CFRA

Industry Surveys

Midstream Oil & Gas

MARCH 2023

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CHARTS & FIGURES

NEW THEMES

What's Changed: Since our last publication, natural gas prices have tumbled sharply on record warm winter. Read more on page 13.

What's Changed: We added a chart on U.S. and European natural gas benchmark pricing. See page 14.

EXECUTIVE SUMMARY

CFRA is positive on the Midstream Oil & Gas Storage & Transportation sub-industry (shortened to "midstream" from here). We define "midstream" as activities including the processing, storing, and transporting of oil, natural gas, and natural gas liquids. Here are the key themes we highlight for 2023:

The Next Upcycle Is Just Beginning

It only took seven years, but it finally looks like the next upcycle in upstream capital spending has commenced. Many U.S.-focused producers accelerated spending levels in 2022, and we expect spending levels should still be robust in 2023 (although if the regional banking crisis escalates, it could yield some temporary hesitation in the oil patch). First the budgets go up, and later the production. The incremental production is going to have to go somewhere, and that "somewhere" is going to be dependent on midstream access. We think the industry will first absorb incremental production with available line space and subsequently try to add more capacity later. The natural decline curve will keep a lid on production from exploding, but rising rig counts and more completion work will ultimately push production somewhat higher, and incremental midstream capacity will be needed.

Credit Access Caught in Tug of War

Most midstream firms rely heavily on credit markets. When you have major capex needs and offer hefty dividends, demands on cash flow are high. In fact, in our midstream coverage universe, the median provider has a net debt to capital ratio of almost 70% – well above the 28% average for their exploration and production (E&P) customers. So, the abrupt recovery in crude oil prices that began in late 2020 was a welcome sigh of relief for an industry that had been beset by weak pricing for the better part of last year. One could argue that the Fed raising rates should weigh on midstream, and to a degree, it already has – midstream stock prices were up in 2022, but not up as much as other energy sub-industries. Nonetheless, we sense credit availability remains good, even with inflation, and many firms have already pushed out major debt milestones for several years.

Environmental Advocates Discover That Dogma Has Its Consequences

For years, environmental activists have endeavored to throw sand in the gears of midstream development efforts, arguing that they disturb habitats, threaten water quality, and unnecessarily delay the transition towards a renewable future. We have previously argued that the trade-off for tapping the brakes on fossil fuels is the acceptance of higher prices for energy if renewable fuels disappoint. Such a problem recently presented itself in Western Europe when an unexpectedly poor wind energy system resulted in a much higher demand for natural gas to fill the gap. To be fair, it is not the fault of environmentalists that oil prices topped $100 per barrel – we have Vladimir Putin to thank for that. However, given prices at the pump, we think the electorate may now be more inclined to support a two-pronged energy strategy that provides support for both fossil-fuel *and* renewable-fuel investments.

Self-sufficiency Efforts Came at the Right Time

The industry could not have known a pandemic was looming, so it comes as extremely good timing for many midstream providers who spent the last few years getting their financial houses in order. More specifically, firms today are doing a far better job of reining in spending so that it's less than their organic cash flows – and thus not as dependent on external capital markets. That process has been years in the making and a function of two major decisions: cutting back on unnecessary growth projects and (painfully) slashing dividends to more sustainable levels. We think most of the hard work on those fronts has been done, barring another major crude oil collapse into the low-$30 per-barrel range or worse.

MIDSTREAM OIL & GAS

Outlook: Positive

MARKET CAP BREAKDOWN*

RANK NO.	COMPANY NAME	MARKET CAP ($ billion)
1	Enbridge	76.2
2	Enterprise Products Partners LP	55.4
3	Energy Transfer LP	39.2
4	Kinder Morgan	38.4
5	Cheniere Energy	38.3
	Others	199.3

*Data as of February 28, 2023.
Source: CFRA, S&P Global Market Intelligence.
Refer to the Comparative Company Analysis section for other companies in the industry.

