Midstream/MLP Energy

WMB & ET recaps: High expectations in a low commodity environment; Reit. Buys

Earnings Review

15 February 2024

Equity
Americas
Master Limited Partnerships

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

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

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

‘25 guide short of high expect; Reiterate Buy on LT growth

WMB underperformed the AMNA 2.5%, on Feb. 14, following its analyst day. We believe the main cause was WMB's '25 EBITDA guide of $7.2-$7.6bn (midpoint: $7,400mm) falling short of cons/BofA expectations by 1%/3%, and our expectation of ~$7.6bn. The '25 EBITDA combined with higher than cons capex, and an especially weak gas tape (<$2/Mcf front month) caused an outsized downward move, in our opinion. We believe WMB's transition to a more long term, contracted growth story causes it to be our preferred nat. gas infrastructure stock. We reiterate our Buy rating and raise our PO to $40. Our new '24/'25/'26 EBITDA estimates are $6.991bn/$7.481bn/$7.658bn.

WMB EBITDA weighted to contracted pipe growth in ‘25+

More important than a +/- $200mm swing on $7bn+ EBITDA in '25 is 1) a return to base EBITDA growth in '25 after a transition year in '24 and 2) incremental EBITDA weighted towards higher multiple contracted pipe projects, mostly along Transco. Midpoint of '25 y/y EBITDA growth is 8% and WMB guides conservatively. Then, the $200mm difference between our $7.6bn ‘25 pre-release est. and WMB's guided midpoint of $7.4bn can be attributable to LEG in-service delayed 2 quarters, tempered G&P activity in '24 causing a lower base to grow off in '25 and conservative Sequent assumptions. Currently, 45% of WMB's EBITDA is attributable to higher multiple transmission, storage & GOM business. But in '25 when WMB brings online 6 Transco projects and files a Transco rate case for return on its ERP investments, the 45% business mix moves higher. The SESE project is likely upsized to 1.9 Bcf/d, coming online in ‘27/'28. SESE is underpinned by producers & utilities and allows MVP volumes North & South of Transco Station 165 to utilities via compression expansions. We see continued utility demand driving pipeline growth.

ET: 4Q beat but '24 guidance below investor expectations

ET reported a solid 4th quarter, similar to EPD beating cons/BofA by 2%. The NGL and crude segments drove the beat beating cons by 9%/10%. Record volumes across the Permian NGL value chain, like EPD, drove the NGL outperformance. And the Lotus acquisition contributed to the crude outperformance. Note that Midstream underperformed investor expectations by 5%, despite beating volume expectations, showing how weak commodity prices (NGLs and natural gas) weigh on non-fee G&P margins. And this weakness is something unappreciated by investors, in our opinion. '24 guidance is $14.5bn-$14.8bn (midpoint: $14,650mm) which is -1%/+1% vs. cons/BofA. But in our YA24 survey, nearly 90% of investor's expectations believe ET can reach $15bn in EBITDA for '24. We think this is possible but commodity prices need to move up. Despite this, ET has the best FCF and operating leverage in midstream. We reiterate Buy and $18 PO. Our ‘24/'25/'26 EBITDA estimates are $14.757bn/$15.395bn/$15.910bn.

Capex averaging $2bn annually creating significant FCF

ET's '24 guided growth capex is ~$2.5bn. But the growth capex is above the lower end of its guidance of $2bn largely because '23 capex ($300mm) was deferred into ‘24 and came in at $1.6bn. ET is adding capital efficient capacity at its Permian processing plants. It's using its leading FCF to redeem preferred debt & maybe repurchase shares.

Glossary
AMNA – Alerian Midstream Energy Index
Cons – consensus
WMB - Williams Companies
Est. – estimate
G&P – gathering and processing
GOM – Gulf of Mexico
ERP – emissions reduction program
MVP – Mountain Valley Pipeline
ET – Energy Transfer
EPD – Enterprise Products
NGL – Natural gas liquids
YA – year ahead
FCF – free cash flow
Nat. – natural
SESE – Southeast Supply Enhancement

Refer to important disclosures on page 6 to 9. Analyst Certification on page 5. Price Objective Basis/Risk on page 5.

