Midstream/MLP Energy

Year Ahead 2024: Prefer large-caps, FCF inflection stories as commodities weaken

Price Objective Change

05 January 2024

Equity
Americas
Master Limited Partnerships

Neel Mitra, CFA
Research Analyst
BofAS
+1 713 247 6801
indraneel.mitra@bofa.com

Lauren LeGros
Research Analyst
BofAS
+1 713 409 2491
lauren.legros@bofa.com

Paul Armentor, CFA
Research Analyst
BofAS
paul.armentor@bofa.com

Leaning defensive w/ large cap, FCF inflection stocks

We expect '24 to be a weak year for NGL/natural gas prices. And as such, we prefer well capitalized, large-cap stocks with stable earnings growth through operating leverage/high FCF (ET), contractual growth (EPD and WMB), and FCF inflection stories (OKE and TRGP). These stocks have defensive characteristics like internal hedges along the NGL chains (ET, EPD and TRGP) or contracted systems (WMB take or pay gas pipelines and OKE's acquired refined products system). And with high FCF yields and growing distributions, these should outperform in a decreasing interest rate environment. We update our POs for PAGP and TRGP in this report (see page 5).

OKE our top C-Corp pick and ET our top MLP pick

We upgraded OKE to Buy in Dec with a PO of $83. We still believe OKE's transition to a more stable FCF story is underappreciated. We expect OKE to deliver 5% dividend growth and $5n of FCFaD through '27, hitting its targeted leverage ratio of <3.5x in '24 (2 years early). Later in January, we expect OKE to announce its '24 dividend increase. We believe a share repurchase authorization could be announced with the dividend increase, which most investors aren't expecting. ET has operating leverage with the most expansive asset footprint in midstream and still trades at a group low 6.8x '25 EBITDA and 14% FCF yield. We see continued wellhead to water Permian growth and Haynesville gas opportunities.

Expect continued POP weakness from NGL/gas prices

We update our differentiated POP (percent-of-proceeds) indicator following the fall-off in crude/NGL/gas prices. We indicated in Sept. that heavy NGLs were oversupplied in the U.S. and Asian demand was weakening. Since then, crude prices have fallen ~$10/bbl and '24 propane/WTI is testing historical lows at 40%. Concurrently, lower gas prices provide less downside support for ethane prices, which are back in balance after a 2H23 deficit. So now POPs are lower y/y and fee floors will be tested with G&P contracts. Hence, why we prefer integrated NGL names: EPD, ET, OKE & TRGP that have internal hedges.

A full Permian NGL takeaway primer for '25+

We see a battle for Permian NGL takeaway as >1 MMbpd of new pipe capacity comes online in '25 oversupplying the market, as EPD/ET/OKE/TRGP all bid for in-kind volumes and expiring contracts, lowering rates. We describe the nuances of closed-loop systems, in-kind rights, and "fake in-kind" rights with the characteristics and producers on each system. Ultimately, TRGP is the best situated with ~70% of volumes on its pipelines sourced by midstream controlled G&P volumes with ET and EPD lower at ~55%. We think OKE converts one of its WesTex pipes to refined products service over time.

ET continues to take market share in the Haynesville

ET is challenging right of ways for competitor gathering lines that move gas to the LNG corridor. But the only pipe that is needed in late '24 is the already built Gulf Run pipe supplying gas to Golden Pass LNG under contract. And we believe Gulf Run will also supply the CP2 LNG facility, which we believe is sanctioned next. Lastly, ET owns most available East & Northbound egress. WMB's recent gas storage acquisition in LA is timely given the lack of new storage relative to new LNG.

Exhibit 1: BofA POs

NGL/gas volume growth benefiting intg'd names

Ticker	Rating	PO
C-Corp		
ETRN	Underperform	$9
KMI	Neutral	$19
KNTK	Buy	$39
KGS	Buy	$29
OKE	Buy	$83
PAGP	Neutral	$17
TRGP	Buy	$104
WMB	Buy	$41
MLP		
EPD	Buy	$31
ET	Buy	$18
MPLX	Underperform	$36
PAA	Neutral	$17
WES	Underperform	$27

Source: BofA Global Research
BofA GLOBAL RESEARCH

NGL: Natural gas liquids
ET: Energy Transfer LP
EPD: Enterprise Products Partners
WMB: Williams Companies Inc.
OKE: Oneok Inc.
TRGP: Targa Resources Corp.
G&P: Gathering & processing
WesTex: West Texas NGL
LNG: Liquefied natural gas
CP2: Calcasieu Pass 2
LA: Louisiana

Refer to important disclosures on page 39 to 42. Analyst Certification on page 38. Price Objective Basis/Risk on page 35.
12641591

Timestamp: 05 January 2024 06:00AM EST

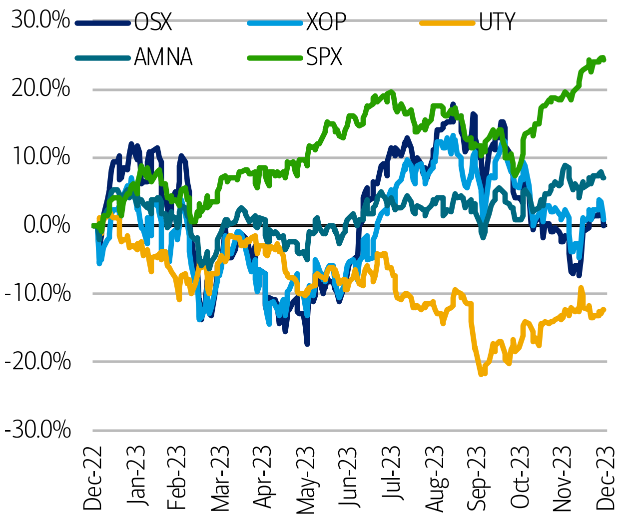
Contents

’24 Midstream Equity Outlook

Prefer large cap FCF stories and/or contractual growth

’23 saw energy underperform the broader markets, as commodity markets retreated off ’22 highs. Pockets of high energy prices, during the middle part of ’23, caused the XOP and OSX to outperform midstream (AMNA) until 4Q, when commodity prices began to fall. So, in 4Q, the AMNA began to outperform broader energy, given its more stable earnings and strong yields, in a falling interest rate environment. Midstream trades as a hybrid between energy (more so) and utilities. And in a weak energy environment, we prefer well-capitalized, large-cap stocks with stable earnings growth through operating leverage/high FCF (ET), contractual growth (EPD and WMB), and FCF inflection stories (OKE and TRGP). These stocks have defensive characteristics like internal hedges along the NGL chains (ET, EPD and TRGP) or contracted systems (WMB take or pay gas pipelines and OKE’s refined products system).

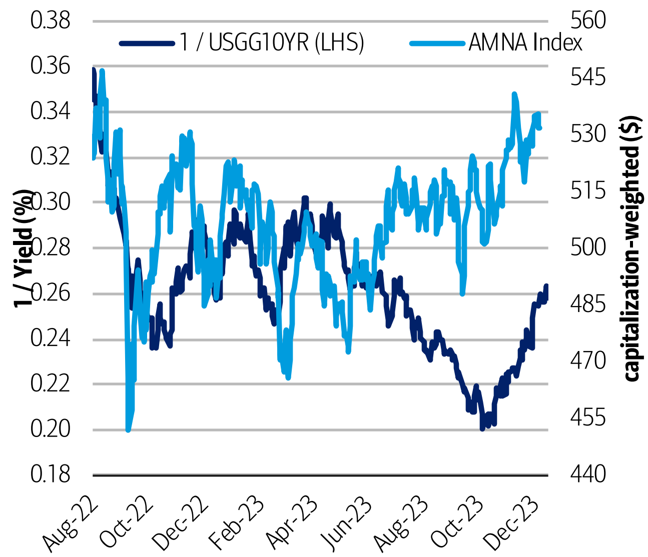
Exhibit 2: ’23 stock performance of energy subsectors vs. S&P 500
Energy has generally outperformed the S&P 500, with AMNA holding strong among commodity price volatility



Source: Bloomberg

BofA GLOBAL RESEARCH

Exhibit 3: AMNA vs. 10-year Treasury
Yield characteristics impact stock prices esp. in weak energy market



Source: Bloomberg

BofA GLOBAL RESEARCH

Top Picks

Our top C-Corp pick is Oneok (OKE) and our top MLP pick is Energy Transfer (ET).

We upgraded **OKE** to a Buy with an $83 PO with a detailed report (ONEOK Inc: Tulsa cash king: Upgrading OKE to Buy and $83 PO as deal synergies trend up 04 December 2023) in early December. Key takeaways:

- We expect OKE to realize $600mm+ of commercial synergies over the next 4 years with minimal capex, creating massive operating leverage. OKE should lower costs and expand MMP’s butane blending business through pipeline system integration and last mile tracking. Batching will create market-based opportunities.
- OKE becomes a FCF inflection story. We see OKE delevering to 3.4x by YE24, 2 years ahead of schedule, establishing a 5% dividend growth rate, and generating $5bn of FCFaD through ’27. We see OKE trading at >9% ’25 FCF yield, highest among the large cap C-Corps.
- The Magellan system provides a defensive hedge in a weak commodity environment. The butane blending operation provides an internal hedge against weak LPG prices.

Key Catalyst: We expect OKE to announce a 5% dividend increase at the end of January and likely a share repurchase, at the same time.

ET continues to generate best-in-class FCF while growing earnings through its operating leverage. Despite ET having the most expansive midstream footprint in our coverage group, it trades at a group low 6.8x '25 EBITDA multiple and 14% FCF yield.

- ET sees the full benefit of projects in '24 put into service in mid '23, especially Permian NGL infrastructure. It will expand its Nederland NGL export facility in '25. The Lone Star NGL pipeline still has ~2 years before needing to expand. And it can compete for volumes, even with the NGL pipe overbuild. Demonstrating ET's geographical diversity, NGL rates on legacy ENBL Mid-Con acreage fall, as new 3rd party incentivized transportation rates are put in place and ET can put the volumes on its fractionators.

- The Haynesville position is best-in-class and the Gulf Run system is a first mover, moving gas south to the Golden Pass facility in '24/'25. We believe that the next LNG facility sanctioned is Venture Global CP2, and Gulf Run will likely source that facility from the Haynesville (Midstream/MLP Energy: Too much LNG demand…not enough Permian gas and pipes 30 October 2023). Finally, ET owns the majority of east and northbound available egress in the basin.

- 9% distribution yield + 3%-5% annual growth and opportunistic unit repurchases.

- Our '24/'25 EBITDA estimates increase to $14.6bn/$15.1bn. The decline in '24 Permian POPs moderates our '24 expectation.

Other top picks

WMB remains a '25+ contracted growth story. Following its DJ/Cureton and Gulf Coast storage acquisitions, our '25 updated EBITDA estimate is still ~$140mm above consensus expectations. And we believe that the Street is failing to capture the value of '27+ Transco expansions associated with utility demand from the Mountain Valley pipeline coming online (we capture in our DCF analysis). Last quarter, WMB increased the scope of its Southeast Supply Enhancement project to 1.43 Bcf/d from 423 MMcf/d in its previous update. And because Transco has almost no latent capacity at and around the 165 interconnect, we see up to 0.5-0.6 Bcf/d of additional utility contracts announced.

- *Key Catalyst*: WMB will host an analyst day on Feb 13-14th providing a 2-year outlook. We believe that will help investors understand the '25+ contracted EBITDA opportunity. And capex will moderate in '25 given the surge of new projects coming online in '24. We do not expect WMB to make a corporate acquisition near term, now that leverage will trend up to 3.9x in '24 following its 2 acquisitions.

TRGP becomes a FCF inflection story. Heavy capex needs in '23/'24 (we expect '23/'24 capex should be near $2.2bn) but an inflection in '25 when we see capex under $1.5bn. And following that, we expect an average capex spend of $1.5bn going forward. With that, we see TRGP's FCF yield increasing from breakeven to ~9% in '25. Hence, why TRGP is increasing its dividend 50% in '24.

- *Key Catalyst:* TRGP will provide a '25 capex outlook and a longer-term average. The longer-term average we expect to be ~$1.5bn, which includes 2 processing plants each year (1 in the Midland and 1 in the Delaware) and half of the spend for a fractionator. Note we revised our FY24 EBITDA estimate down to $3,773mm, which is 2.5% below consensus, as we moderate inlet Permian growth volumes for 4Q23 and FY24 (high single digits).

Due to lower estimates, partially offset by lower long-term capex, we lower our PO to $104 from $105.

EPD owns the largest NGL downstream network in midstream with the most LPG/ethane export capacity and NGL storage. As such, it has internal hedges from lower commodity prices, as the arb for exports opens and more storage is utilized. And our '24/'25 EBITDA estimates are above consensus.

Note we increase our PAGP PO to $17, in-line with PAA.

Many of our estimates are unchanged, so our EBITDA estimates for '23/'24/'25 only are changing by 0.2%/1.4%/2.1%, on average. Estimate changes are included for EPD, ET, TRGP, KGS, and PAGP, and WMB. The largest change was KGS (2%/16%/28% change) in which we incorporated its CSI acquisition. So, our KGS EBITDA estimates now sit at $443mm/$548mm/$661mm for '23/'24/'25. Overall, our estimate changes put us 0.3%/0.8%/1.8% above consensus in '23/'24/'25 on average. The consensus gaps are attributed largely to OKE, where we are 3.7%/6.3%/6.9% above consensus in '23/'24/'25, and KGS where we are 1.4%/13.7%/23.8% above consensus in '23/'24/'25. The incorporation of the CSI acquisition put our KGS estimates largely above consensus in '24 and '25. While most of our POs are unchanged, we do have two PO changes, which include PAGP that goes from $16 to $17 (6.3% change) on slightly higher estimates and TRGP which goes from $105 to $104 (1% change) on slightly lower estimates, after adjusting down our projected inlet volumes.

Updated POs and Estimates

Exhibit 4: BofA updated POs and estimates

We are above consensus in '23 / '24 / '25 by 0.3% / 0.8% / 1.8%

				2023E EBITDA ($mm)				2024E EBITDA ($mm)			2025E EBITDA ($mm)		
Ticker	Price	PO	Rating	BofAe	Cons.	Guidance	BofA v. Cons.	BofAe	Cons.	BofA v. Cons.	BofAe	Cons.	BofA v. Cons.
C-Corp													
KMI	$17.95	$19	Neutral	$7,654	$7,630	$8,000	0.3%	$8,067	$8,067	0.0%	$8,203	$8,220	-0.2%
ETRN	$10.35	$9	Underperform	$1,057	$1,040	$1,020-$1,040	1.7%	$1,364	$1,350	1.1%	$1,526	$1,446	5.6%
KGS	$20.29	$29	Buy	$443	$437	$430-$440	1.4%	$548	$482	13.7%	$661	$534	23.8%
KNTK	$32.49	$39	Buy	$835	$843	$820-$860	-0.9%	$926	$955	-3.0%	$983	$1,011	-2.7%
OKE	$70.87	$83	Buy	$5,342	$5,152	$4,675-$4,800	3.7%	$6,290	$5,916	6.3%	$6,628	$6,198	6.9%
PAGP	$16.15	$17	Neutral	$2,638	$2,641	NA	-0.1%	$2,678	$2,749	-2.6%	$2,630	$2,756	-4.6%
TRGP	$86.25	$104	Buy	$3,501	$3,537	$3,500-$3,700	-1.0%	$3,773	$3,867	-2.4%	$4,162	$4,254	-2.2%
WMB	$35.82	$41	Buy	$6,725	$6,747	$6,600-$6,800	-0.3%	$6,954	$6,940	0.2%	$7,571	$7,435	1.8%
MLPs													
EPD	$26.78	$31	Buy	$9,303	$9,279	NA	0.3%	$9,747	$9,673	0.8%	$10,097	$10,015	0.8%
ET	$13.87	$18	Buy	$13,585	$13,631	$13,500-$13,600	-0.3%	$14,548	$14,661	-0.8%	$15,147	$15,079	0.5%
MPLX	$36.85	$36	Underperform	$6,176	$6,200	NA	-0.4%	$6,182	$6,360	-2.8%	$6,374	$6,442	-1.1%
PAA	$15.31	$17	Neutral	$2,638	$2,637	$2,600-$2,650	0.0%	$2,678	$2,676	0.1%	$2,630	$2,697	-2.5%
WES	$28.48	$27	Underperform	$2,050	$2,048	$1,950-$2,050	0.1%	$2,272	$2,290	-0.8%	$2,309	$2,364	-2.3%

Source: Visible Alpha, Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 5: EV/EBITDA multiples
C-Corps are trading at a premium to MLPs