ETF FOCUS

AMLP Alerian MLP	AUM ($M) 6,463.5	Expense Ratio 0.87
EMLP First Trust North American Energy Infrastructure Fund	AUM ($M) 2,485.8	Expense Ratio 0.95
MLPA Global X MLP ETF	AUM ($M) 1,359.0	Expense Ratio 0.46

BY THE NUMBERS

+39% Change in WTI spot crude oil price, 2022 vs. 2021

1.1 MMb/d Projected increase in 2023 global crude oil demand

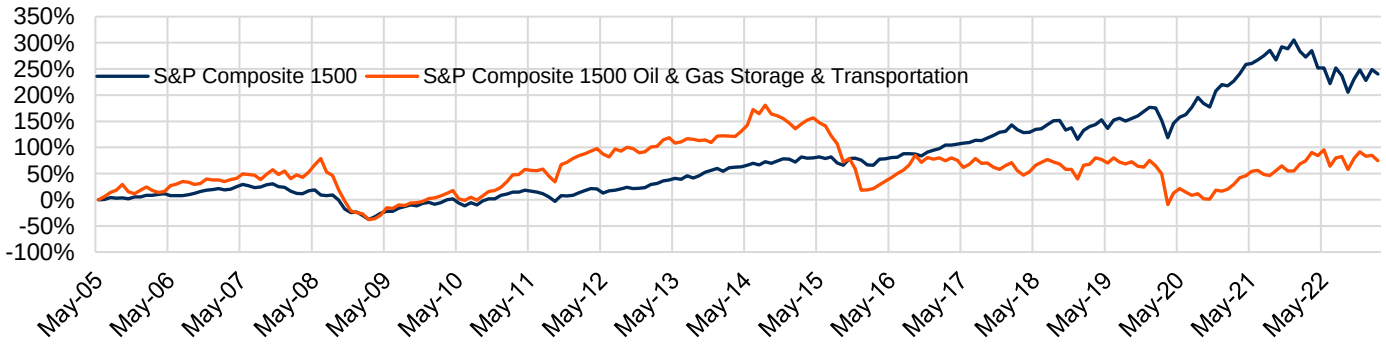
15% Eight-year CAGR in pipeline capacity out of the U.S. Northeast, 2022 vs. 2014

8.6% NGL production in the U.S., 2022 vs. 2021

2.29 Spare Capacity, OPEC-10 Nations, Q4 2022 MMb/d

+8.6% Increase in LNG cargoes exported out of the U.S., 2022 vs. 2021

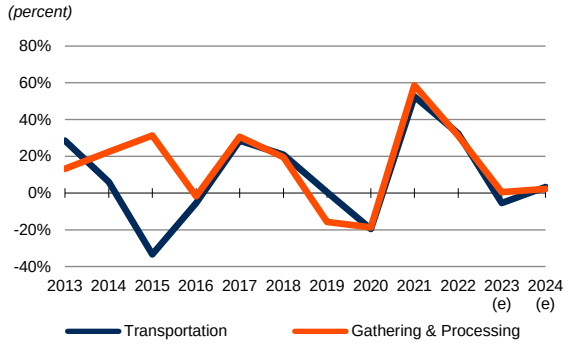
HISTORICAL INDEX PERFORMANCE



*Data through February 28, 2023.
Source: S&P Global Market Intelligence.

FINANCIAL METRICS

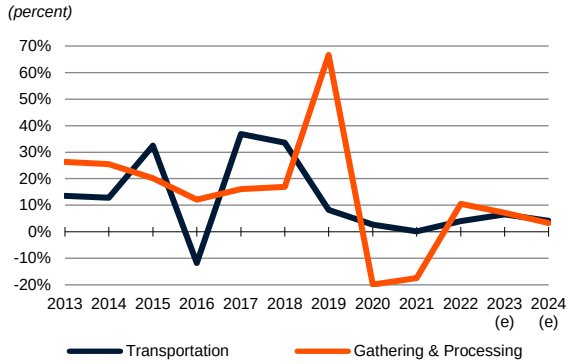
Revenue Growth



Source: CFRA, S&P Global Market Intelligence.

- Transportation revenue is expected to decline 5.4% in 2023, followed by a 3.3% growth in 2024 (versus revenue growth of 32% in 2022 and 53% in 2021) as global oil demand growth is expected to wane.
- The Gathering & Processing (G&P) segment's revenue growth is expected to slow to 0.4% in 2023 and 2.3% in 2024 versus 31.1% in 2022, as natural gas prices begin to soften relative to 2022's level.

