	5.1%	5.1%	5.1%	5.1%	5.1%
EBITDA	4,616.2	5,058.4	4,968.4	5,037.4	5,499.3	6,104.8	6,588.9	6,954.8	7,271.3	7,557.8	7,859.4
% Margin	9.7%	10.5%	18.4%	21.9%	18.8%	18.7%	18.5%	18.5%	18.4%	18.4%	18.3%
Interest Expense, net	801.6	921.0	961.8	982.6	984.6	1,172.1	1,274.0	1,368.0	1,445.7	1,508.3	1,571.8
Pre-Tax Income	2,664.6	2,856.6	2,555.9	2,576.4	2,920.4	3,165.3	3,416.9	3,590.4	3,729.4	3,872.4	4,025.4
% Margin	5.6%	6.0%	9.5%	11.2%	10.0%	9.7%	9.6%	9.5%	9.5%	9.4%	9.4%
Income Tax Expense	57.5	23.1	(2.5)	23.4	25.7	28.8	31.2	33.1	34.7	36.1	37.7
Effective Tax Rate, %	2.2%	0.8%	(0.1%)	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
Net Earnings	2,607.1	2,833.5	2,558.4	2,553.0	2,894.7	3,136.5	3,385.7	3,557.4	3,694.7	3,836.3	3,987.7
% Margin	5.5%	5.9%	9.5%	11.1%	9.9%	9.6%	9.5%	9.5%	9.4%	9.3%	9.3%
Weighted Average Diluted Shares Outstanding	990.3	1,895.2	1,998.6	2,089.1	2,174.2	2,215.2	2,256.7	2,298.7	2,341.2	2,384.4	2,428.5
Diluted Earnings per Share	\$2.62	\$1.47	\$1.26	\$1.20	\$1.31	\$1.39	\$1.48	\$1.52	\$1.55	\$1.58	\$1.61
% Growth		(43.9%)	(14.2%)	(4.6%)	8.9%	6.3%	5.9%	3.1%	2.0%	1.9%	2.1%
Distributions per Share					\$1.67	\$1.73	\$1.78	\$1.85	\$1.91	\$1.98	\$2.04
% Growth						3.4%	3.4%	3.4%	3.4%	3.4%	3.4%