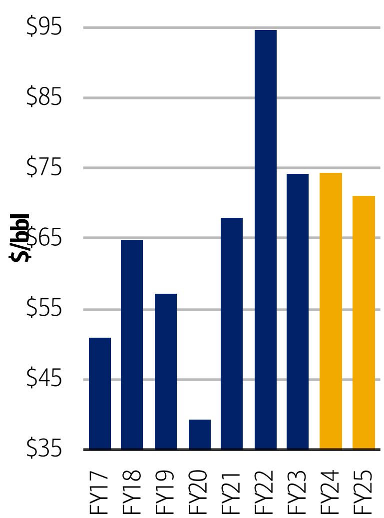
	BofA Comparable EV/EBITDA Multiples				Cons EV/EBITDA Multiples				BofA FCF Yield (Levered)				Cons FCF Yield (Levered)			
Company Name	**2022**	**2023E**	**2024E**	**2025E**	**2022**	**2023E**	**2024E**	**2025E**	**2022**	**2023E**	**2024E**	**2025E**	**2022**	**2023E**	**2024E**	**2025E**
C-Corp																
Kinder Morgan	10.0x	9.9x	9.4x	9.2x	10.1x	9.8x	9.3x	9.1x	7.9%	7.5%	8.5%	8.6%	7.4%	7.1%	8.1%	8.6%
Equitrans Midstream	10.9x	11.0x	8.5x	7.6x	11.0x	11.2x	8.6x	8.0x	8.6%	-4.3%	7.2%	16.2%	7.9%	-4.8%	7.5%	17.1%
Kinetik Holdings Inc	9.9x	9.8x	8.8x	8.3x	10.0x	9.7x	8.6x	8.1x	7.3%	-0.1%	13.4%	14.6%	N/A	1.0%	12.3%	11.0%
Kodiak Gas Services	NA	7.6x	7.0x	6.4x	NA	7.6x	6.9x	6.2x	NA	3.6%	4.9%	5.5%	NA	4.6%	6.8%	4.2%
ONEOK	17.9x	12.1x	10.3x	9.8x	18.0x	12.6x	11.0x	10.5x	4.0%	5.2%	6.7%	9.3%	2.4%	5.6%	6.4%	8.2%
Targa Resources	10.9x	8.8x	8.1x	7.4x	11.0x	9.0x	8.2x	7.5x	3.7%	-0.8%	4.7%	8.7%	-5.8%	2.5%	3.1%	8.2%
The Williams Companies	10.9x	10.2x	9.7x	8.9x	10.5x	9.9x	9.6x	9.0x	5.3%	5.6%	6.5%	8.1%	5.9%	5.9%	7.0%	8.3%
Average	**11.8x**	**9.9x**	**8.8x**	**8.2x**	**11.8x**	**10.0x**	**8.9x**	**8.3x**	**6.1%**	**2.4%**	**7.4%**	**10.2%**	**3.6%**	**3.2%**	**7.3%**	**9.4%**
MLPs																
Enterprise Products Partners	9.6x	9.7x	9.3x	8.9x	9.6x	9.5x	9.1x	8.8x	10.3%	6.6%	6.5%	10.2%	7.7%	7.5%	8.0%	9.9%
Energy Transfer	7.9x	7.5x	7.0x	6.8x	7.1x	6.7x	6.2x	6.1x	9.5%	13.6%	12.9%	13.9%	14.7%	12.1%	15.6%	16.3%
MPLX LP	9.9x	9.3x	9.2x	9.0x	9.9x	9.2x	9.0x	8.9x	10.2%	10.8%	11.4%	11.5%	9.5%	11.6%	11.5%	11.8%
Plains All American Pipeline	8.2x	7.7x	7.6x	7.7x	8.6x	8.0x	7.9x	7.8x	16.0%	12.6%	14.7%	14.3%	14.3%	12.1%	15.4%	13.8%
Western Midstream Partners	8.8x	9.1x	8.2x	8.1x	8.7x	9.1x	8.1x	7.9x	11.2%	8.3%	9.4%	13.4%	10.8%	8.6%	11.1%	13.9%
Average	**8.9x**	**8.6x**	**8.3x**	**8.1x**	**8.8x**	**8.5x**	**8.1x**	**7.9x**	**11.4%**	**10.4%**	**11.0%**	**12.6%**	**11.4%**	**10.4%**	**12.3%**	**13.1%**

Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

'24 Commodity Outlook: Crude, Natural Gas, and especially NGLs

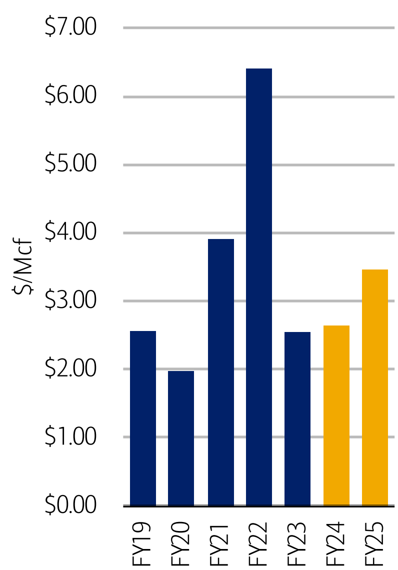
Exhibit 6: WTI Cushing avg. annual prices
'23 oil price retreats from highs reached in '22



Source: Bloomberg

BofA GLOBAL RESEARCH

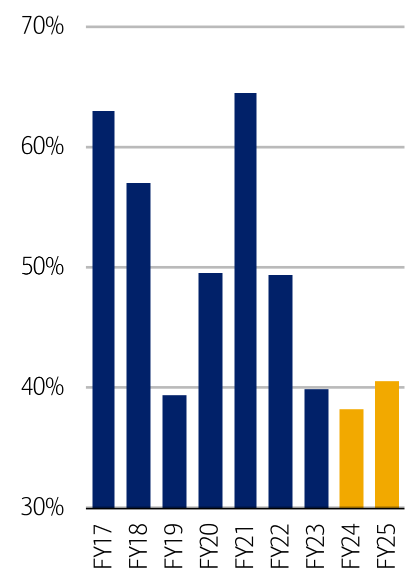
Exhibit 7: Henry Hub avg. annual prices
Elevated production pressures prices in '24



Source: Bloomberg

BofA GLOBAL RESEARCH

Exhibit 8: Propane-WTI ratio
Oversupply in global market

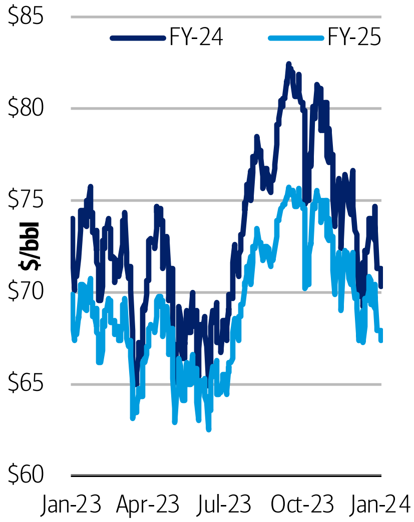


Source: Bloomberg

BofA GLOBAL RESEARCH

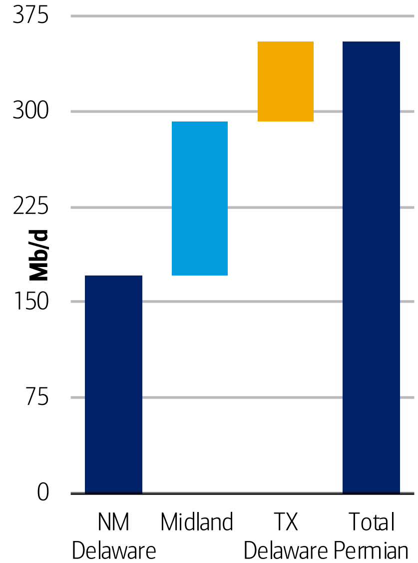
Crude – '24 WTI prices now sits at $73/bbl. Concerns over global demand and rising U.S. production caused the '24 strip to fall from its highs of $82/bbl in mid-September. We expect OPEC+ to cut production at its next meeting and there are several geopolitical events that could provide support to crude pricing. That said, when OPEC+ has plenty of spare production on the sidelines and prices are still weak, it is indicative of a weaker market environment. Rig efficiencies in the Permian will allow growth to exit '23 with growth of ~400 Mbpd despite 2 quarters of flat volumes due to heat issues and a declining rig count. And we expect the Permian to grow ~300 Mbpd in '24, despite the rig count falling ~50 units from April highs.

Exhibit 9: Forward crude prices
WTI off >$80 highs



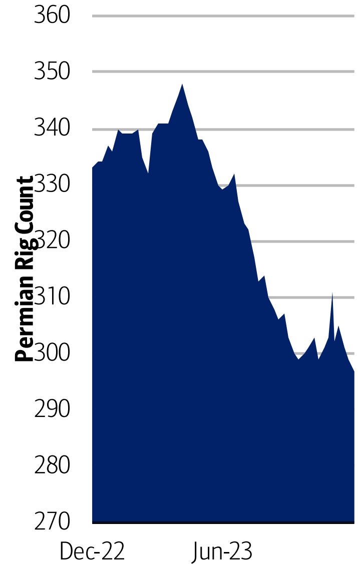
Source: Bloomberg
BofA GLOBAL RESEARCH

Exhibit 10: Permian '24 exit growth
Driven by 4Q growth



Source: S&P Capital Markets
BofA GLOBAL RESEARCH

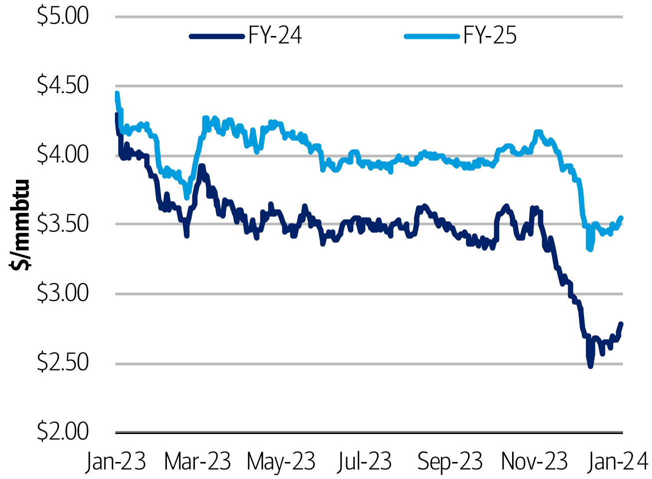
Exhibit 11: Permian rig count
Down 50 from '23 highs



Source: Rystad
BofA GLOBAL RESEARCH

Natural Gas – At our conference Global Energy Conference in November, a key topic was a sudden supply-push across the L48. Data providers noted a near 3 Bcf/d increase in gas production from 102 Bcf/d in October to 105 Bcf/d in November (Exhibit 12) driven by growth across the Permian, Northeast, and Mid-Con. While a 3 Bcf/d increase is suspect, we believe at least half of that growth (1.5 Bcf/d) is real, especially since the Permian turned-in-line a disproportionate amount of wells in the 4th quarter, given the heat-related infrastructure constraints. That supply-push combined with a mild winter to date has oversupplied the gas market. And Golden Pass likely comes online in '25 (see LNG section), pushing the gas demand-pull into '25, as Plaquemines is the only LNG facility to come online in '24.

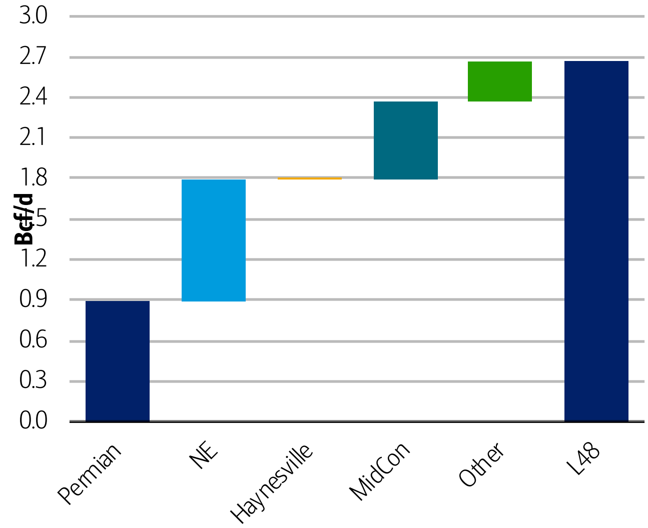
Exhibit 12: Forward natural gas prices
'24 forward prices plunged after Nov. production surged



Source: Bloomberg

BofA GLOBAL RESEARCH

Exhibit 13: M/m surge production
Data notes a 3 Bcf/d surge (1.5 Bcf/d BofA risked) m/m in Nov.

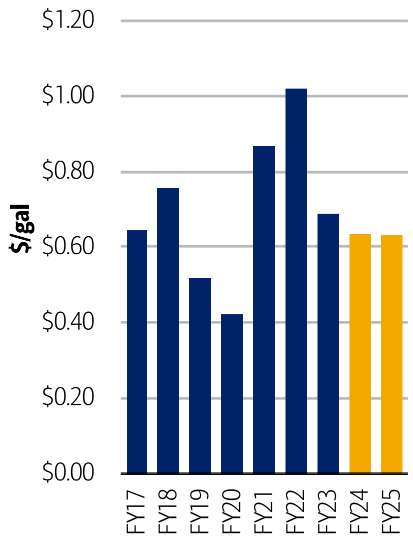


Source: S&P Capital Markets

BofA GLOBAL RESEARCH

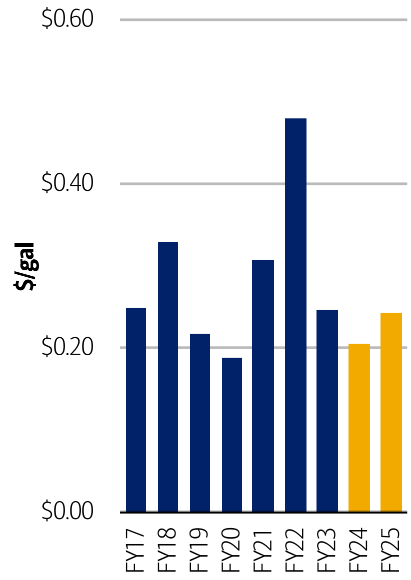
NGLs – NGL prices are expected to be in-line with '23. But this was not the case a mere quarter ago. Forward '24 NGL prices are 15% lower than mid-September highs underperforming WTI crude prices that are 10% lower, during the same period. Ethane is down 25% during the same period given the 30% decrease in gas prices. And propane is down 20%, underperforming WTI, as Asian demand for U.S. propane has decreased, lowering Mont Belvieu pricing and keeping the arb open and volumes flowing overseas. The OPEC+ supply cuts have helped already weak U.S. pricing, as Middle East exports (Saudi Arabia, Kuwait, and most recently Iran) are being replaced by U.S. exports. And later in the year, we expect LPG volumes to approach dock capacity, causing a further decoupling vs. WTI, as domestic consumption of LPGs is maxed out causing stranded barrels in the U.S.

Exhibit 14: MB NGL avg. annual prices
'24 NGL forward prices aligned with '23 prices



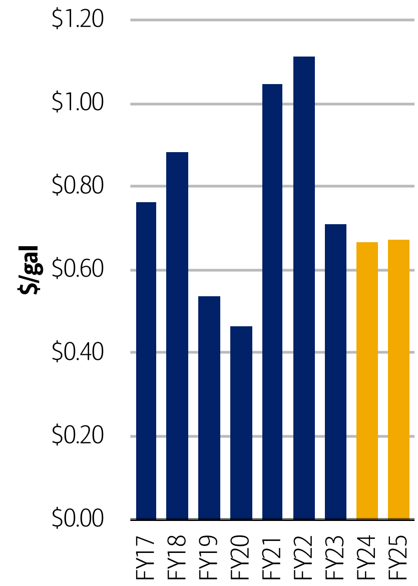
Source: Bloomberg
BofA GLOBAL RESEARCH

Exhibit 15: Ethane avg. annual prices
'24 forward prices do not incentivize recovery



Source: Bloomberg
BofA GLOBAL RESEARCH

Exhibit 16: Propane avg. annual prices
Prices sink as inventories reach 5-year highs

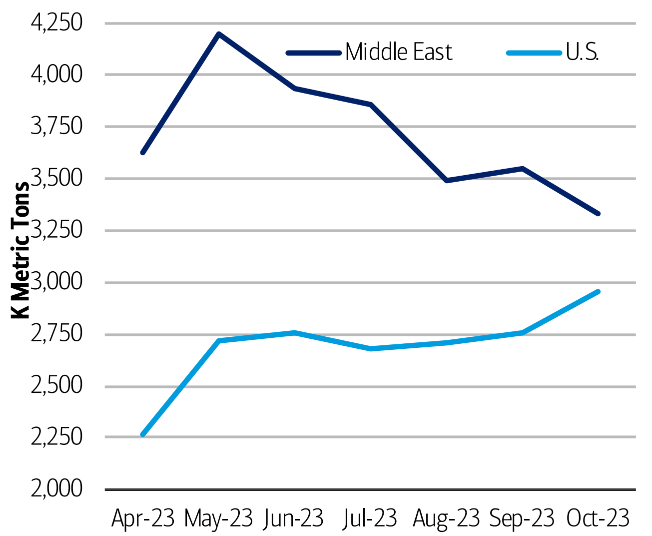


Source: Bloomberg
BofA GLOBAL RESEARCH

Demand for purity products has struggled to keep up with the pace of NGL production in the U.S. As such, ~40% of NGLs produced are exported. Asia accounts for the most imports from the U.S. at ~50%. NGL content in the gas stream, as measured by gallons per thousand cubic feet of sold gas (GPM), has been increasing over the last decade, before plateauing this year in liquids-rich basins including the Anadarko, Bakken, Eagle Ford, and Niobrara. Much of the recent increase can be attributed largely to the Permian.

Meanwhile, export capacity has just stepped up 35k b/d due to an expansion at Targa's Galena Park terminal, but more substantive capacity growth is expected in '25, when EPD adds 120k b/d of ethane export capacity at its Neches River NGL terminal and ET adds 250k b/d of capacity at its Nederland terminal (Exhibit 33). In the interim, NGL export capacity utilization will continue to rise and could contribute to wider spreads between U.S. NGL prices and comparable international benchmarks.