WMB highlights: Utility demand & LEG re-route

Utility growth key to pipeline expansions in '25+

SESE is the tangible Transco project in '25+, as producer and utility counterparties have already signed precedent agreements to underwrite what we believe, will ultimately become a near 2 Bcf/d project. However, utilities securing firm capacity will be a key theme going forward. And WMB is set to benefit from further Transco and MountainWest commitments, as well as storage demand. The key demand drivers are:

- Renewable intermittency with need for natural gas backstop and
- Data center demand

Renewable intermittency causing need for natural gas backstop

This issue is rampant for Southeast utilities, where the renewable quality is lower than the West Coast. And remember that WMB is paid on *peak demand,* not average demand. Regulated utilities need to procure firm pipeline capacity for peak demand for reliability purposes, and WMB will be paid for reserving that capacity on Transco.

The NorTex acquisition in the Dallas area also highlights the benefits of storage in a merchant power market. Local gas supply has declined with the Barnett shale and most gas supply is piped across state from the Permian. Renewables are a material supply of power, from the regulated transmission build sanctioned in 2009, that moves West Texas renewables to North TX. So the DFW area has lacked gas supply during winter storms, reliable power with renewable interruptions, and a local supply for gas plants.

Data center demand multiplying load growth for utilities

WMB noted commentary from 3 of their utility customers along Transco in the Southeast including Georgia Power, Duke and Dominion. Data center demand and general electrification is picking up at a near exponential pace.

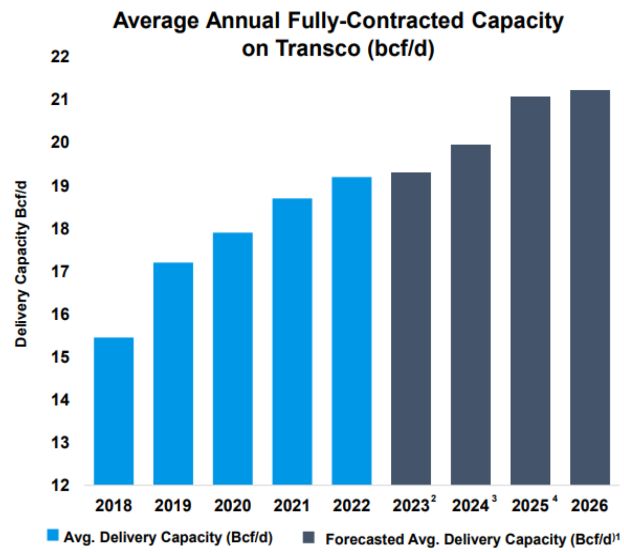
Key commentary included:

- Georgia Power expects to produce 17x more energy than it originally planned by the '30-'31 winter season.
- Duke Energy expects 8x greater energy than predicted 2 years ago. Its service territory is just south of the Transco Station 165 interconnect.
- Dominion will see the greatest benefit of data centers and its service territory is just north of the Transco Station 165 interconnect.

Transco is positioned to move gas to utilities both 2 separate areas

Exhibits 1 and 2 show that Transco firm capacity continues to trend up, in large part from utility demand in the Southeast. Exhibit 2 shows that Transco runs through the Dominion, Duke, and Southern Company service territories. And when MVP (Mountain Valley Pipeline) comes online, Transco will be able to source utilities from Station 165 (where MVP and Transco intersect) and also from Louisiana pushing gas upward, as we discuss in the next section.