## Exhibit 2: Exit Multiple Discounted Cash Flow Analysis Summary Outputs

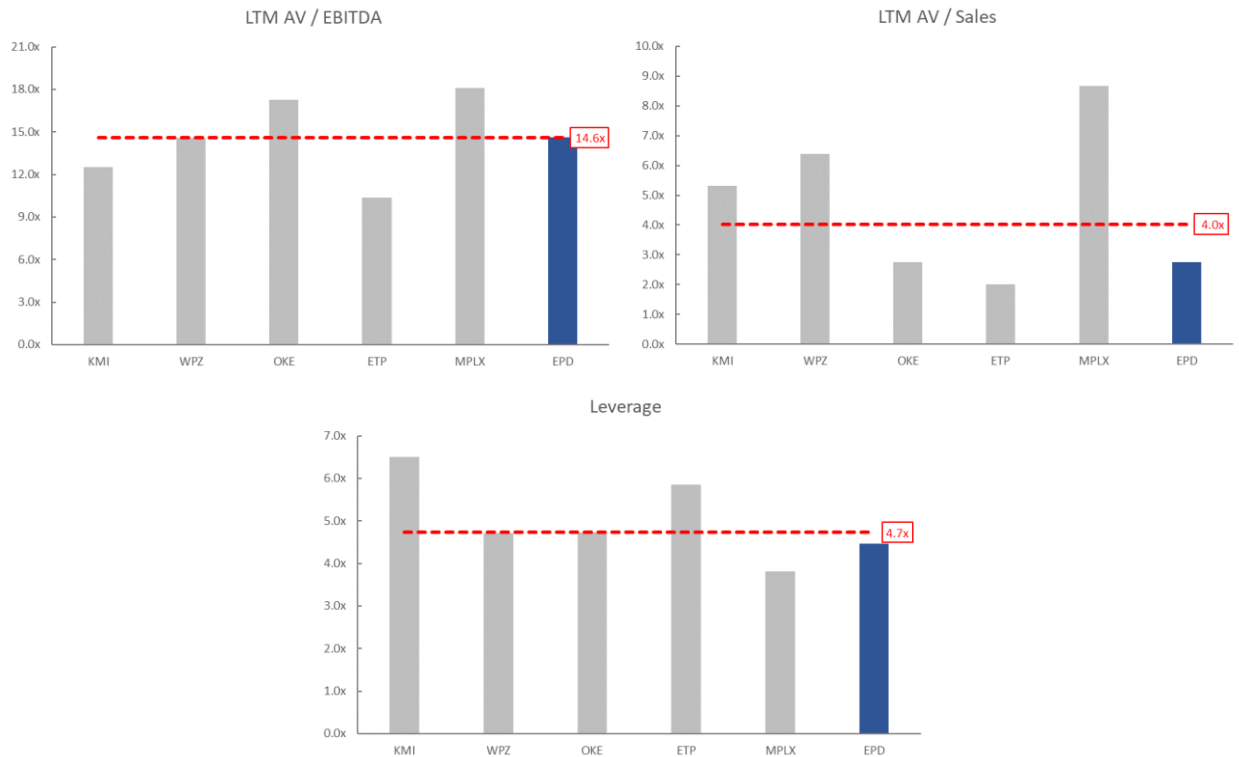
Share Price Sensitivity				Implied PGR Sensitivity				Margin of Safety Sensitivity						
Exit Multiple	WACC			Exit Multiple	WACC			Exit Multiple	WACC					
	6.8%	7.3%	7.8%		6.8%	7.3%	7.8%		6.8%	7.3%	7.8%			
	13.6x	\$31.51	\$29.71		\$28.00	13.6x	1.1%		1.6%	2.0%	13.6x	22.3%	15.3%	8.7%
	14.6x	\$33.65	\$31.74		\$29.93	14.6x	1.5%		1.9%	2.4%	14.6x	30.6%	23.2%	16.2%
	15.6x	\$35.79	\$33.77		\$31.86	15.6x	1.8%		2.3%	2.7%	15.6x	38.9%	31.1%	23.7%

# Appendix

**Exhibit 3: Perpetual Growth Method Discounted Cash Flow Analysis Summary Outputs**

Share Price Sensitivity				Implied Exit Multiple				Margin of Safety Sensitivity						
Perpetual Growth Rate	WACC			Perpetual Growth Rate	WACC			Perpetual Growth Rate	WACC					
	6.8%	7.3%	7.8%		6.8%	7.3%	7.8%		6.8%	7.3%	7.8%			
	2.0%	\$37.33	\$32.09		\$27.79	2.0%	16.3x		14.8x	13.5x	2.0%	44.9%	24.6%	7.9%
	2.5%	\$41.61	\$35.39		\$30.40	2.5%	18.3x		16.4x	14.8x	2.5%	61.5%	37.4%	18.0%
3.0%	\$47.03	\$39.47	\$33.55	3.0%	20.8x	18.4x	16.5x	3.0%	82.6%	53.2%	30.2%			