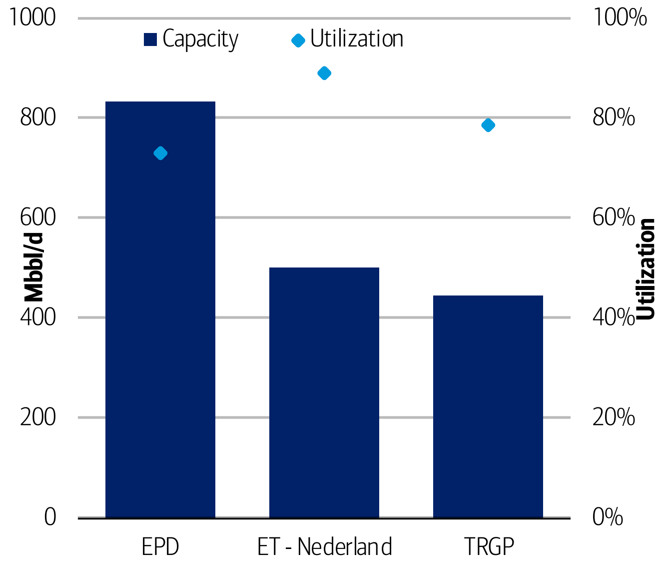
Exhibit 17: Asia LPG imports
US share of LPG imports converging on Middle East levels



Source: S&P Capital Markets

BofA GLOBAL RESEARCH

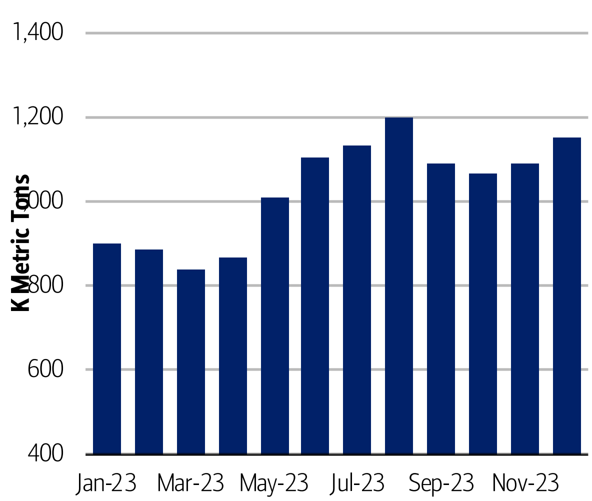
Exhibit 18: Selected midstream LPG export capacity & utilization
ET's Nederland terminal nearly full



Source: Company filings

BofA GLOBAL RESEARCH

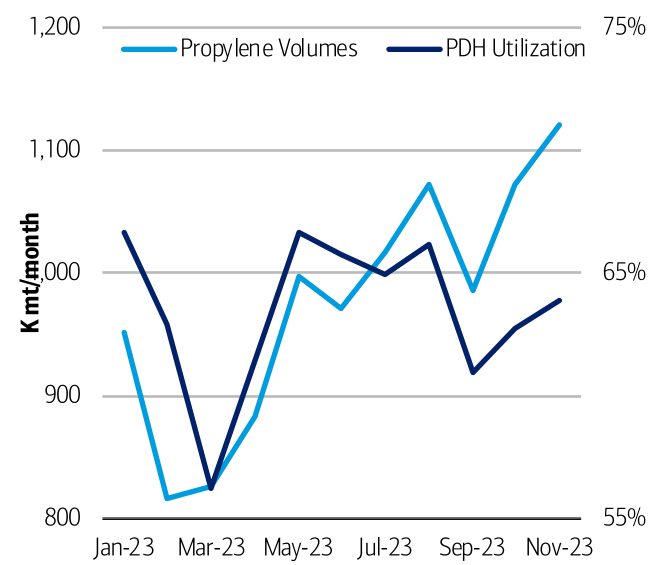
Exhibit 19: NGL Demand from Propane Dehydrogenation - China
Growing PDH capacity in China has stimulated growth in exports



Source: S&P Capital Markets

BofA GLOBAL RESEARCH

Exhibit 20: Propylene production and utilization
Production ramps as operating rates begin to normalize



Source: S&P Capital Markets

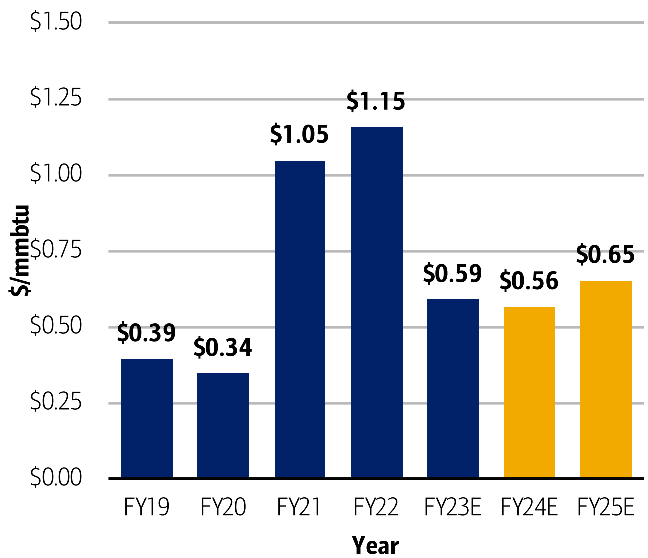
BofA GLOBAL RESEARCH

'24 POPs move to y/y sequential declines in 4Q

Given the decline in forward prices for both NGLs and natural gas prices, our POP indicator now shows a 5% y/y sequential decrease in '24 margins across the Delaware, Midland and Bakken, with a larger 10% decrease in the SCOOP/STACK. This is a reversal from when '24 commodity prices hit their peaks in mid-September and we noted the potential downside heading into '24. At that point, '24

Midland/Delaware/Bakken/SCOOP-STACK POPs were up 18%/14%/16%/12% y/y. As we explain in the company specific section, fee floors will again be tested as forward 2Q24 POPs are even lower than 2Q23 POPs when fee floors were triggered.

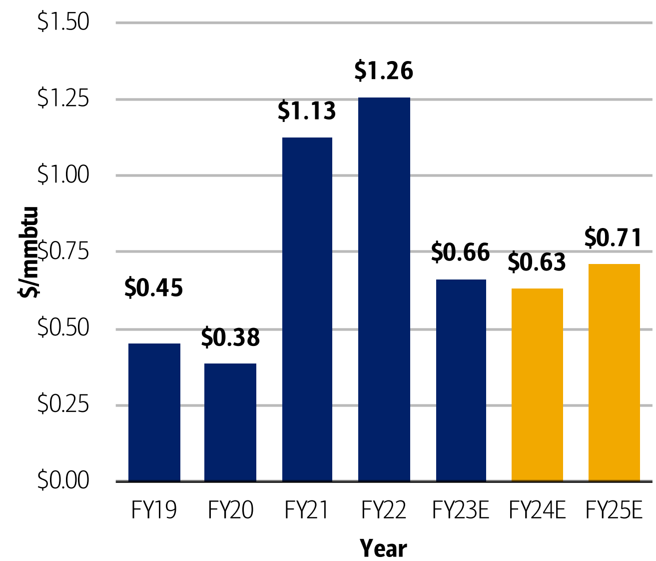
Exhibit 21: Midland POP, assuming 15% netback
YoY 5% decrease in POP margins forecasted in '24



Note: Assumes 5x GPM and 10c/gal T&F rate/Waha gas
Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

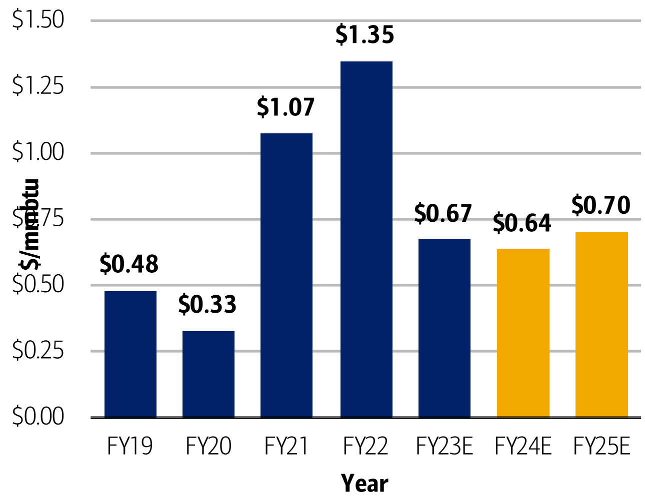
Exhibit 22: Delaware POP, assuming 15% netback
YoY 5% decrease in POP margins forecasted in '24



Note: Assumes 6x GPM and 10c/gal T&F rate/Waha gas
Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

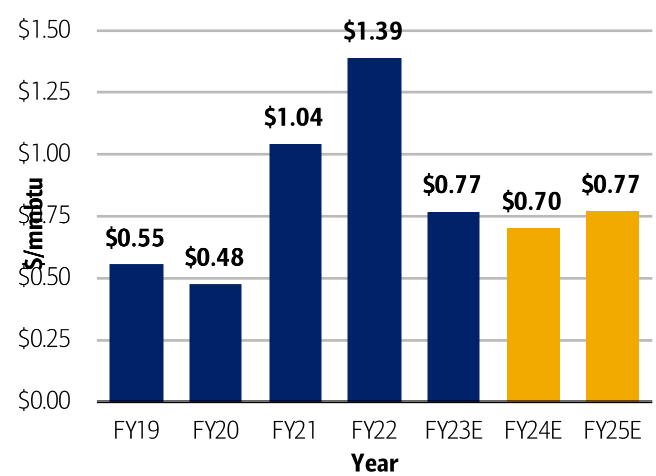
Exhibit 23: Bakken POP, assuming 15% netback
YoY 5% decrease in POP margins forecasted in '24



Note: Assumes 8x GPM and 26c/gal T&F rate/Waha gas
Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 24: SCOOP/STACK POP, assuming 15% netback
YoY 10% decrease in POP margins forecasted in '24



Note: Assumes 6.5x GPM and 10c/gal T&F rate/ONEOK gas
Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Prefer ET, EPD, TRGP as integrateds have internal hedges

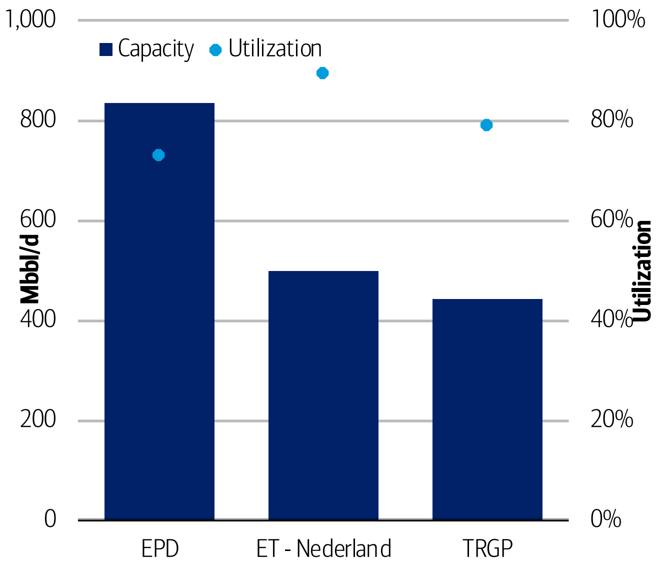
Integrateds own LPG export and storage

We prefer Permian NGL volume stories and companies that can touch the barrel several times. ET and EPD provide an export outlet for ethane under take-or-pay contracts. And all 3 integrateds have storage and propane export docks to clear LPG barrels, even if it is supply-push to several destinations (like pivoting to India vs. China). If international LPG demand indeed picks up in 4Q23+ and forward curves cooperate, integrateds could see a double benefit of higher G&P price and increased export volumes. Accordingly, we believe that:

- Gulf Coast LPG demand is unlikely to materially increase. So, the incremental LPG barrel will be pushed overseas. Incumbents: EPD, ET, and TRGP will move those barrels. And since these facilities are running at high utilization, each of these incumbents have (TRGP) or will expand capacity (ET and EPD in 1H25).

- To the extent that LPG barrels are stranded, EPD then ET and TRGP have storage to hold Y-grade or purity product along the Gulf Coast. Stranded LPG volumes are a real risk if Asian demand continues to stagnate and/or Middle East exports take back market share.

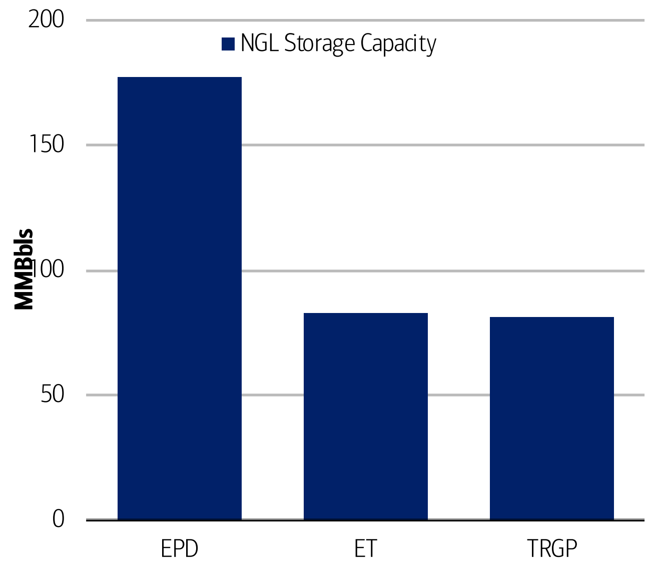
Exhibit 25: LPG export capacity & utilization
ET's Nederland terminal nearing full capacity



Source: East Daley, Company filings

BofA GLOBAL RESEARCH

Exhibit 26: NGL storage capacity
EPD has 38 underground salt caverns at MB with ~130MMbbl of capacity



Source: Company filings

BofA GLOBAL RESEARCH

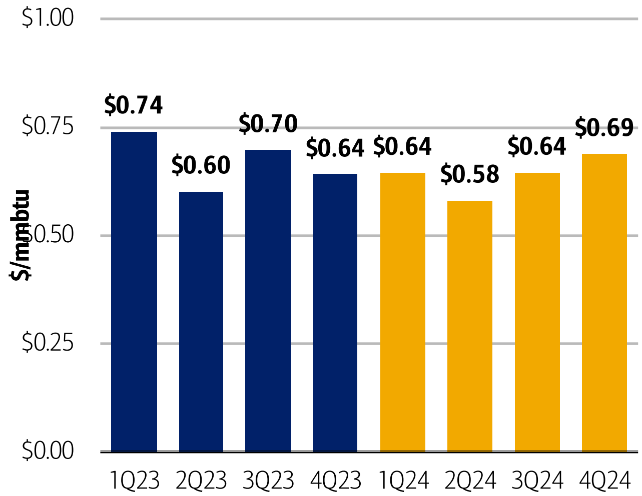
ONEOK now has a synthetic export terminal with MMP butane blending
Legacy OKE lacked the last missing piece of an integrated wellhead-to-water system, as it was unable to build an LPG export facility, as incumbent players, especially EPD and ET, can offer brownfield expansions at lower rates to price new players, like OKE, out of the market. We still do not see an obvious, near-term opportunity for OKE to build an LPG export facility. But with OKE self-sourcing MMP's butane blending business, it replicates the benefit of an export facility by creating a demand sink for OKE's equity butane volumes. And since blending margins expand with lower butane prices, this creates an internal hedge (like an export facility) when butane prices decrease.

We understand that butane and iso-butane are only 17% of the NGL barrel vs. propane at ~32% of the barrel, so OKE's blending operations do not provide the same degree of internal hedge that an LPG export terminal does but is still meaningful as NGL pricing is pressured.

Company specific hedging and fee floor summaries

- ET and EPD do not materially hedge their POP exposure in the Permian. However, both seemingly hit their fee floors in 2Q and have bounced off the bottom.

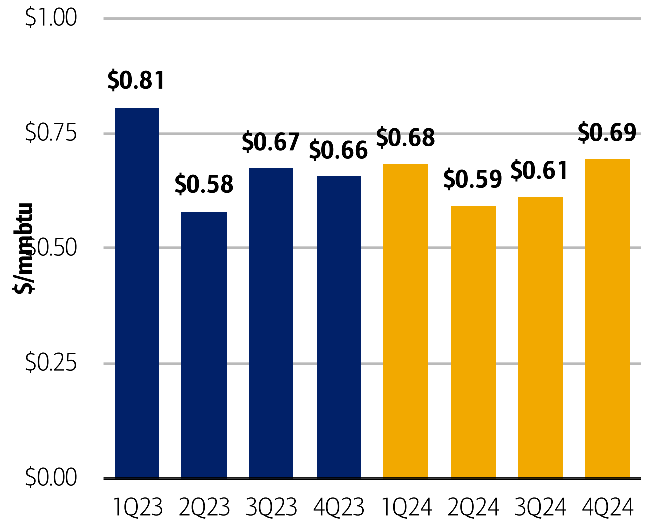
Exhibit 27: Delaware quarterly POPs
2Q24/3Q24 will test fee floors again



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 28: Bakken quarterly POPs
25% of OKE's G&P has POP exposure



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

- OKE's disclosure from their latest 10Q shows they are 34% hedged for C3+ NGLs and 41% hedged for natural gas in '24. ~25% of the G&P business has POP exposure. So ~10% of OKE's G&P business is commodity exposed prior to the butane internal hedge. And natural gas is hedged well above market ($4.50/Mcf), so we expect the impact of weakening POPs to be minimal for the consolidated entity.

- TRGP has a 3-year rolling hedge program and likely locked in some attractive POPs for '24 & '25 on its 1/3rd of G&P volumes that are not fee-based. And when fee floors kick in, prices significantly drop.

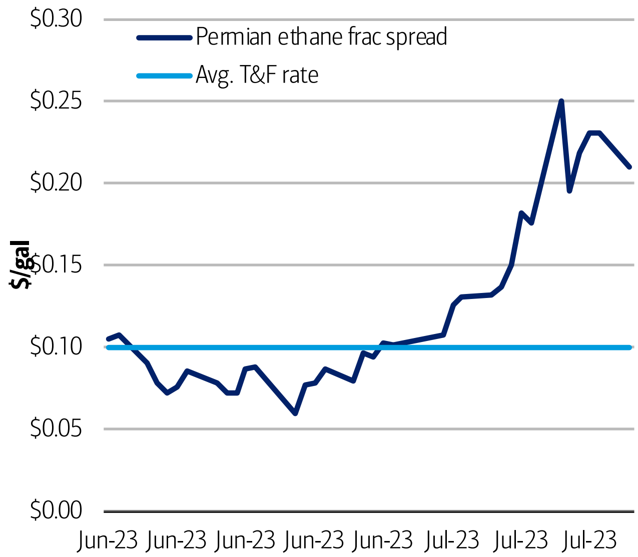
- KNTK and WES are the 2 G&Ps without meaningful internal hedges. But both have relatively light POP exposure. KNTK has 9% commodity exposed EBITDA in '24, of which 25% is already hedged. WES has ~7% commodity exposure with POP contracts, mainly in the Rockies and Delaware liquids yields contracts.

- MPLX has noted that, generally, <5% of its business is commodity exposed. In terms of commodity sensitivity, a 5c change in NGL prices will negatively impact its annual EBITDA by $20mm. Y/Y NGL prices are down 33c/gal so the y/y impact is -$132mm. Sequentially, NGL prices are down 2c/gal so this will reduce the G&P segment by ~$8mm.

Ethane recovery/rejection trends

In 3Q23, we saw an unexpected shortage of ethane causing prices to average ~30c/gal. Due to the extreme West Texas heat initially seen in late May and through June, processors unexpectedly moved from ethane recovery to rejection given the surge in local natural gas demand and the issue of Permian natural gas egress constraints. And due to ethane rejection in June, downstream players (crackers and especially ethane export players) were caught short and needed to procure ethane. This kept ethane prices elevated through 4Q, incentivizing ethane recovery in the Permian and the Bakken.