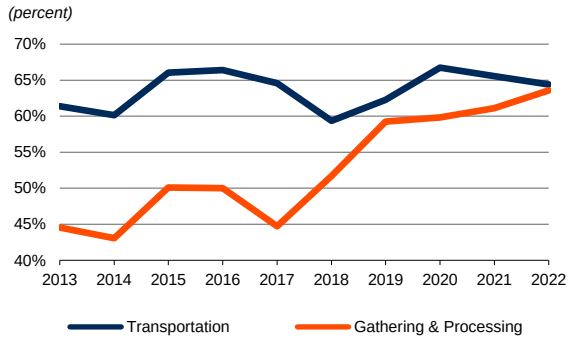
Dividend Growth



Source: CFRA, S&P Global Market Intelligence.

- After a conservative year in 2021, overall dividend payments recovered in 2022 on the back of solid revenue and operating cash flow. However, we think overall dividend growth will start to normalize in 2023 and 2024 as global oil outlook weakens.
- With G&P firms on a more sustainable footing, and assuming that energy demand continues to strengthen this year, we think the stage is set for higher distributions in 2023.

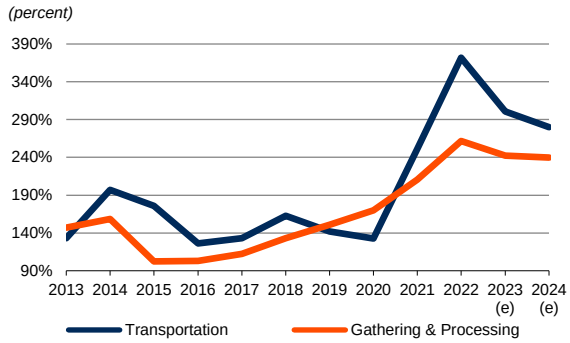
Net Debt to Capital Ratio



Source: CFRA, S&P Global Market Intelligence.

- Midstream firms had managed leverage well, reducing net debt to capital ratio to an average of 59.8% in 2019, from an average of 67.5% in 2015 – the year when oil prices collapsed. The improvement coincides with distribution cuts and an industry-wide corporate restructuring away from the MLP vehicle over the last few years.
- Many firms took the opportunity of still-open credit markets in 2020 (more so after crude prices began to stage a recovery) to take on more debt capital, but some have since started to pay back as firms accumulate more cash from strong business performances. In addition, higher interest rates in 2023 will also incentivize firms to reduce debt.

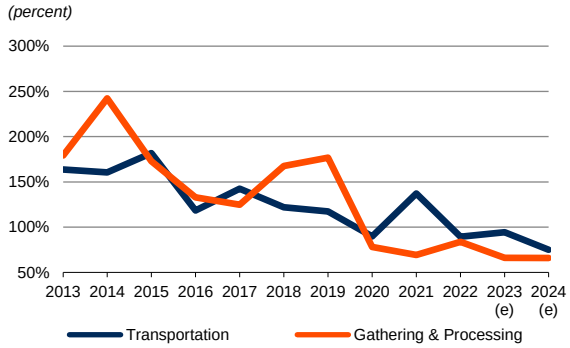
Distribution Coverage Ratios



Source: CFRA, S&P Global Market Intelligence.

- After Covid-19 began to disrupt oil markets in March 2020, we saw a handful of names in our midstream universe trim their dividend payouts, a move to preserve financial flexibility.
- CFRA estimates the industry's average distribution coverage ratios to remain above the 200% range in 2023 and 2024 due to strong distributable cash. The ratio is expected to stay above the 10-year average of 175%, which implies that these companies will be able to support their distribution better than in the past.

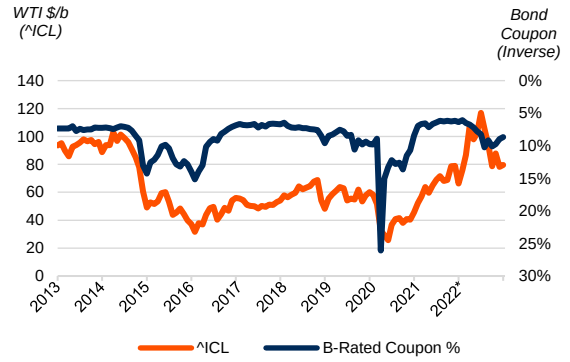
Dividends and Growth Capex as a Percentage of Operating Cash Flow



Source: CFRA, S&P Global Market Intelligence.