**Exhibit 4: Comparable Company Analysis**



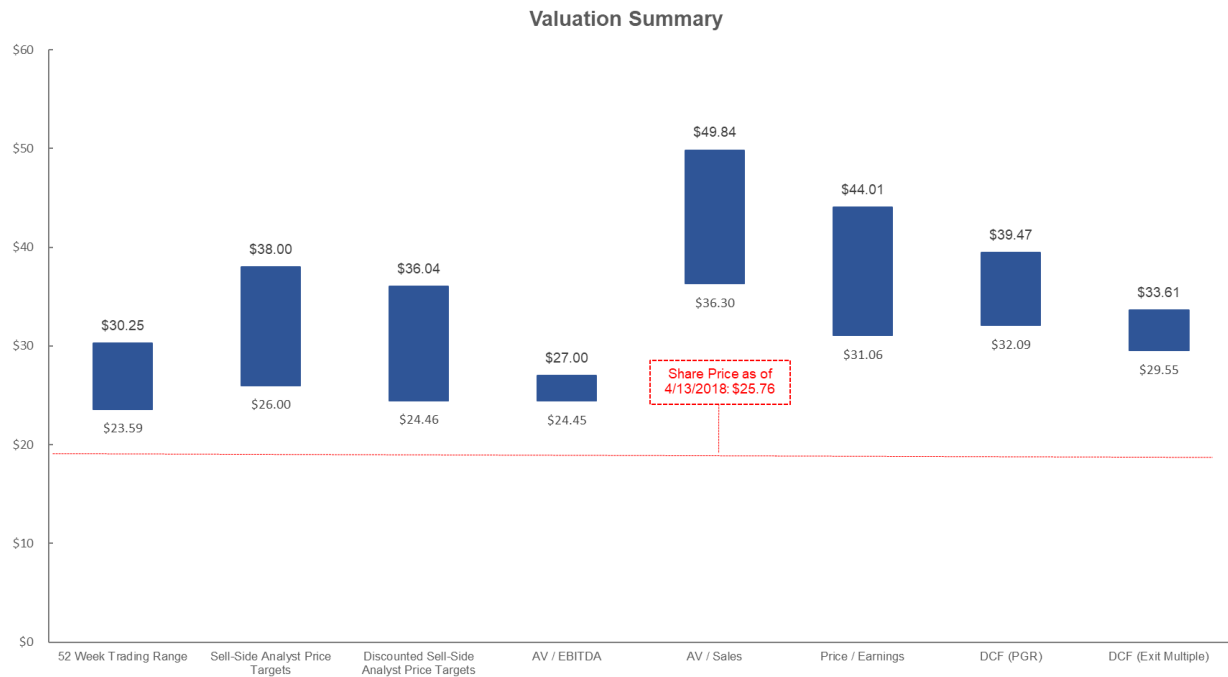
# Appendix

## Exhibit 5: Comparable Company Summary Output

### EPD Comparable Company Analysis

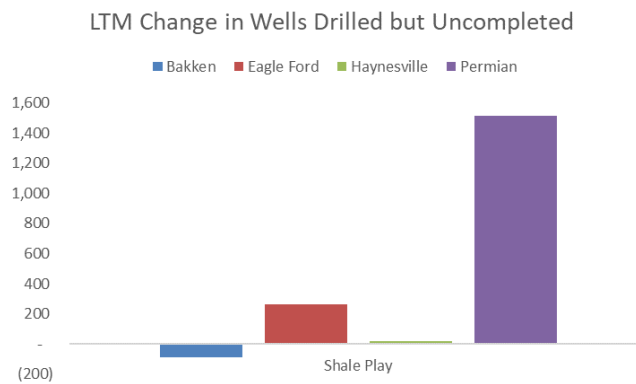
Company	Stock Price <sup>(1)</sup>	Equity Value (\$MM)	Agg. Value (\$MM)	AV / Sales LTM	AV / EBITDA LTM	P / E LTM	EBITDA Margin LTM	Debt / EBITDA LTM
Kinder Morgan Inc.	\$15.33	33,819	72,886	5.3x	12.5x	NM	42.4%	6.5x
Williams Partners LP	\$34.65	33,827	51,102	6.4x	14.6x	39.5x	43.7%	4.7x
Oneok Inc.	\$58.51	24,137	33,396	2.7x	17.3x	NM	15.9%	4.7x
Energy Transfer Partners LP	\$17.05	19,901	58,571	2.0x	10.4x	18.4x	19.4%	5.9x
MPLX LP	\$32.42	25,794	32,880	NM	18.1x	NM	48.0%	3.8x
Median		25,794	51,102	4.0x	14.6x	29.0x	42.4%	4.7x
Mean		27,496	49,767	4.1x	14.6x	29.0x	33.9%	5.1x
Enterprise Products Partners L.P.	\$25.76	55,670	80,459	2.8x	14.6x	19.9x	18.8%	4.5x