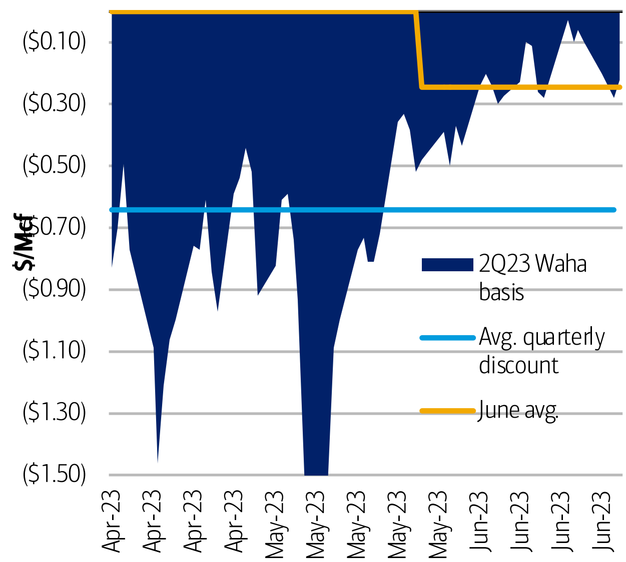
Exhibit 29: Permian ethane frac spread
Elevated ethane prices through 4Q incentivized recovery



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 30: Waha basis vs. avg. quarterly discount / June basis
A pronounced contraction in 2Q23 from in-basin demand/EPNG Line 2000



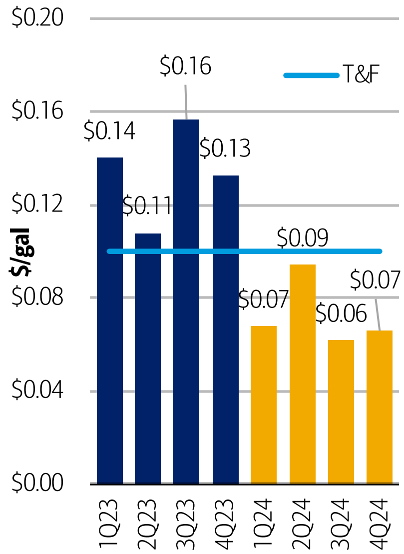
Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

But inventory is normalized and we expect more rejection in '24

Ethane prices have normalized, as higher prices through 4Q23 incentivized recovery, and restored the supply/demand balance. '24 forward Mont Belvieu ethane prices average 20c/gal, which is not even high enough to incentivize Permian recovery with '24 Henry Hub/Waha gas prices trading at $2.65/$1.86 Mcf at 10c/gal T&F charge. We only see non-incentivized Permian recovery in 2Q24 before Matterhorn Express (2.5 Bcf/d) comes online, adding Permian gas takeaway. The Bakken saw significant incentivized ethane recovery in 2H23, especially 3Q, and will probably see minimal opportunities in '24. This is a slight negative for OKE, which benefited from increased NGL pipe utilization from the Bakken down to Belvieu.

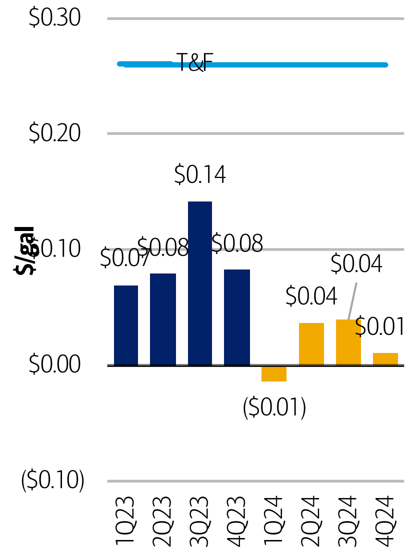
Exhibit 31: MB-Waha frac spread
Narrowing basis in 1Q24 below T&F rates encourages ethane rejection



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

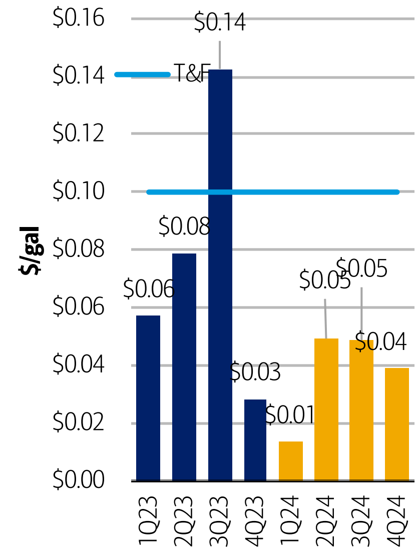
Exhibit 32: Bakken Ventura frac spread
Basis narrowing in 4Q23 with fewer opps for ethane recovery in '24



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 33: Mid-Con frac spread
Basis narrowing in 4Q23 with fewer opps for ethane recovery in '24



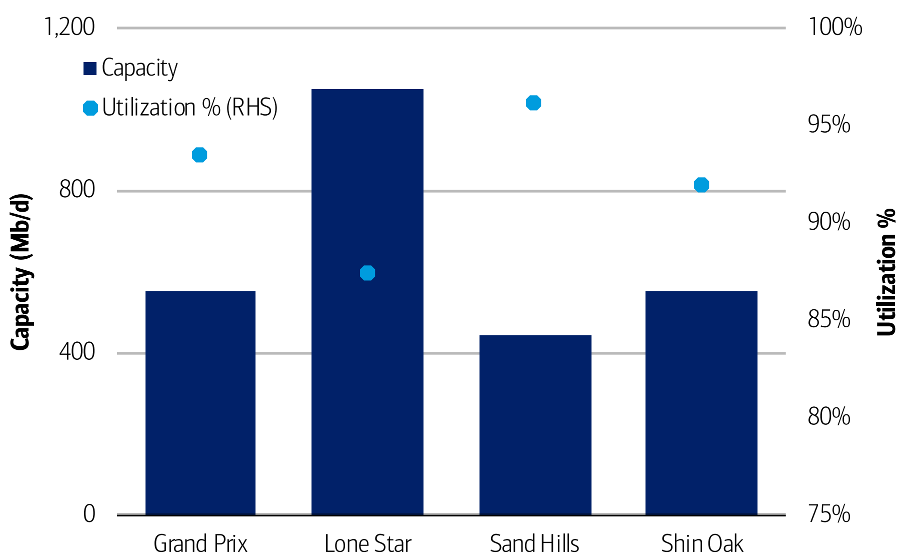
Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

…which is fine for near-full NGL pipes but negative for gas macro

As we explain in our Permian NGL takeaway section, EPD's 600 Mbpd Bahia pipeline and OKE's West Texas NGL expansion, both coming online in 1H25, will over-pipe the Permian market. But, in the meantime, the market is relatively tight with utilization of major Permian NGL pipes already near full utilization, apart from OKE's West Texas NGL pipeline.

Exhibit 34: Permian NGL capacity and utilization
TRGP redirects volumes from Sand Hills to Grand Prix after contract roll off



Source: East Daley, Company filings

BofA GLOBAL RESEARCH

Meanwhile, more gas will be recovered and moved to Houston (via the Permian Highway expansion -570 MMcf/d and newbuild Matterhorn Express pipeline -2.5 Bcf/d). And because a lack of connectivity between Houston and the Louisiana Gulf Coast keeps gas trapped in the Houston area, we expect Ship Channel basis to trend down in '24.

Exhibit 35: Permian gas takeaway options

PHP expansion (570 MMcf/d) and Matterhorn (2.5 Bcf/d) move gas to Houston

Source: S&P Capital Markets

BofA GLOBAL RESEARCH

The Permian NGL Overbuild: A Detailed Primer w/ Stock Implications

Ever since EPD announced it would be moving forward with its 600 Mbpd greenfield NGL pipeline, we feel the biggest theme in midstream has been the Permian NGL pipe overbuild occurring in '25+. And the competitive dynamics will be fluid as contracts roll and NGL pipeline master agreements are unique and complex. In this section we:

- Outline the new pipes and expansions contributing to the NGL pipe "overbuild" beginning in '25+.
- Provide a detailed primer on the difference between producer rights to dictate NGL takeaway with 3 categories: closed-loop G&P system, producer in-kind rights, and producer fake in-kind rights, where physical limitations limit a producer's ability to move barrels on the pipeline of their choice.
- Basin by basin differences: The Midland has primarily closed-loop G&P controlled volumes whereas the Delaware has larger producers with in-kind rights controlling pipeline rights.
- Customer by customer analysis (in-kind vs. G&P-controlled) by company system.

Stock conclusions: top picks = TRGP, EPD, ET & OKE

Overall, we believe TRGP is the best positioned with ~70% of G&P volumes going through the Grand Prix/Daytona system, driven by its closed-loop Midland system. As it focuses more on free cash flow generation, it can selectively bid for T&F volumes. But its Delaware footprint (especially with Lucid) has larger, in-kind customers. And EPD's T&F contracts roll off at Lucid's Red Hills complex in '26+.

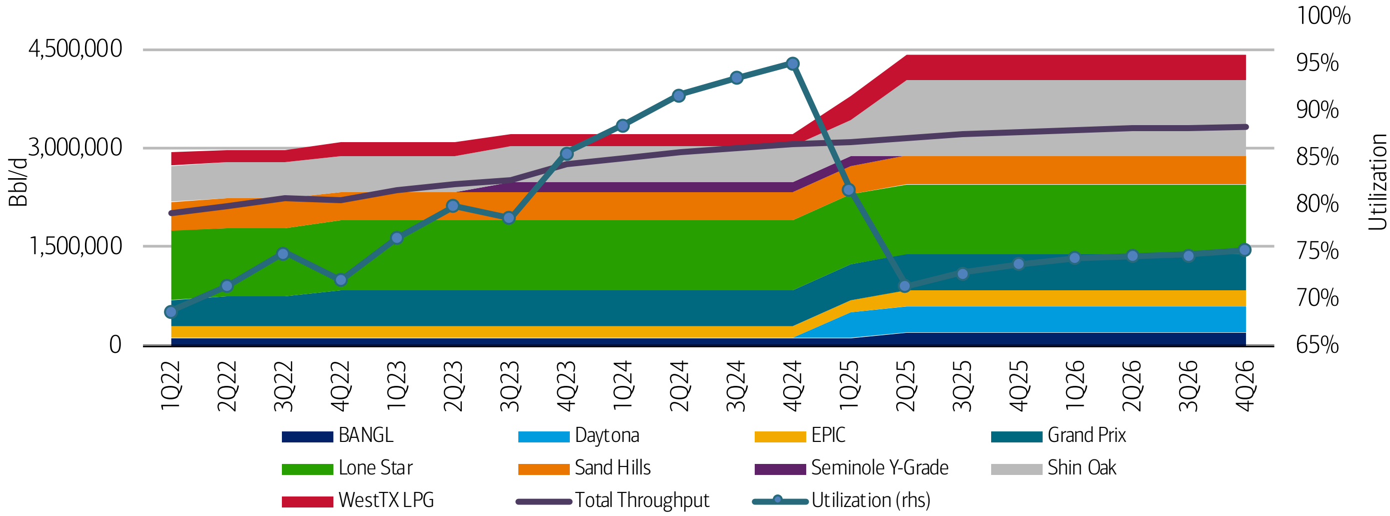
EPD's Navitas acquisition in early '22 was timely as it provided the company a closed-loop G&P system, like TRGP. We expect Navitas' legacy T&F contracts on OKE's West Texas to roll-off in ~'25 and onto the EPD system. We believe ~50% of EPD's G&P volumes flow on its NGL pipe system. And Bahia will be 70% sourced by system growth, so EPD will be bidding aggressively for new volumes with a new outsized pipe.

ET has the lowest amount of G&P volumes flowing on its ~1 MMbpd Lone Star system. But it does have significant in-kind contracts with large upstream producers, like XOM, and G&Ps like KNTK. Those contracts are up for re-negotiation in the latter part of the decade. Like EPD, it will need to be competitive on price to keep Lone Star ~full. But unlike EPD, ET has latent capacity on Lone Star so even if it lowers pricing, its return on capital will remain high and it will continue to generate FCF.

Lastly, we believe OKE will convert its older West Texas NGL line to refined product services over time, as it will lack the ability to fill the pipeline without a G&P to source the >700 Mbpd system.

New takeaway and build rationale

Exhibit 36: Permian NGL egress, throughput and utilization
TRGP, EPD, MPLX and OKE are all increasing NGL pipe capacity in '25



Source: East Daley, Rystad, BofA Global Research

BofA GLOBAL RESEARCH

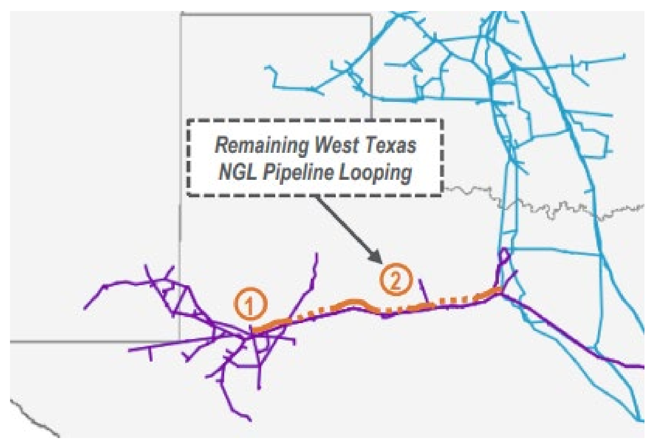
In addition to EPD building Bahia (600 Mbpd), OKE is expanding West Texas ~300 Mbpd, TRGP is twinning Grand Prix with the 400 Mbpd Daytona pipeline in 4Q24 and MPLX is expanding BANGL 75 Mbpd by 1H25. As such, utilization drops from 95% in 4Q24 to 71% by 2Q25 before trending back up. T&F rates will be pressured through the end of the decade.

Exhibit 37: Permian NGL takeaway
600 Mbpd Bahia NGL pipeline adds optionality to repurpose other pipelines

Source: Company filings

BofA GLOBAL RESEARCH

Exhibit 38: OKE West Texas NGL system
Loop of OKE's West Texas NGL connects to its Arbuckle II pipeline



Source: Company filings

BofA GLOBAL RESEARCH

Why did EPD choose to build a new NGL pipeline?

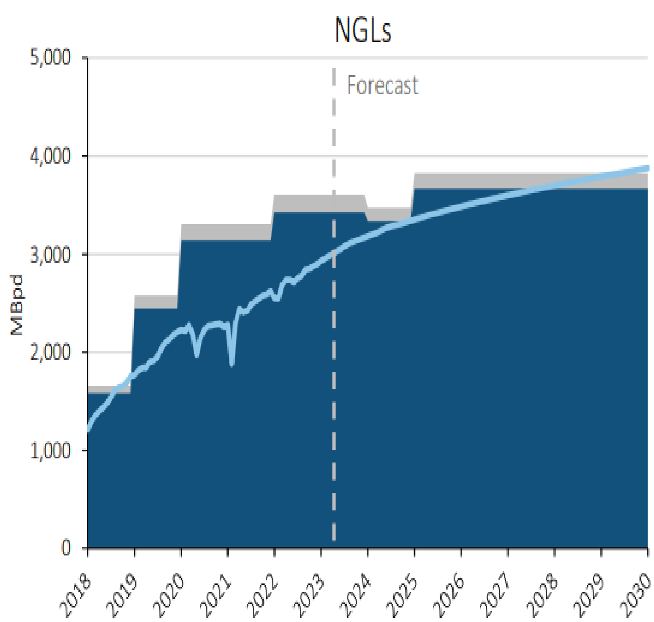
At its analyst day in May '23, EPD's fundamentals team laid out a Permian NGL egress forecast through 2030. EPD's general assumptions have not changed since its analyst day, which showed the basin had adequate takeaway through 2027. EPD needed a bridge through the end of '24, as the Chaparral conversion put more barrels on Shin Oak, and volumes are projected to approach Shin Oak's capacity of 550 Mbpd in 2H24. But seemingly, after a partial 2-year Seminole conversion, a 275 Mbpd Shin Oak loop could move EPD's equity volumes through the end of the decade. But EPD intends to source the pipe with 70% of its equity volumes then bid for take-in-kind 3rd party barrels to source downstream opportunities. Bahia will "over-pipe" the basin, near term, but EPD intends to take market share given the value of its downstream network, and sourcing barrels is critical to realizing those downstream opportunities.

We discuss in detail that NGL takeaway is not like residue gas takeaway, where residue gas is pooled at a hub and overall egress matches basin production. As we discuss later in detail, integrated operators, like TRGP, EPD and ET create closed-loop wellhead-to-water systems, when possible, to control the NGL barrel, as many times possible. EPD bought the Navitas gathering system in the Midland basin to source its downstream system. Many of those barrels are coming off contract with OKE's West Texas in the near-term, helping EPD to source more equity volumes.

But, as shown in Exhibit 45, EPD's Shin Oak pipeline volume growth has lagged TRGP's Grand Prix and ET's Lone Star pipeline volume growth since '20. So now EPD will bid aggressively for T&F contracts, with competitive pricing, for stand-alone G&P systems with near-term contract roll-offs. And of course, some larger producers have in-kind rights that allow them to direct their volumes to the NGL pipeline of their choice. The end goal is for EPD to source their leading Gulf Coast downstream network closer to the wellhead, even if it lowers market T&F rates.

Exhibit 39: Permian takeaway balances

EPD forecasts tightening of capacity in 2H24

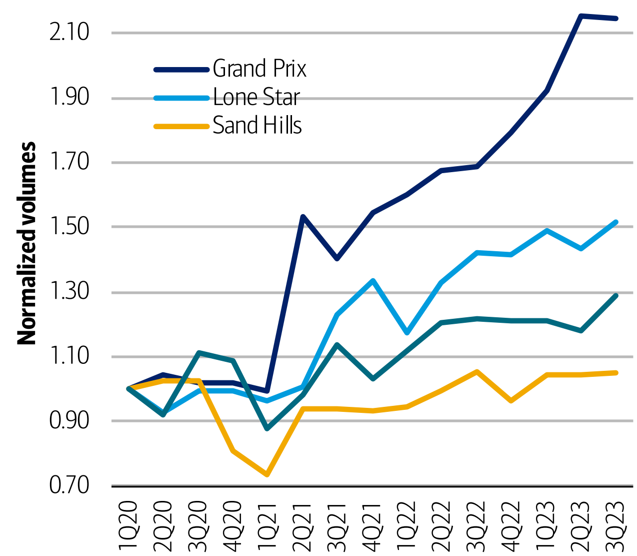


Source: Company filings

BofA GLOBAL RESEARCH

Exhibit 40: Indexed Permian NGL Pipeline Volumes

Grand Prix moves TRGP's Permian G&P volumes and Lone Star's large system moves both Permian and Eagle Ford barrels



Source: East Daley, BofA Global Research

BofA GLOBAL RESEARCH

We think OKE converts its legacy NGL pipeline to refined product service

OKE is twinning a pipe on its West Texas NGL Permian pipeline from Midland to the Arbuckle II NGL pipeline in North Texas. Arbuckle II has latent capacity and can move West Texas barrels to OKE's frac complex at Mont Belvieu. OKE will spend $520mm, primarily in '24, to loop the system so the total Permian system will have 740 Mbpd of total capacity by 1Q25.