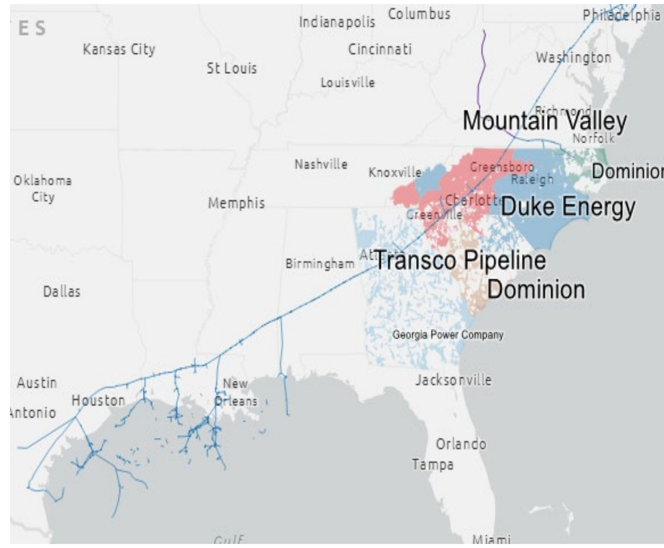
Exhibit 1: Transco firm capacity continues to grow
Driven by utility demand



Source: Company filings

BofA GLOBAL RESEARCH

Exhibit 2: Transco runs across major utility service territories
Station 165 where MVP intersects Transco and LA can both source utilities



Source: S&P Capital Markets

BofA GLOBAL RESEARCH

LEG in-service date pushed from 4Q24 to 2H25

The Louisiana Energy Gateway (LEG) project, which will move gas from the Haynesville (Perryville hub) to the Louisiana LNG corridor (Gillis hub), is now expected to come online in 2H25 from an initial in-service date of 4Q24. We believe the <2 Bcf/d of pipe costs ~$1bn. And at a 8x build multiple; this is $125mm of annual EBITDA. So '25 loses ~$60mm of EBITDA from the delay.

In service date unlikely to impact LNG feedgas given Biden ban

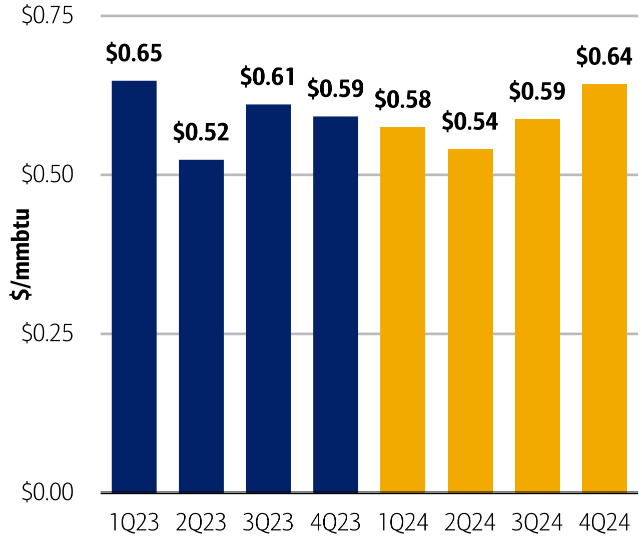
While the delay in the project delays WMB earnings modestly, it should have no impact on producer contracts or LNG supply/demand balances along the Louisiana Gulf Coast. The 2 near term projects under construction already have dedicated pipeline supply: Golden Pass with ET's Gulf Run already constructed with 1.6 Bcf/d of capacity and Plaquemines with KMI's TGP and TRP's ANR pipeline feeding the facilities. And the indefinite ban on new LNG approvals pushes out the need for gas to Gillis. We think LEG, until the latter part of the decade, likely sees more value pushing Haynesville gas, onto Transco, where the pipeline can push gas up from Station 45 to Southern utilities, experiencing material load growth.

ET Highlights: Operating leverage shining through

Midstream segment is a headwind for '24 EBITDA

We noted that some investors believe that ET can reach $15bn in EBITDA for '24. But we note that ET does have material commodity exposure for Permian processing. And our POP (percent-of-proceed) indicators show that '24 is similar to '23. Note that 2Q23 was when ET saw the biggest headwinds from commodity prices.