## Exhibit 6: Valuation Summary

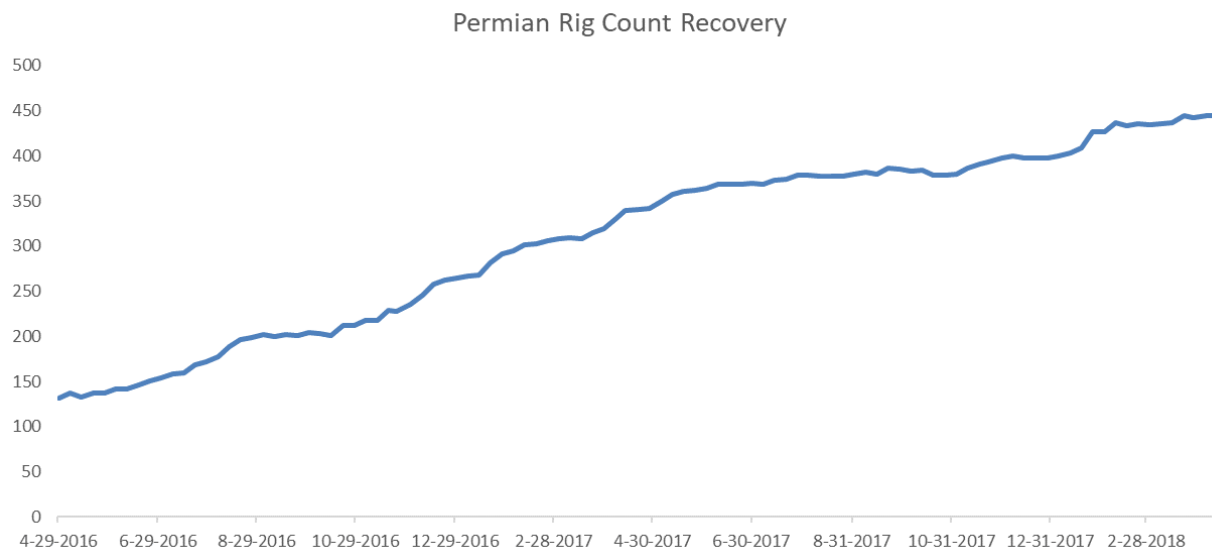


# Appendix

**Exhibit 7: Last Twelve Month Change in Wells Drilled but Uncompleted (DUCs)**



**Exhibit 8: Permian Rig Count Recovery**



# Appendix

**Exhibit 9: Ethane Demand Continues to Build As Downstream Capacity Comes Online**

Company	Ethylene Production Capacity	Potential Ethane Consumption	Estimated Completion Date
	(Billion lbs/yr)	(MBPD)	
Occidental Chemical/Mexichem	1.2	40	Operational
Dow Chemical	3.3	90	Operational
Chevron Phillips Chemical	3.3	90	1Q 2018
ExxonMobil Chemical	3.3	90	1Q 2018
Indorama	1.1	30	2018
Shintech	1.1	30	2018
Sasol	3.3	90	2018
Formosa Plastics	3.5	95	2019
Axiall/Lotte	2.2	60	2019
Total Petrochemicals & Refining	2.2	60	Early 2020s
Shell	3.5	95	Early 2020s
<b>Total</b>	<b>28.0</b>	<b>770</b>	

**Exhibit 10: Releveraging Calculation**

Re-Leveraging Bond	2017	2018	2019	2020	2021	2022	2023
Beginning Balance	--	--	2,870.0	7,052.1	11,633.7	13,589.2	15,489.5
Plus: Issuance	--	2,870.0	4,182.2	4,581.5	1,955.6	1,900.2	2,565.6
Voluntary Paydown	--	--	--	--	--	--	--
Ending Balance	--	2,870.0	7,052.1	11,633.7	13,589.2	15,489.5	18,055.1
Leverage	4.50x	3.89x	3.73x	3.70x	4.09x	4.11x	4.04x
Shortfall (Excess)	--	0.47x	0.63x	0.66x	0.27x	0.25x	0.33x
Total 12/31 Debt (Incl. RLB)	24,719.9	26,634.8	28,747.0	30,343.6	31,724.1	32,974.4	34,290.0
New 12/31 Leverage	4.50x	4.36x	4.36x	4.36x	4.36x	4.36x	4.36x
Zero Paydown Leverage	--	4.52x	4.68x	4.79x	4.44x	4.45x	4.52x
Amortization	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest Rate	4.39%	4.39%	4.39%	4.39%	4.39%	4.39%	4.39%
Interest Expense	--	63.1	218.0	410.5	554.2	638.9	737.0