However, we believe OKE has different intentions than EPD. Its latest contract dedication from a 3rd party G&P justifies the capital spend. And the more OKE spends in '24 for capital accretive projects, the greater the cash tax savings created by the recently completed Magellan acquisition. OKE can continue to bid for 3rd party and in-kind volumes without a dedicated G&P system, but we believe only 250-350 Mbpd of the system is being utilized right now. So, the chances of OKE filling the full 740 Mbpd are minimal. We believe OKE will either:

- Convert the older West Texas line to refined product service. Demand in the Midland-Odessa, Arizona, New Mexico, and Mexican markets continue to remain strong. Recall, legacy MMP is completing its refined product pipe expansion to El Paso. We think a refined product pipeline conversion is most likely. Especially if blending and batching opportunities exist, as well.

- Acquire G&P to source OKE's downstream NGL network. OKE historically has opposed acquiring a Permian G&P system in the past, given weak margins from significant competition. But with more opportunities to invest capital, following the merger close, we believe management could reconsider. That said, we still believe this is still not OKE's preferred option.

Although we believe OKE will eventually convert part of the loop to refined product services, we believe OKE will methodically evaluate its options, continuing to try to win 3rd party contracts, so the expansion will add capacity to the Permian in '25+.

A Primer: Closed-loop, In-Kind and Fake In-Kind Volumes

Closed-loop systems

If the G&P company goes to the wellhead and ties in the low pressure gathering (high capital), they typically have a master agreement that includes gathering, processing, transportation, and fractionation. And when these contracts are due for renewal, they are, typically, sticky, with the midstream company having more bargaining power, as no one producer wants to replicate a system back to the wellhead. These systems that move from the wellhead, all the way to the fractionator, are what we label closed-loop systems.

In-kind rights

Most producers are part of closed-loop systems. But larger producers with material volumes typically build their own wellhead gathering. These larger producers build their own low-pressure gathering systems to the wellhead and move their rich gas to a central delivery point (CDP), where they can price shop processors, given linking CDPs to a processing system, via a high pressure NGL line, is not capital intensive. The producers then take "in-kind" rights on their volumes, choosing to direct volumes on the NGL pipelines of their choice.

We believe the major producers in the Permian exercising in-kind rights are:

- COP
- CVX
- DVN
- CTRA
- EOG
- OXY
- XOM

Note, each operator has acreage across the Permian. And in some cases, they will ask the midstream provider to build to the wellhead for them. Or they dedicate their wellhead volumes to a pure-play G&P like OXY does for WES, and control T&F. Lastly, we assume legacy Pioneer volumes stay on TRGP's closed-loop system, given their midstream partnership.

Fake In-Kind rights

Transportation and fractionation contracts are anything but homogenous, with each contract having nuances. And oftentimes, in-kind rights have limitations, due to physical constraints. So choices to shop T&F rates are more limited, than on paper. For example, many Midland processing plants have split connects, allowing for several NGL pipes to access the volumes. But most Midland producers lack in-kind rights, so the split connects lack meaningful value until the G&P has a T&F contract roll-off.

Moreover, in the Delaware, in-kind rights are limited to the pipe connects within the plant. For example, the New Mexico Delaware has the highest percentage of in-kind producers in the Permian basin, with most processing volumes flowing onto TRGP's Lucid system. Most of the Lucid volumes have historically been processed on the massive Red Hills system and are under contract to move through EPD pipes through '26-'29. So, volumes processed at Red Hills are dedicated to EPD until the latter part of the decade before TRGP can bid on the T&F volumes on the processing complex they acquired.

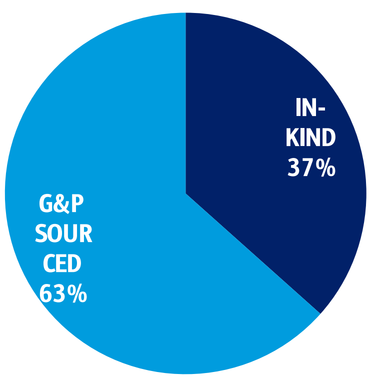
But Red Hills is a massive processing complex (1.2 Bcf/d), so producers are understandably concerned about flow assurance, if any issues arise at the complex. So TRGP is moving some incremental New Mexico plants to new Delaware plants that interconnect exclusively into Grand Prix. Producers are willing to limit their T&F options, in order to guarantee flow assurance and diversify where their rich gas is processed. So midstream players are constantly searching for ways to provide value to upstream customers to keep in-kind volumes on their system.

Lastly, in most cases, we question if rival midstream companies will allow 3rd party interconnects to be built into their plants. At best, a financial settlement between midstream parties would be the most practical solution.

Basin broad observations and conclusions

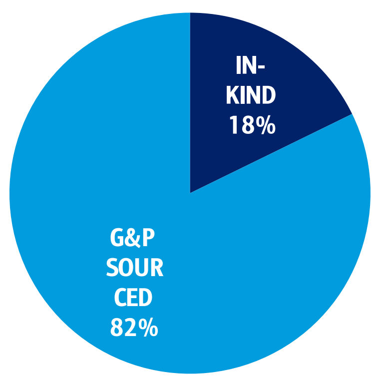
Overall, we believe 2/3 of Permian rich gas volumes are controlled by the midstream processor. But there is a material dichotomy between the Midland and Delaware basins.

Exhibit 41: Permian NGL control
~2/3 of Permian NGLs are controlled by G&Ps



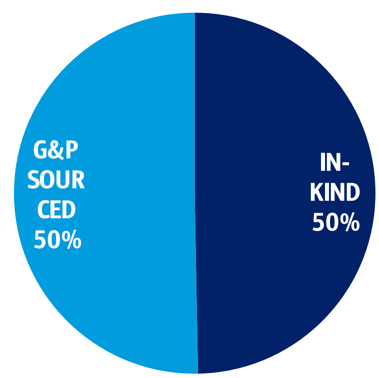
Source: East Daley, BofA Global Research
BofA GLOBAL RESEARCH

Exhibit 42: Midland NGL control
~4/5 of Midland NGLs are controlled by G&Ps



Source: East Daley, BofA Global Research
BofA GLOBAL RESEARCH

Exhibit 43: Delaware NGL Control
NGL control is split in the Delaware

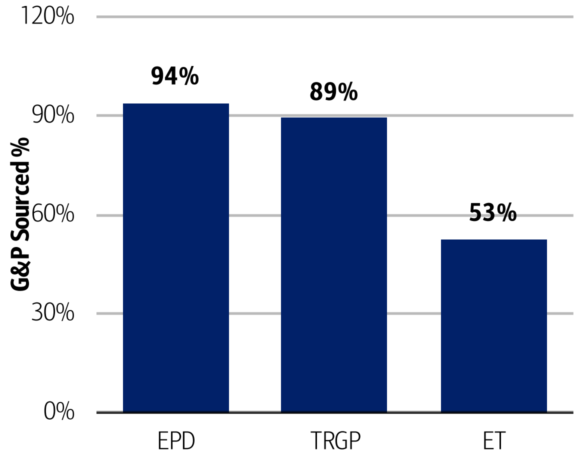


Source: East Daley, BofA Global Research
BofA GLOBAL RESEARCH

Midland basin – TRGP and EPD own primarily closed-loop systems

We believe ~80% of Midland basin volumes are controlled by the processor. TRGP's Midland and EPD's Navitas closed-loop systems account for most of these midstream-directed volumes. ET processes (and moves) XOM's volumes, for now, in the Midland accounting for the higher in-kind rights on its Midland system.

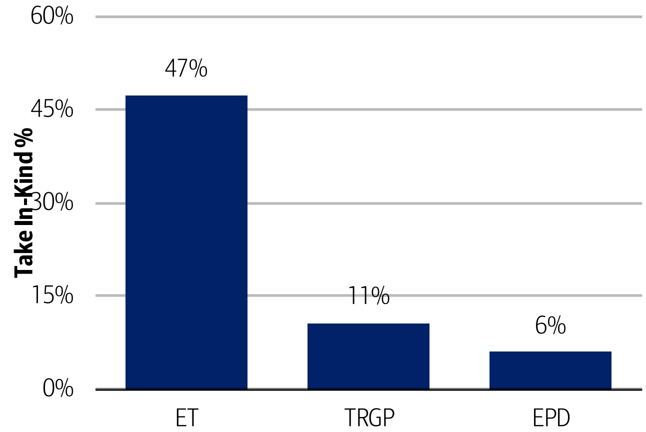
Exhibit 44: Midland G&P sourced NGL volumes by company
EPD's Navitas system accounts for most closed-loop volumes



Source: East Daley, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 45: Midland take in-kind volumes by company
ET has the most in-kind volumes



Source: East Daley, BofA Global Research

BofA GLOBAL RESEARCH

Delaware basin – In-kind rights more common across all systems

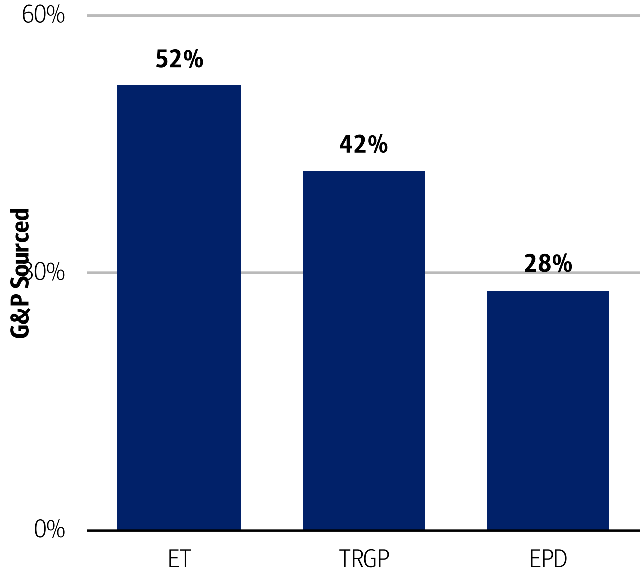
EOG, DVN, OXY, XOM, COP and CVX comprise 8 of the 9 top producers in the Delaware basin. And they control which pipelines their NGL barrels flow on given that they build their own low pressure gathering system.

- EPD's Delaware system has a high percentage of in-kind rights in the Delaware, as the top 6 producers on its system are OXY, CVX, EOG, XOM, and COP, which account for ~65% of system volumes. BP, DVN and CTRA are also on the system.

- Next, TRGP has a majority of its Delaware volumes coming from in-kind producers. We believe ~65% of Lucid New Mexico volumes currently come from in-kind producers. Lea and Eddy County have the best quality rock in the Lower 48, and the integrateds and large independents are growing volumes, a positive sign. The volumes on the existing 1.2 Bcf/d Red Hills system are dedicated to EPD, so TRGP will have an opportunity to bid on these volumes when the contracts roll in '26-'29. But TRGP can bid with discipline, as both Grand Prix and Daytona are both needed and will run full.

- While ET has the highest percentage of in-kind volumes in the Midland, we believe it has the least in the Delaware. But as XOM ramps up volumes in the Delaware, this percentage will increase. We believe ET has mostly XOM NGL volumes on Lone Star, a positive. But the risk is that XOM volumes are bid away by opportunistic players when contracts roll in '26+, like EPD and OKE, who are willing to offer lower T&F rates to increase market share.

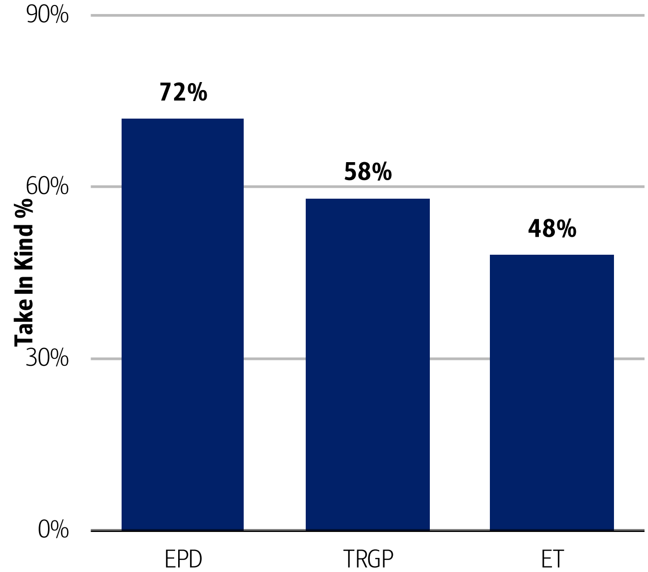
Exhibit 46: Delaware G&P sourced NGL volumes by company
ET has a higher proportion of G&P sourced volumes in the Delaware



Source: East Daley, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 47: Delaware take in-kind NGL volumes by company
As OXY NGL volumes ramp, ET expected to retain more in-kind volumes



Source: East Daley, BofA Global Research

BofA GLOBAL RESEARCH

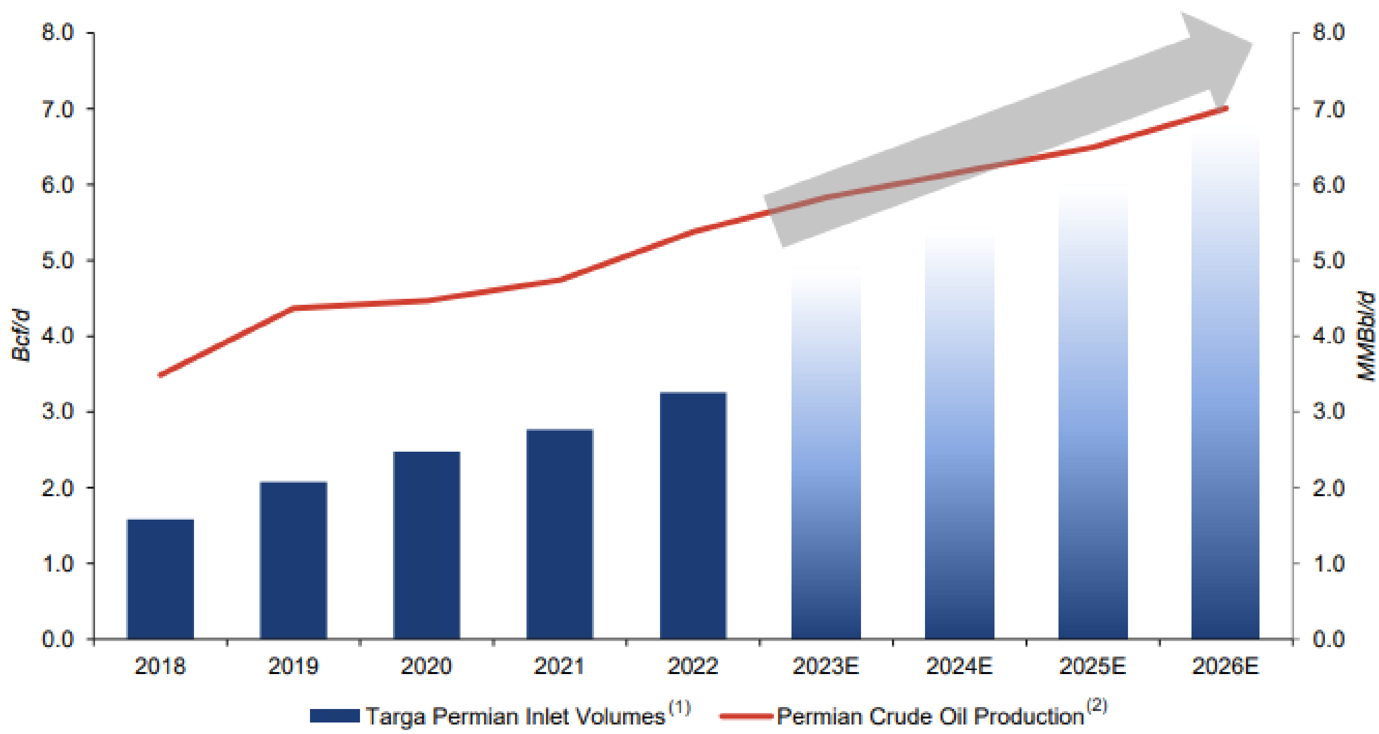
Who is the best situated Permian NGL pipe name?

We believe the 3 dominant NGL midstream players are EPD, ET and TRGP, given each has wellhead-to-water infrastructure, G&P sourcing NGL pipes, and large blocky acreage dedications. We don't view OKE and PSX as major players. OKE can opportunistically pick up a dedication from a plant or in-kind customer, but we see strategy relatively immaterial to overall basin egress. PSX (DCP's) Sand Hills pipeline will continue to see contract rolls that will move over to G&P sourced pipelines, especially TRGP's Grand Prix.

So, between the big 3 integrateds, we believe TRGP is the best situated going forward followed by EPD, then ET. But we believe all 3 companies have strengths that will maintain their competitiveness as T&F rates fall in '25+.

- **TRGP** – TRGP has the most G&P sourced barrels on its NGL pipes. The 400 Mbpd Daytona pipeline (ISD: 4Q24) will be well-utilized immediately. TRGP's Midland system has almost no in-kind customers, so TRGP controls the flow of barrels. TRGP's underlying system growth and emphasis to shifting to a free cash flow story in '25+ will allow it to be disciplined with its pricing, not resorting to lowering T&F rates to add volumes. But TRGP acquired Lucid, not just to increase G&P volumes, but to move barrels for in-kind players in the most prolific acreage in Lea and Eddy Counties. A large portion of contracts dedicated to EPD from the Red Hills complex will have contract renewals between '26-'29 for which TRGP will compete. Currently, we believe EPD's G&P to pipeline volume ratio is ~95%.