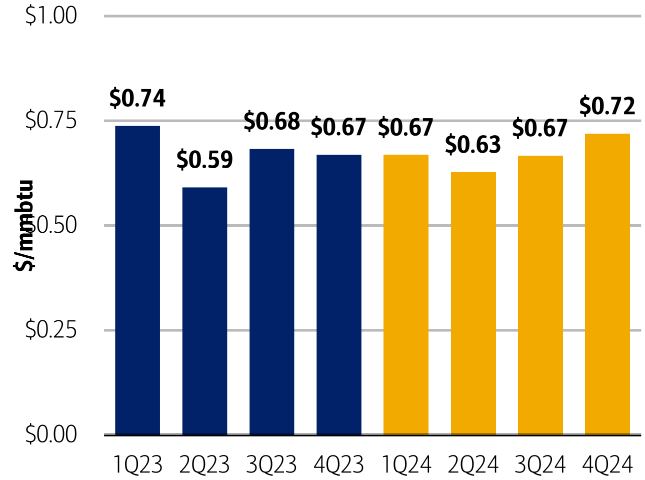
Exhibit 3: Midland Quarterly POP
Midland POP declines in 1H24 and moves back up in 2H close to '23 high



Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 4: Delaware Quarterly POP
Delaware POP declines in 2Q24, but raises again in 2H, staying below '23 high



Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

Overview of growth capex projections

- **Nederland export terminal expansion:** The expansion provides additional export capacity at the terminal. It is expected to provide flexibility to load various products based on customer demand and is planned to be in-service in mid-2025. ET noted they expect to be finished driving piles by the end of the month.

- **Nederland refrigerated storage:** ET is building new refrigerated storage at Nederland to increase butane storage capacity by 33% and double propane storage capacity. This refrigeration will help to keep customers' ships loaded on time.

- **Marcus Hook terminal optimization:** The optimization project includes the addition of incremental ethane refrigeration and storage capacity. ET has commenced construction of the first phase.

- **Cryogenic processing plant expansions:** ET has begun expanding processing capacity at several existing 200 Mcf/d cryogenic processing plants. This will add approximately 100-150 Mcf/d of processing capacity in West and South Texas at favorable costs compared to a new processing plant.

- **Pipeline acquisitions:** ET recently closed on the acquisition of two pipelines including 1) a pipeline from Mount Belvieu to Nederland and 2) a pipeline from Mount Belvieu to the ship channel. It expects to have firm commitments on the first pipe soon, which will flow at least 70 Mbpd and provide needed capacity for high-demand products.

Other projects mentioned for '24 include a new pumping station to increase NGL takeaway capacity from the Permian, new crude oil pipeline connections and new train capacity in the Haynesville. Looking ahead to the next few years, ET expects long-term annual growth capital run rate of $2-$3bn.

Price objective basis & risk

Energy Transfer LP (ET; B-1-7; $14.11)

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.

The Williams Companies, Inc. (WMB; B-1-7; $33.05)

Our PO of $40 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.

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.