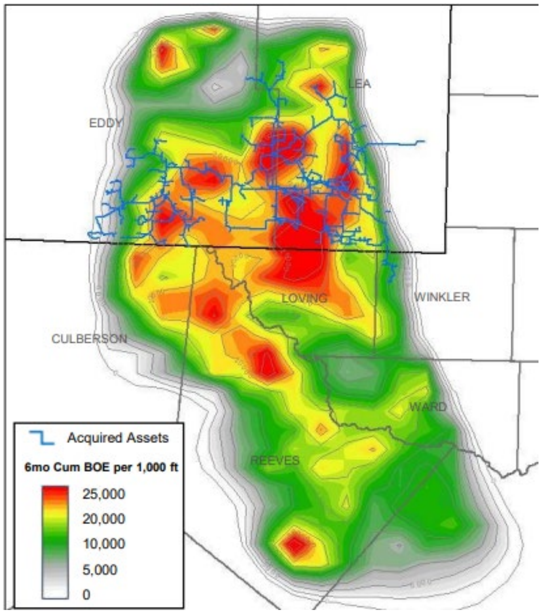
Exhibit 48: TRGP Permian inlet growth
TRGP has the largest G&P footprint in the Permian



Source: Company filings

BofA GLOBAL RESEARCH

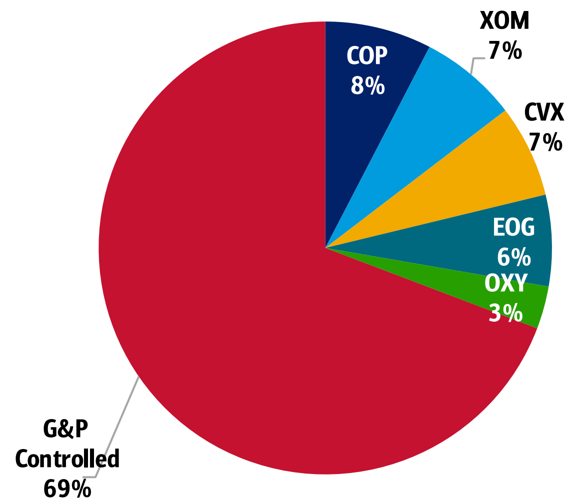
Exhibit 49: Lucid New Mexico acreage
Eddy and Lea Counties are most prolific acreage in Permian



Source: Company filings

BofA GLOBAL RESEARCH

Exhibit 50: TRGP Permian customer mix
Almost 70% G&P controlled

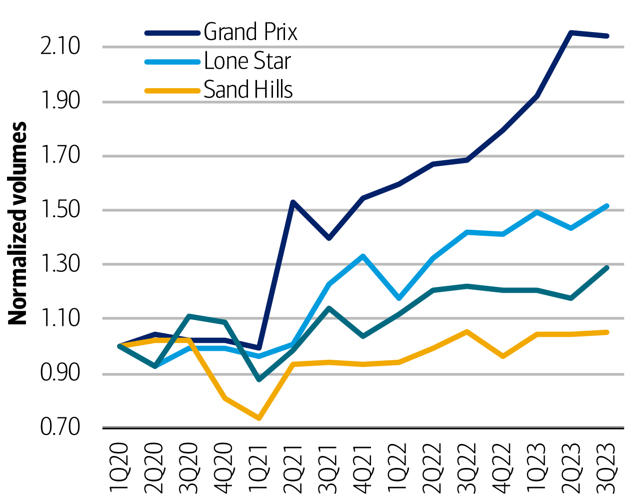


Source: East Daley, BofA Global Research

BofA GLOBAL RESEARCH

- **EPD**– The Navitas acquisition in '22 creates a closed-end Midland midstream system, like TRGP's Midland system. We expect legacy T&F contracts to roll-off in ~'25, allowing EPD to move the volumes on to its pipelines. This will help catch-up EPD's NGL pipe volume growth vs. TRGP and ET. It will, however, need to compete for 3rd party volumes in the Delaware, with competitive pricing. ~70% of EPD's Delaware G&P volumes are in-kind. Currently, we believe EPD's G&P to pipeline volume ratio is ~50%.

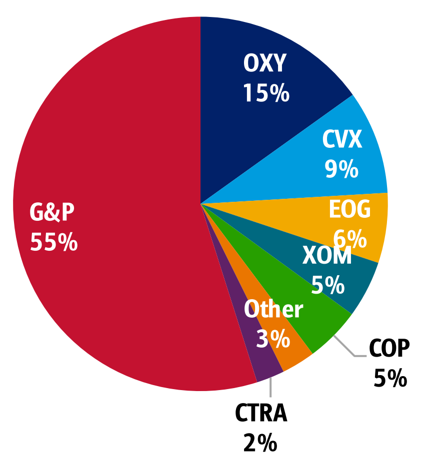
Exhibit 51: Normalized volume growth on key NGL pipes
Shin Oak has lagged but Navitas volumes will narrow gap



Source: East Daley, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 52: EPD G&P Sourced pipeline volumes
~55% is G&P sourced w/ Navitas growing that %

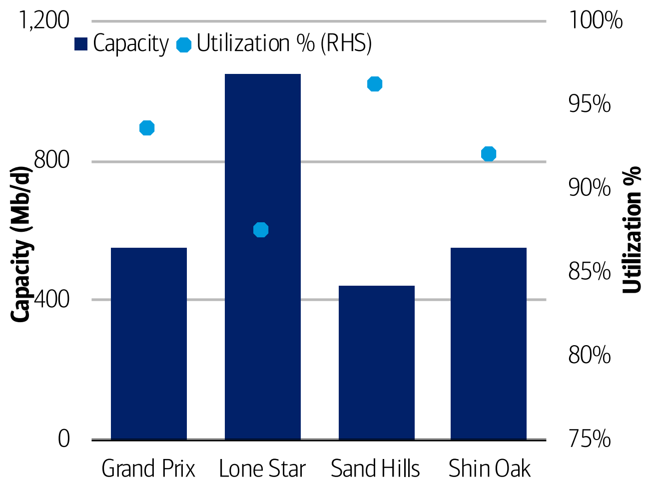


Source: East Daley, BofA Global Research

BofA GLOBAL RESEARCH

- **ET** – The massive ~1 MMbpd Lone Star pipeline still has latent capacity, and ET likely will not need to expand the pipe for another 1-2 years. Latent capacity on systems is the main reason ET has the highest FCF yield in the midstream space. But ET has the least amount of G&P sourced volumes on its system and has the highest percentage of in-kind volumes among its peers. We believe its largest in-kind customer is XOM, which will be growing its volumes substantially in the Permian. So, ET benefits from this, but as contracts come up for re-negotiation later in the decade, substantial competition will exist (especially from EPD). Contract renewals are key for ET, as its G&P volume to pipeline volume ratio is only ~25%.

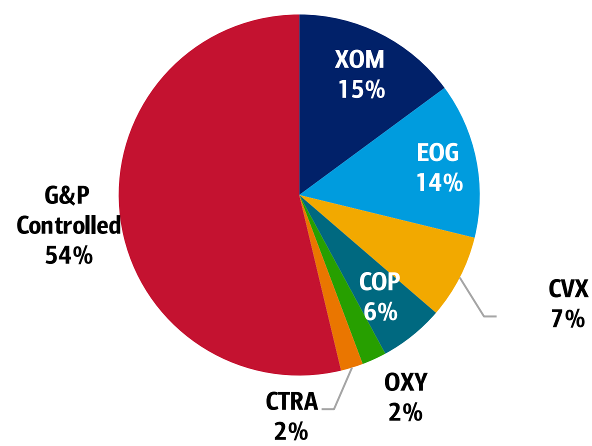
Exhibit 53: NGL pipeline capacity and utilization
ET's Lone Star has latent capacity, benefiting FCF yield



Source: BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 54: ET G&P Sourced pipeline volumes
54% is G&P sourced, but XOM growing volumes



Source: East Daley, BofA Global Research

BofA GLOBAL RESEARCH

The Haynesville Midstream Situation in Detail

We believe production in the Haynesville is set to pick up in '24 into a higher forward curve, but the ~$1 decrease in '24 forward Henry Hub gas prices likely causes production to remain more stable. Nonetheless, there is still a lack of takeaway to demand centers, where netbacks are comparable to Henry Hub. We believe:

- ET has the best position in the Haynesville. Its system is the most expansive in the basin, owning most of the available egress to the east and north. The Tiger/Line CP – Gulf Run system gives ET a first mover advantage with a FERC-regulated, interstate pipeline to move gas to Golden Pass in late '24, then likely to CP2 later in the decade. Litigation regarding crossings for 3 gathering pipes down to Gillis will likely delay those pipes coming online, giving Gulf Run more commercial opportunities.

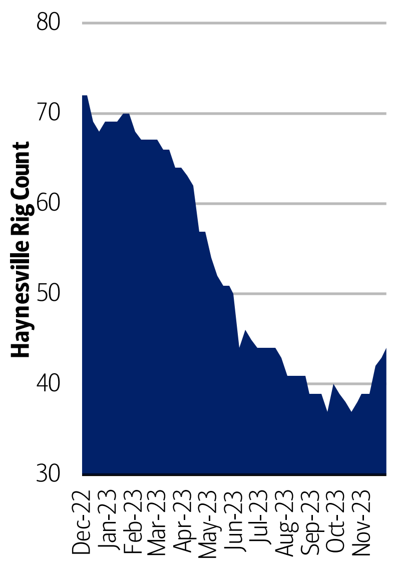
- WMB has continued to expand its presence in the Haynesville in a short period of time. The gathering systems will likely take more time to fill given weak gas prices, but we expect WMB to have a solution to ET's litigation by its February analyst day for its LEG pipeline. Lastly, we view WMB's recent Gulf Coast storage acquisition positively, as storage is not keeping up with LNG capacity.

- KMI is carefully evaluating opportunities in the Haynesville. TGP will supply the Plaquemines LNG facility, which comes online in '24. The Kinderhawk gathering system is supported by a stable customer in BP. Lastly, KMI is ready to build FERC-regulated pipes to support Haynesville egress, if the litigation against the 3 southbound gathering lines is delayed or cancelled.

Haynesville activity summary – 4Q was supposed to ramp but px collapsed

The Haynesville is expected to co-supply new Gulf Coast LNG facilities, along with the Permian. Henry Hub prices averaged $6.41/Mcf in '22 causing the Haynesville year-end rig count to exit at ~70. But '23 Henry Hub prices averaged $2.54/Mcf causing the Haynesville rig count to plummet to <40 before slightly increasing at year-end. Concurrently, frac fleets spiked towards year-end, as producers prepared to grow volumes into a strong '24 pricing environment. However, '24 forward Henry Hub gas prices fell $1/Mcf over the last 2 months of the year. Strong 4Q Permian gas production, after 2 quarters of delayed completions, and a possible delay of Golden Pass in '25, pushes outsized LNG demand-pull out another year.

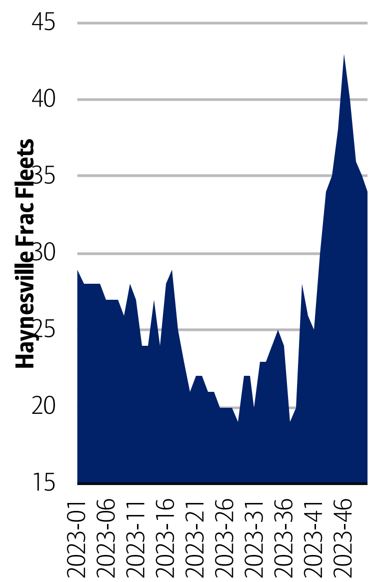
Exhibit 55: Haynesville rig count YTD
Rig counts declined sharply as HH prices fell



Source: Rystad

BofA GLOBAL RESEARCH

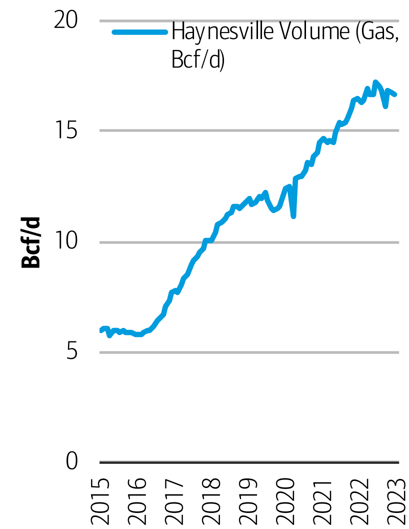
Exhibit 56: Haynesville frac fleets by week
Producers expecting stronger pricing in '24



Source: Rystad

BofA GLOBAL RESEARCH

Exhibit 57: Haynesville gas volumes
Gas volumes have plateaued in '23



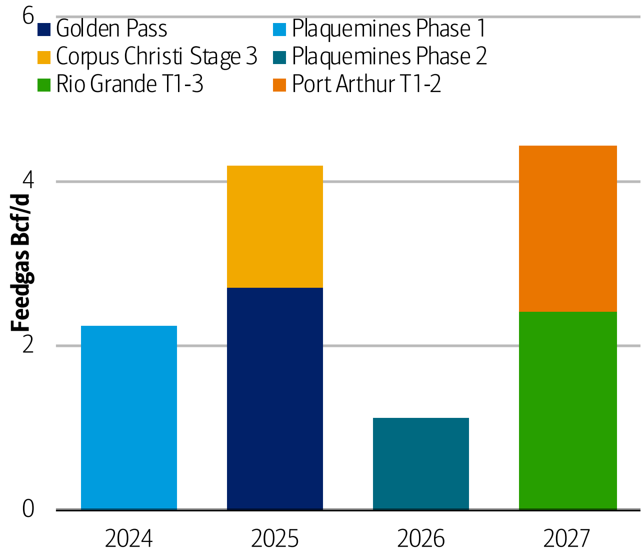
Source: S&P Global

BofA GLOBAL RESEARCH

Plaquemines, located in eastern Louisiana, is the only LNG plant set to come online In '24. TRP's ANR pipeline and phase 2 of KMI's Tennessee Gas Pipeline (Evangeline Pass project) will source the plant. And Golden Pass will come online soon after, using ET's already built Gulf Run pipeline to source ~1 Bcf/d of gas with the rest of the gas likely coming from the TX intrastate system.

Exhibit 58: LNG capacity announced between '24-27

Plaquemines Phase 1 is the only LNG plant scheduled to come online in '24



Source: East Daley

BofA GLOBAL RESEARCH

Exhibit 59: Gulf Coast LNG facilities

Gulf Coast LNG facilities scheduled to come online by '27

Source: S&P Capital Markets

BofA GLOBAL RESEARCH

But who will source the 25'+ LNG buildout and which midstream players win? ET then WMB in the Haynesville

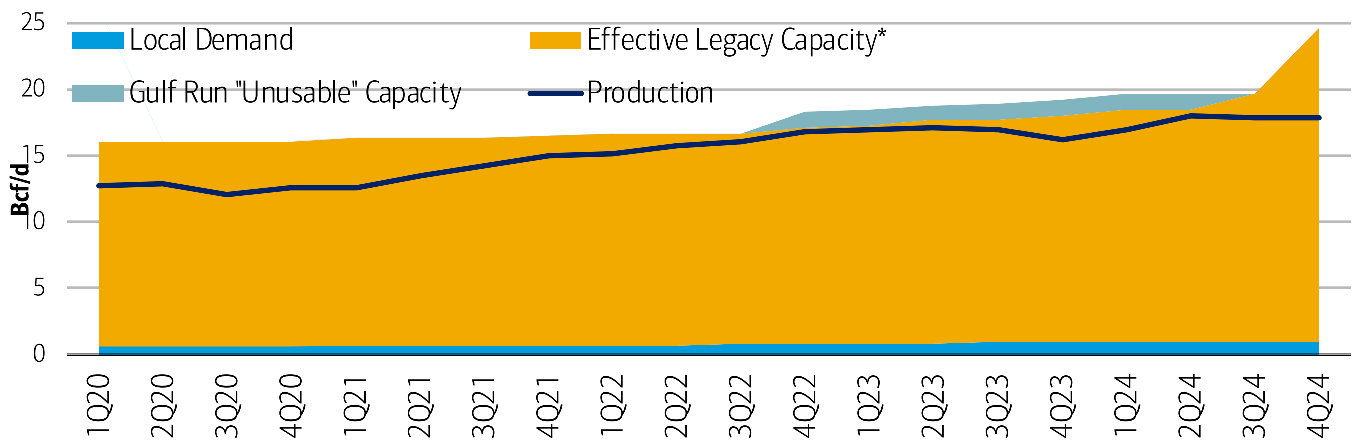
The depth of Haynesville inventory to supply a 20-year LNG contract has been questioned. And we believe the Permian will be the main supplier of long-term LNG gas, with the Haynesville a secondary, more adjacent source or Louisiana Gulf Coast plants. We explain our reasoning for believing the Permian will supply new LNG in the section below. But first, we describe the Haynesville midstream players' market positioning in the basin.

Available Eastbound and Northbound egress controlled by ET

While Haynesville production has eased, egress bottlenecks still exist, as supply lacks a home until the LNG buildout occurs in scale, and new pipes to feed the new facilities will need to be built. Note the increase in takeaway capacity in 4Q24 assumes all 3 litigated pipes (LEAP expansion, LEG and Momentum NG3) come online on time. And these pipes only move the bottleneck from Perryville more to Gillis until LNG demand is real in '25+.

Exhibit 60: Haynesville egress

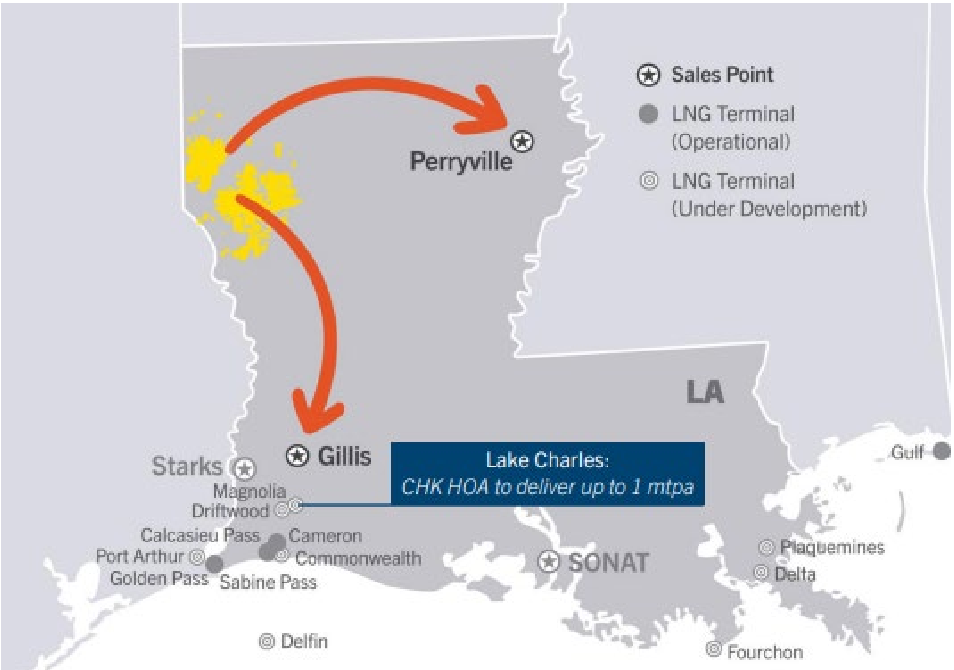
LNG demand needs to show up for increased production to find a home



Source: Rystad, BofA Global Research

This is a reason that both Perryville and Gillis trade at a ~30c/Mcf discount to Henry Hub. Lack of demand is an issue until LNG takes volumes in scale.

Exhibit 61: Perryville and Gillis delivery points
Southbound pipes are pointed to Gillis for LNG market

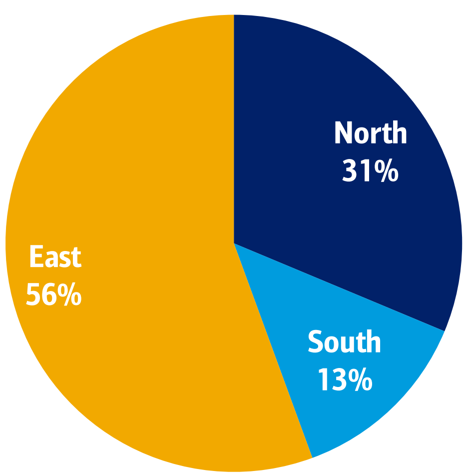


Source: Company filings

BofA GLOBAL RESEARCH

Existing southbound pipes, like CJ Express, Acadian, LEAP, and 500 MMcf/d of Gulf Run are running near full. There is 1.2 Bcf/d of available egress on Gulf South, ET/KMI's Midcontinent Express Pipeline (MEP), and ET's SESH (Southeast Supply Header) system. And 700 MMcf/d of latent capacity exists on ET's primarily demand-pull Mississippi River Transmission (MRT) system, which moves gas up to gas utilities in the St. Louis area.

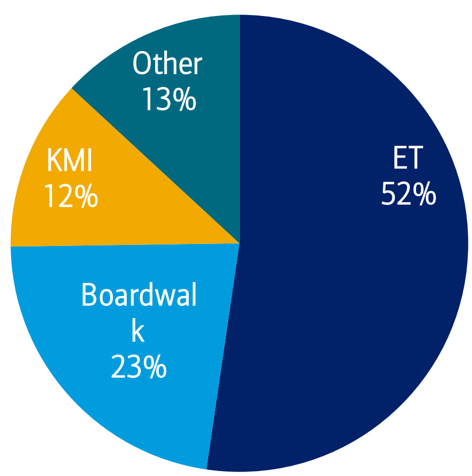
Exhibit 62: Haynesville egress by direction
Pull from Southeast utilities is primary demand sink



Source: East Daley

BofA GLOBAL RESEARCH

Exhibit 63: Available egress by company
ET controls majority of latent egress



Source: East Daley

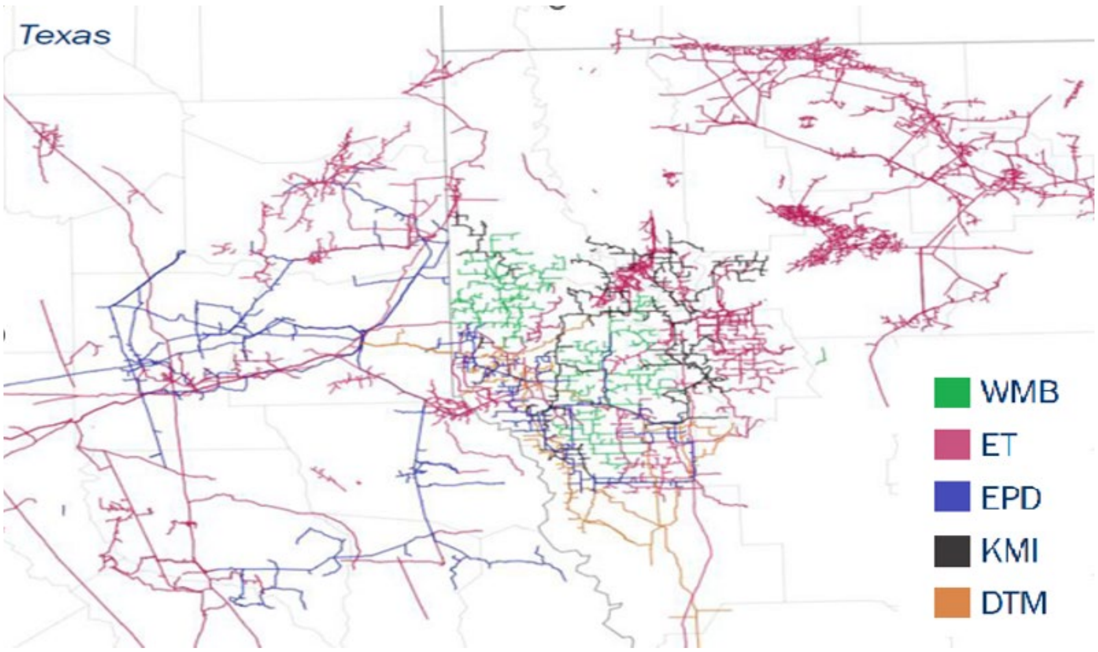
BofA GLOBAL RESEARCH

ET has the most scale / first mover advantage but WMB is making a strong push

Oftentimes, ET's Haynesville position is overlooked given its outsized Permian wellhead-to-water NGL position. But ET, especially after acquiring Enable, now has a controlling position across the basin. WMB has also made a meaningful, centralized push in the basin anchored by the best asset in midstream – Transco. Its recent storage acquisition adds to its wellhead-to-water buildout, as storage is lagging the LNG buildout, creating potential flow assurance problems. Exhibit 56 shows each company's relative footprint in the Haynesville.

Exhibit 64: Haynesville footprint by company

ET spans the entire basin

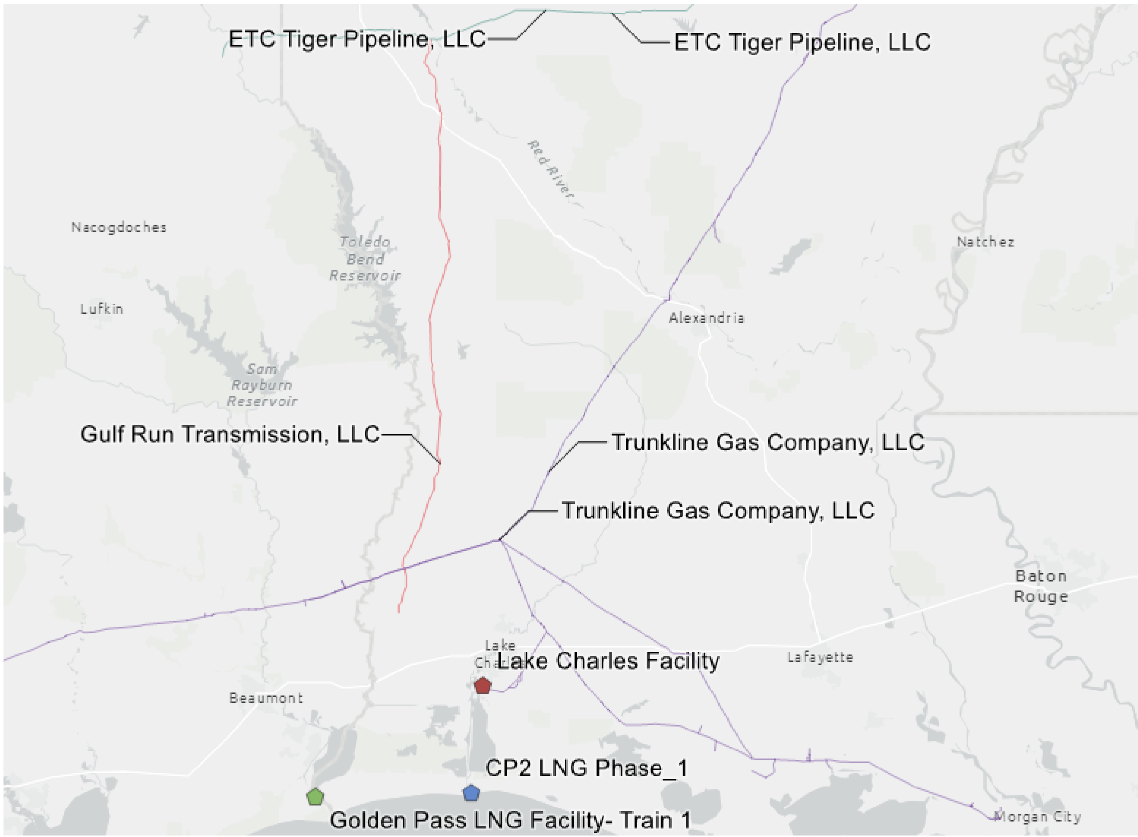


Source: East Daley

BofA GLOBAL RESEARCH

Exhibit 57 shows ET's footprint in the Haynesville. Note that ET controls the east-west header system across the entire Haynesville with the 200-mile Tiger (2.4 Bcf/d) pipeline and similar sized, parallel EGT system, formerly known as Line CP. The RIGS system moves gas intrastate within Louisiana. And finally, the 1.65 Bcf/d Gulf Run interstate pipeline was put into service in '23, running at ~500 MMcf/d until Golden Pass comes online. We also expect it to deliver gas to CP2 (explained in the next section) and possibly, Lake Charles, if the project is sanctioned.

Exhibit 65: ET's Haynesville infrastructure
ET's Gulf Run will source Golden Pass LNG, and likely CP2



Source: S&P Capital Markets, BofA Global Research

BofA GLOBAL RESEARCH

A legal fight is ensuing as ET argues that gathering pipes lack right-of-ways

Gulf Run is an interstate FERC approved pipe that ET built, as a first mover, to supply the Golden Pass LNG project. The FERC process is far more cumbersome, but once completed, gives the pipeline operator eminent domain and ability to obtain right of ways and crossings.

But ET argues that 3 sanctioned gathering pipes are crossing its pipes which have exclusive right-of-ways. ET's argument is that these ~150-mile bullet lines from the competitors' gathering facilities to the Gillis Hub are crossing ET's pipes ~40 times each.

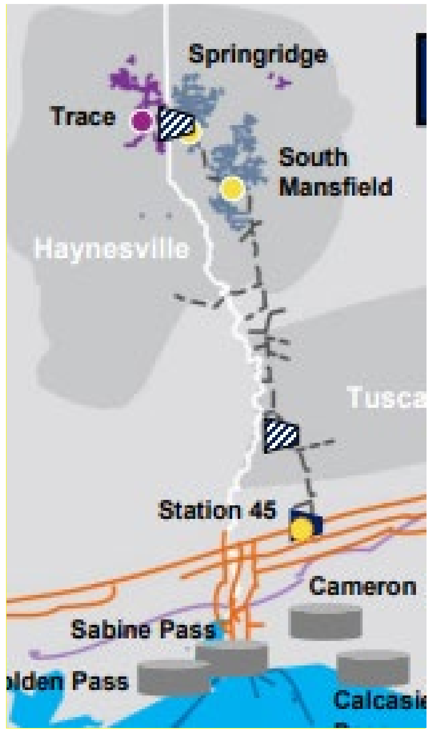
Operators like Momentum are arguing that ET is engaging in anti-competitive behavior. ET rebuts that it built Gulf Run under more stringent requirements, as required for an interstate pipe. We expect the LEAP expansion will move forward. WMB will likely announce some re-routing and the length of delay for its LEG project. But we are unsure of Momentum's status. Delays or project cancellations would unlikely cause issues for LNG operators, as these pipes come online earlier than needed, and are moving a bottleneck from Perryville to Gillis until more LNG facilities come online later in the decade. And Gulf Run can be expanded quickly with compression, if producers need an option, benefiting ET.

Exhibit 66: DTM Blue Union-LEAP system
LEAP expansion is brownfield

Source: Company filings

BofA GLOBAL RESEARCH

Exhibit 67: WMB LEG buildout
Upstream to LNG exposure being built out



Source: Company filings

BofA GLOBAL RESEARCH

Exhibit 68: Momentum's NG3 project
NG3 moves 1.7 Bcf/d from Haynesville to GC LNG markets

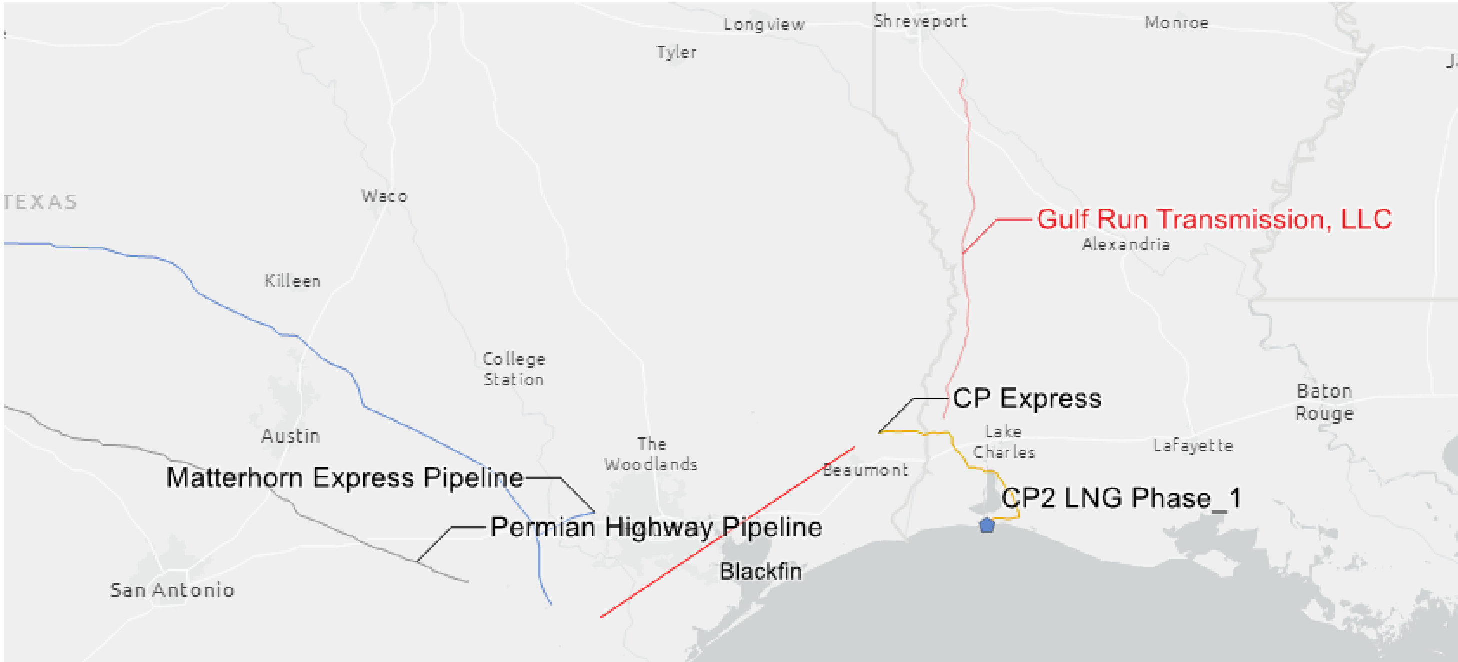
Source: Company filings

BofA GLOBAL RESEARCH

We believe Gulf Run will co-source CP2 with Permian gas

We believe Calcasieu Pass 2 will be the next U.S. LNG facility to be sanctioned with an ISD of late '27. The brownfield facility only has a total capacity of 2.7 Bcf/d with ~50% contracted. And because of Venture Global's success with CP1, it doesn't need to fully contract the facility, as it can fund more with equity. Both CP2 and its feed-in pipeline, CP Express, have already received positive FERC EIS statements in July, clearing the way for an FID soon, after the final approval. CP Express is a 91-mile, 48-inch pipeline (~3.5 Bcf/d) originates in East TX and moves across the LA border to the facility. And Whitewater's similarly sized 48-inch Blackfin pipeline could connect ~3.1 Bcf/d of Permian gas into CP Express, that is sent to Katy via Matterhorn Express (2.5 Bcf/d, ISD '24) and the Permian Highway expansion (~550 MMcf/d).

Exhibit 69: CP2 LNG pipelines
Permian pipes deliver gas into CP Express via Blackfin

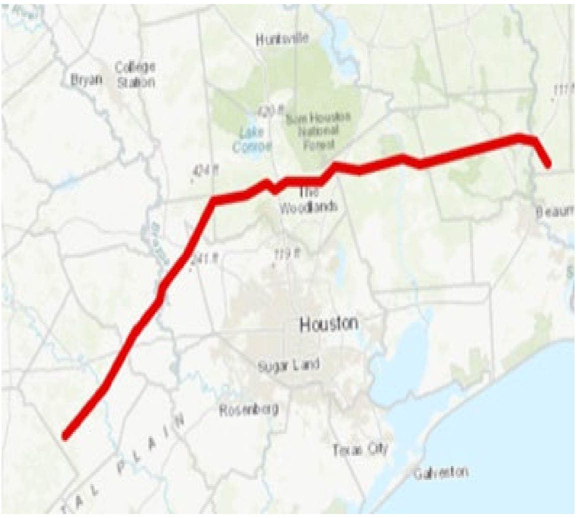


Source: S&P Capital Markets, BofA Global Research

BofA GLOBAL RESEARCH

And Gulf Run will connect into the CP Express Pipeline as the Haynesville source
In CP2's FERC filing, it noted its header pipeline, CP Express, will have a 6-mile 24-inch diameter lateral connecting to Gulf Run. Remember that ~1 Bcf/d of Gulf Run is committed to Golden Pass. 650 MMcf/d of the pipe will be open to the market with connectivity – currently Trunkline capacity is the limiting factor for full flow of Gulf Run. So, 650 MMcf/d is still available for contract capacity, with an available demand sink. And with compression alone, we think the pipe can be expanded up to 2.5 Bcf/d without material regulatory approvals. Even before the legal fight ensued between ET and DTM/Momentum/WMB about right-of-ways on North-South Haynesville pipes, Gulf Run held 1) first mover advantage and 2) status as a FERC-regulated, interstate pipeline, providing it with a lower risk profile than competing north-south gathering pipelines yet to come online. So, either producers could contract (supply-push) to move gas down to CP2 or the LNG facility could contract the pipe capacity (demand-pull).