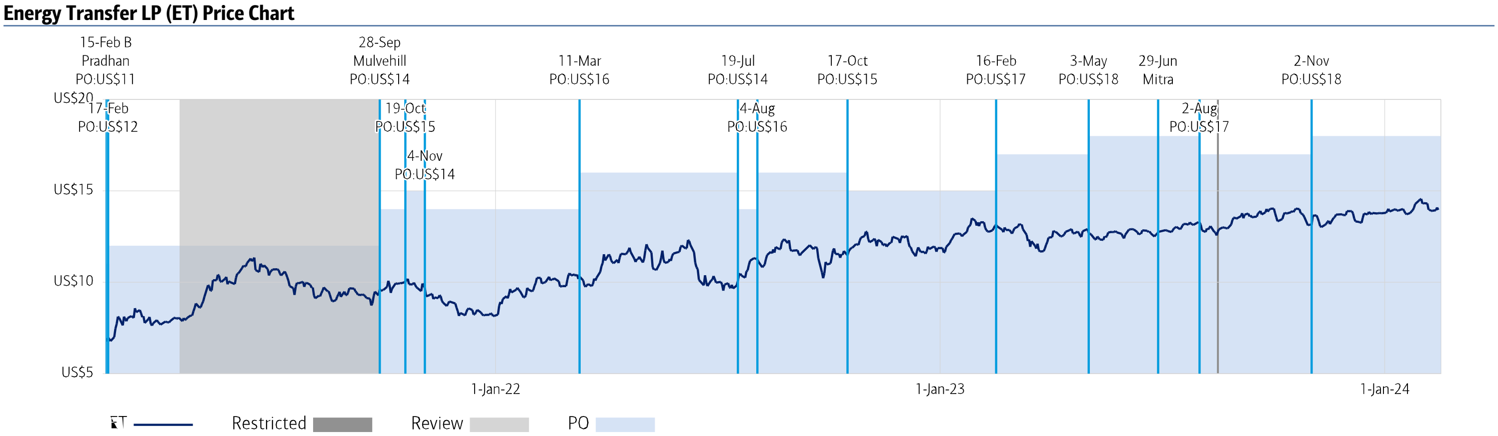
US - Pipelines and MLPs Coverage Cluster

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

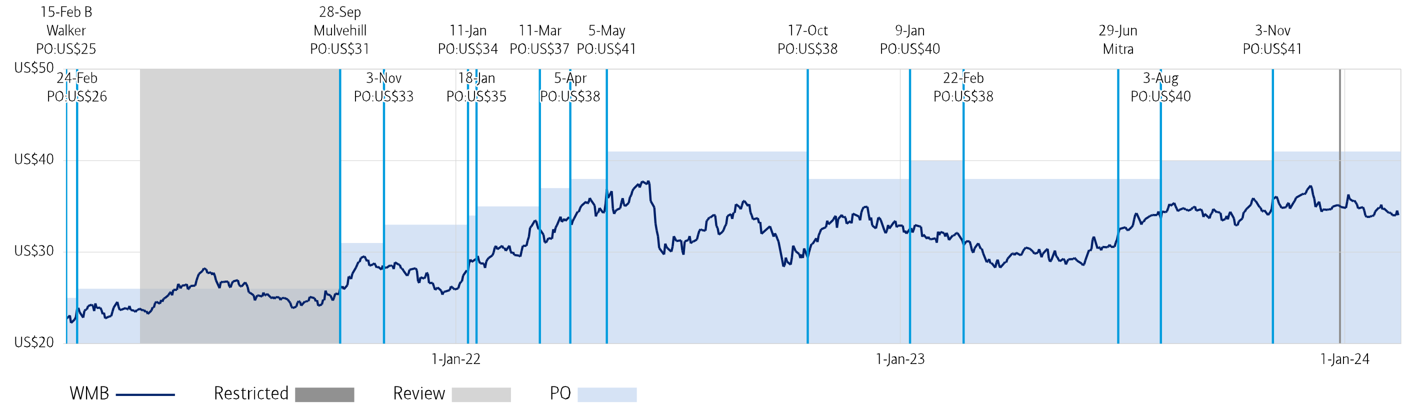
Energy Transfer LP (ET) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

Williams Companies (WMB) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

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, Williams Companies.
BofAS or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: The Williams Comp.
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, The Williams Comp.
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, The Williams Comp.
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, The Williams Comp.
BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: Energy Transfer LP, The Williams Comp.
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, The Williams Comp.
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, 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, 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, The Williams Comp.
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.

Subject to the quiet period applicable under laws of the various jurisdictions in which we distribute research reports and other legal and BofA Securities policy-related restrictions on the publication of research reports, fundamental equity reports are produced on a regular basis as necessary to keep the investment recommendation current.

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.