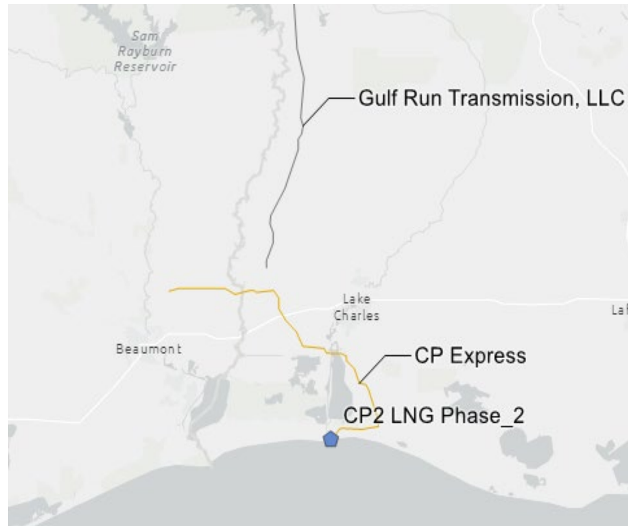
Exhibit 70: Proposed Blackfin pipeline route
Planned to move Katy gas to TX/LA border



Source: S&P Capital Markets, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 71: Gulf Run pipeline
Gulf Run can move Haynesville supply to CP2



Source: S&P Capital Markets, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 72: Companies mentioned
Companies mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
ET	ET US	Energy Transfer LP	US$ 13.87	B-1-7
EPD	EPD US	Enterprise L.P.	US$ 26.78	B-1-7
ETRN	ETRN US	Equitrans Midstream	US$ 10.35	C-3-8
KMI	KMI US	Kinder Morgan	US$ 17.95	B-2-7
KNTK	KNTK US	Kinetik	US$ 32.49	C-1-7
KGS	KGS US	Kodiak Gas Services	US$ 20.29	C-1-7
MPLX	MPLX US	MPLX LP	US$ 36.85	B-3-7
OKE	OKE US	ONEOK Inc	US$ 70.87	B-1-7
PAA	PAA US	Plains AA	US$ 15.31	B-2-7
PAGP	PAGP US	Plains GP Holdings	US$ 16.15	B-2-7
TRGP	TRGP US	Targa Corp.	US$ 86.25	C-1-7
WES	WES US	Western Midstream	US$ 28.48	C-3-7
WMB	WMB US	Williams Companies	US$ 35.82	B-1-7

Source: BofA Global Research

BofA GLOBAL RESEARCH

Price objective basis & risk

Energy Transfer LP (ET)

Our PO of $18 is derived from our discounted cash flow valuation, which implies a 8.4x 2024E EV/EBITDA multiple. We forecast a ten year outlook, which we believe is the limit of market recognition, and then forecast terminal decline of 1% while using a 7.0% WACC.

Downside risks are: potential shutdown of Dakota Access pipeline for extended period as per court ruling, higher leverage, dilutive M&A transaction and lower sustained commodity prices. The tax treatment of ET depends on its status as a partnership for federal income tax purposes: should ET become subject to taxes, its performance could be materially affected. From a macro perspective, financial risks are rising interest rates and a stricter regulatory environment which would increase operating and maintenance expenses.

Enterprise Products Partners, L.P. (EPD)

Our PO of $31 is derived from our discounted cash flow valuation, which implies a 10.3x 2024E EV/EBITDA multiple. We forecast a ten-year outlook, which we believe is the limit of market recognition, and then forecast a terminal decline of 1.0% while using a 7.0% weighted-average cost of capital (WACC).

Downside risks to our price objective are supply chain disruptions, the loss of key customers, and lower sustained commodity prices. Any of these risks could negatively impact volumes at EPD's pipelines and storage facilities and demand for gathering, processing and storage of crude oil, natural gas, NGLs, and petrochemicals.

Equitrans Midstream Corporation (ETRN)

Our PO of $9.00 is derived from our discounted cash flow valuation, which is 8.6x 2024E EV/EBITDA multiple. We forecast a ten year outlook, which we believe is the limit of market recognition, and then forecast a terminal growth rate of 1.0% while using a 9.0% WACC.

We continue to see risks some associated with the MVP JV project and current slate of associated projects. We acknowledge steady gas production in the Northeast and ETRN's entirely fee-based cash flows and advantaged position in the Marcellus/Utica. Upside risks to our PO: favorable progress on MVP completion withstanding new legal challenges, better than expected volume growth, faster than expected deleveraging, additional growth projects. Downside risks to our PO: further project delays, supply chain disruptions, increased customer credit risks, and slower than expected production ramp, any of which could negatively impact ETRN's natural gas pipelines and gathering systems. From a macro perspective, risks are elevated geopolitical uncertainty, an increasing interest rate environment, the need to access a relatively large amount of external capital to fund growth, and a stricter regulatory environment. ETRN is a C-corp structure and thus any changes to its tax characterization could impact cash flows.

Kinder Morgan Inc (KMI)

Our PO of $19 is derived from our discounted cash flow valuation, which implies a 9.9x 2024E EV/EBITDA multiple. We forecast a ten year outlook, which we believe is the limit of market recognition, and then forecast terminal growth of 1.0% while using a 7.5% WACC.

Upside risks to our estimates are (1) higher commodity prices, (2) better long-term macro environment in the crude oil and refined products businesses, (3) stronger pipeline recontracting prospects and (4) tailwinds associated with energy transition opportunities.

Downside risks to our estimates are (1) US economic weakness, (2) slower oil and gas demand growth, (3) lower oil/gas prices, (4) higher than expected cash tax incidence at KMI and (5) weaker pricing at KMI's CO2 segment.

Kinetik Holdings Inc. (KNTK)

Our PO of $39 is derived from our Discounted Cash Flow Valuation which implies a 10.4x 2024 EV/EBITDA multiple. We forecast a ten-year outlook, which we believe is the limit of market recognition and then forecast a terminal growth rate of 1.0% while using a 9.0% weighted-average cost of capital (WACC).

Upside risks to our price objective are 1) higher commodity prices, 2) increased rich gas production on KNTK's contracted acreage, 3) winning acreage dedications at pace faster than modeled.

Downside risks to our price objective are 1) US economic weakness and/or commodity prices, 2) slower Permian production growth, 3) inability to win new acreage dedications.

Kodiak Gas Services, Inc. (KGS)

Our PO of $29 is derived from a multiples-based approach to valuation which uses a 7.5x 2025E EV/EBITDA multiple based on peer group comparables.

Upside risks to our price objective are 1) higher commodity prices, 2) increased rich gas production in the Permian, 3) growth in LNG export markets along the Gulf Coast.

Downside risks to our price objective are 1) US economic weakness and/or commodity prices, 2) slower Permian production growth, 3) customer concentration/shift to in-sourcing compression.

MPLX LP (MPLX)

Our PO of $36 is derived from our discounted cash flow valuation, which implies a 9.1x 2024E EV/EBITDA multiple. We forecast a ten-year outlook, which we believe is the limit of market recognition, and then forecast a terminal growth rate of 0% while using a 7.5% weighted-average cost of capital (WACC).

Downside risks to our price objective are (1) US economic weakness, (2) slower oil and gas demand growth/lower oil/gas prices, (3) lower utilization at MPC's refineries, (4) slowdown/decline in crude oil/refined products demand and (5) changes to its dividend/payout policy.

ONEOK Inc (OKE)

Our PO of $83 PO is derived from our discounted cash flow valuation, which implies a 10.9x 2024E EV/EBITDA multiple. We forecast a ten-year outlook, which we believe is the limit of market recognition, and then forecast a terminal decline of 0.5% while using a 7.0% WACC.

Upside risks to our estimates and price objective are: (1) stronger and sustained commodity prices, (2) faster oil and NGL demand growth, (3) increased oil producer capital spending, (4) quicker than expected deleveraging, (5) favorable commodity price differentials and (6) lower corporate taxes.

Downside risks to our estimates and price objective are: (1) materially lower commodity prices, (2) lower oil and NGL demand growth and (3) decreased oil producer capital spending in the Bakken which may translate to lower/flat volumes.

Plains All American Pipeline, L.P. (PAA)

Our price objective (PO) of $17.00 is derived from our discounted cash flow valuation, which implies an 8.0x 2024E EV/EBITDA multiple. We forecast a ten year outlook, which we believe is the limit of market recognition, and then forecast a terminal decline rate of 0% while using a 8.5% weighted-average cost of capital (WACC).

While PAA appears to be well contracted over the medium-term, we acknowledge the overbuild in the Permian may persist. Upside risks to our price objective are a better-than-expected recovery in oil prices and drilling activity, lower-than-expected headwinds to PAA's pipeline transportation tariffs, higher spread/contango opportunities, further reductions to PAA's capex program, better-than-anticipated cost optimizations and further potential asset sales.

Downside risks to our price objective are prolonged period of crude oversupply and longer-term demand destruction, sustained low crude oil prices and lower drilling activity and bigger-than-expected drop in pipeline tariffs.

Plains GP Holdings, L.P. (PAGP)

For PAGP, we use the same valuation as PAA. Our PO of $17.00 is derived from our discounted cash flow valuation, which implies a 8.0x 2024E EV/EBITDA multiple. We forecast a ten year outlook, which we believe is the limit of market recognition, and then forecast a terminal decline of 0% while using a 8.5% WACC.

While PAA appears to be well contracted over the medium-term, the overbuild in the Permian may persist. Upside risks to our price objective are a better than expected recovery in oil prices and drilling activity, lower then expected headwinds to PAA's pipeline transportation tariffs, higher spread/contango opportunities, further reductions to PAA's capex program, better than anticipated cost optimizations and potential asset sales.

Downside risks to our price objective are prolonged period of crude oversupply and potential longer term demand destruction, sustained low crude oil prices and lower drilling activity and bigger than expected drop in pipeline tariffs

Targa Resources Corp. (TRGP)

Our PO of $104 is derived from our discounted cash flow valuation, which implies an 9.6x 2024E EV/EBITDA multiple. We forecast a ten year outlook, which we believe is the limit of market recognition, and then forecast terminal growth of 1% while using a 8% WACC.

Downside risks are: 1) another downturn in commodity prices and producer activity in TRGP's core basins, 2) slower-than-expected volume ramp on TRGP's assets, 3) sustained weakness in commodity prices leading to deterioration of counterparty credit quality and (4) reduced oil & gas producer capital spending.

The Williams Companies, Inc. (WMB)
Our PO of $41 is derived from our discounted cash flow valuation, which implies a 10.9x 2024E EV/EBITDA multiple. We forecast a ten year outlook, which we believe is the limit of market recognition, and then forecast a terminal increase of 1.0% while using a 7.0% WACC.

Downside risks to our estimates and price objective are: (1) pace of deleveraging longer than expected and inability to execute on organic growth projects (2) global economic weakness (3) slower oil and gas demand growth (4) reduced oil & gas producer capital spending (5) changes to regulatory environment (6) increase in corporate tax policies.

Western Midstream Partners, LP (WES)
Our PO of $27 is derived from our discounted cash flow valuation, which implies a 8.0x 2024E EV/EBITDA multiple. We forecast a ten-year outlook, which we believe is the limit of market recognition, and then forecast a terminal decline of 0% while using a 9.0% WACC.

We believe WES's earnings predictability, higher leverage/capex and limited ability to return capital in '24 are issues with a weak commodity tape going into '24.

Risks to the upside are higher than expected volumes on WES's Delaware, DJ and PRB systems, more earnings certainty, and lower than expected capex needs.

Analyst Certification

I, Neel Mitra, CFA, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

Special Disclosures

BofA Securities is currently acting as financial advisor to The Williams Cos Inc. in connection with its proposed acquisition of natural gas storage assets from an affiliate of Hartree Partners LP, which was announced on December 27, 2023.

US - Pipelines and MLPs Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Energy Transfer LP	ET	ET US	Neel Mitra, CFA
	Enterprise Products Partners, L.P.	EPD	EPD US	Neel Mitra, CFA
	Kinetik Holdings Inc.	KNTK	KNTK US	Neel Mitra, CFA
	Kodiak Gas Services, Inc.	KGS	KGS US	Neel Mitra, CFA
	ONEOK Inc	OKE	OKE US	Neel Mitra, CFA
	Targa Resources Corp.	TRGP	TRGP US	Neel Mitra, CFA
	The Williams Companies, Inc.	WMB	WMB US	Neel Mitra, CFA
NEUTRAL				
	Kinder Morgan Inc	KMI	KMI US	Neel Mitra, CFA
	Plains All American Pipeline, L.P.	PAA	PAA US	Neel Mitra, CFA
	Plains GP Holdings, L.P.	PAGP	PAGP US	Neel Mitra, CFA
UNDERPERFORM				
	Equitrans Midstream Corporation	ETRN	ETRN US	Neel Mitra, CFA
	MPLX LP	MPLX	MPLX US	Neel Mitra, CFA
	Western Midstream Partners, LP	WES	WES US	Neel Mitra, CFA
RVW				
	Golar LNG Limited	GLNG	GLNG US	Neel Mitra, CFA

Disclosures

Important Disclosures

Equity Investment Rating Distribution: Energy Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	83	61.48%	Buy	64	77.11%
Hold	28	20.74%	Hold	21	75.00%
Sell	24	17.78%	Sell	18	75.00%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

[R1] Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. VOLATILITY RISK RATINGS, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. INVESTMENT RATINGS reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster[R2]
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

[R2] Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. *Coverage Cluster* is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

Price Charts for the securities referenced in this research report are available on the Price Charts website, or call 1-800-MERRILL to have them mailed.

BofAS or one of its affiliates acts as a market maker for the equity securities recommended in the report: Energy Transfer LP, Enterprise L.P., Equitrans Midstream, Kinder Morgan, Kinetik, Kodiak Gas Services, MPLX LP, ONEOK Inc, Plains AA, Plains GP Holdings, Targa Corp., Western Midstream, Williams Companies.

BofAS or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: Energy Transfer LP, Kinetik, Kodiak Gas Services,, MPLX LP, Oneok Inc., Targa Corp., The Williams Comp., Western Midstream.

The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: Energy Transfer LP, Enterprise L.P., Equitrans Midstream, Kinder

Morgan, Kinetik, Kodiak Gas Services,, MPLX LP, Oneok Inc., Plains AA, Plains GP Holdings, Targa Corp., The Williams Comp., Western Midstream.
BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: Energy Transfer LP, Enterprise L.P., Equitrans Midstream, Kinder Morgan, Kinetik, Kodiak Gas Services,, MPLX LP, Oneok Inc., Plains AA, Plains GP Holdings, Targa Corp., The Williams Comp., Western Midstream.
The issuer is or was, within the last 12 months, a non-securities business client of BofAS and/or one or more of its affiliates: Energy Transfer LP, Enterprise L.P., Equitrans Midstream, Kinder Morgan, Kinetik, Kodiak Gas Services,, MPLX LP, Oneok Inc., Plains AA, Plains GP Holdings, Targa Corp., The Williams Comp., Western Midstream.
BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: Energy Transfer LP, Enterprise L.P., Equitrans Midstream, Kinetik, Kodiak Gas Services,, MPLX LP, Oneok Inc., Plains AA, Plains GP Holdings, Targa Corp., The Williams Comp., Western Midstream.
BofAS or an affiliate expects to receive or intends to seek compensation for investment banking services from this issuer or an affiliate of the issuer within the next three months: Energy Transfer LP, Enterprise L.P., Equitrans Midstream, Kinder Morgan, Kinetik, MPLX LP, Oneok Inc., Plains AA, Plains GP Holdings, Targa Corp., The Williams Comp., Western Midstream.
BofAS together with its affiliates beneficially owns one percent or more of the common stock of this issuer. If this report was issued on or after the 9th day of the month, it reflects the ownership position on the last day of the previous month. Reports issued before the 9th day of a month reflect the ownership position at the end of the second month preceding the date of the report: Energy Transfer LP, Kinder Morgan, MPLX LP, Plains GP Holdings, The Williams Comp.
BofAS or one of its affiliates is willing to sell to, or buy from, clients the common equity of the issuer on a principal basis: Energy Transfer LP, Enterprise L.P., Equitrans Midstream, Kinder Morgan, Kinetik, Kodiak Gas Services, MPLX LP, ONEOK Inc, Plains AA, Plains GP Holdings, Targa Corp., Western Midstream, Williams Companies.
The issuer is or was, within the last 12 months, a securities business client (non-investment banking) of BofAS and/or one or more of its affiliates: Energy Transfer LP, Enterprise L.P., Equitrans Midstream, Kinder Morgan, Kinetik, Kodiak Gas Services,, MPLX LP, Oneok Inc., Plains AA, Plains GP Holdings, Targa Corp., The Williams Comp., Western Midstream.
BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

Other Important Disclosures

From time to time research analysts conduct site visits of covered issuers. BofA Global Research policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.
Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.
The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.
Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.
Refer to BofA Global Research policies relating to conflicts of interest.
"BofA Securities" includes BofA Securities, Inc. ("BofAS") and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. "BofA Securities" is a global brand for BofA Global Research.
Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:
BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at www.bofaml.com/BofASEdisclaimer; BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSFC); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.
This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSFC; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofASE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the Electronic Communications Disclaimers for further information.
This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in

respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities.

This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

This report may contain a short-term trading idea or recommendation, which highlights a specific near-term catalyst or event impacting the issuer or the market that is anticipated to have a short-term price impact on the equity securities of the issuer. Short-term trading ideas and recommendations are different from and do not affect a stock's fundamental equity rating, which reflects both a longer term total return expectation and attractiveness for investment relative to other stocks within its Coverage Cluster. Short-term trading ideas and recommendations may be more or less positive than a stock's fundamental equity rating.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned herein. Investors in such securities and instruments, including ADRs, effectively assume currency risk.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofAS or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information.

In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

BofA ESGMeter Methodology:

ESGMeter is a proprietary metric based on quantitative analysis and fundamental analyst inputs that reflects our assessment of a company's Environmental, Social and Governance-related attributes. The ESGMeter is intended to indicate a company's likelihood of experiencing stronger financial stability (higher return on equity and lower earnings and price volatility) over the next three years relative to peer group. There are three ESGMeter levels - Low, Medium, and High - which indicate whether a company has attributes most likely to translate into superior financial stability (in the case of a High level) or weaker financial stability (in the case of a Low level) over the next three years relative to its peer group. A Medium level suggests that a company exhibits ESG characteristics that are likely associated with financial stability results in line with its peer group over the next three years. Full details of our methodology, financial stability definition and disclaimers are available at BofA ESGMeter methodology. ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of the BofA Global Research fundamental equity analyst's investment rating, volatility risk rating, income rating or price objective for that company.

Copyright and General Information:

Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.