- A ratio lower than 100% indicates that midstream firms are capable of self-funding their two major capital allocation decisions: how much to pay out in dividends and how much to invest for future growth opportunities. Conversely, a ratio above 100% means that firms are not self-funding, but rather are tapping some external source of capital to manage the shortfall.
- In 2022, the median of the ratios averaged 89.3% for the Transportation segment and 83.6% for the G&P segment. We expect the ratios to still stay below 100% in 2023-2024 as firms remain relatively conservative on capex spending compared to the past.

WTI Spot Prices vs. Five-year Maturity B-rated Energy Sector Bond Coupons

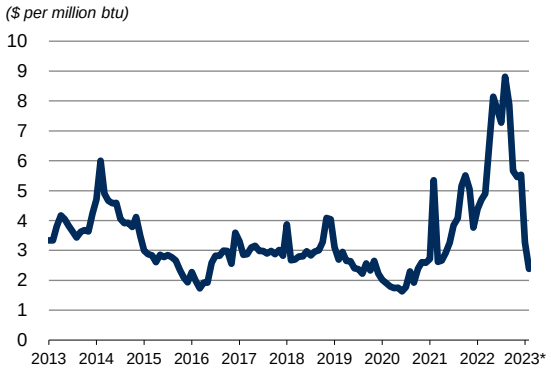


*Data through December 27, 2022.
Note: All data are on a rolling 30-day basis.
Source: S&P Global Market Intelligence.

- From 2013 to 2021, the high-yield interest rate has correlated well with WTI spot prices; nearly half of the movement in B-rated (known as high yield) bond coupons can be explained by movements in WTI spot prices.
- As the energy sector is vulnerable to oil price volatility, energy firms would typically compensate with higher bond yields to lenders for taking more risk. Conversely, when oil prices improve, upward pressure on bond yield relaxes.
- However, the correlation has been interrupted since the first quarter of 2022. This tells us that concerns over inflation and the ramp-up of rates are more important than the strength in oil prices (or, perhaps, that lenders are worried about a recession and another oil price drop).

KEY INDUSTRY DRIVERS

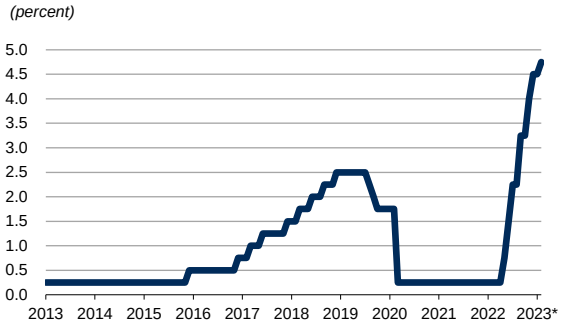
Natural Gas Spot Prices



*Data through February 2023.
Source: U.S. Energy Information Administration.

- The EIA revised natural gas spot prices down to $3.40 Mmbtu in 2023 and $4.04 Mmbtu in 2024 (a -43% revision for 2023 vs. September 2022's forecast, and -16% for 2024 vs. last month's forecast) as a result of a significantly warmer-than-normal weather in the U.S. that led to less-than-normal consumption of natural gas for space heating and pushed inventories above the five-year average.
- In 2022, Henry Hub natural gas spot prices averaged $6.42 per million British thermal units (MMbtu), up 64.2% from the prior year.

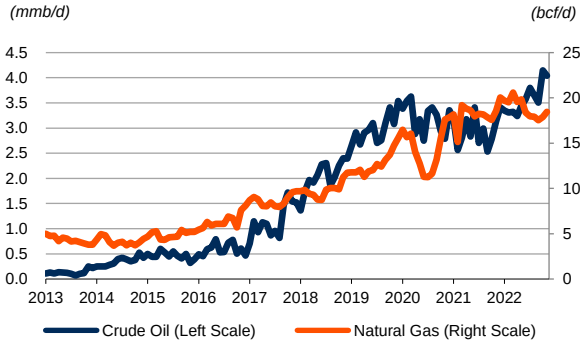
Federal Interest Rates



*Data through Feburary 2023.
Source: U.S. Federal Reserve.

- In 2022, the Federal Reserve raised interest rates seven times to the 4.25%-4.5% range, as the central bank tries to tame the worst inflation in 40 years. The fed funds rate was further raised to 4.5%-4.75% in February 2023.
- This marks the end of the ultra-low-rate regime since the pandemic started. High borrowing costs generally slow economic expansion, which in turn lowers oil demand growth.

U.S. Exports of Crude Oil & Natural Gas

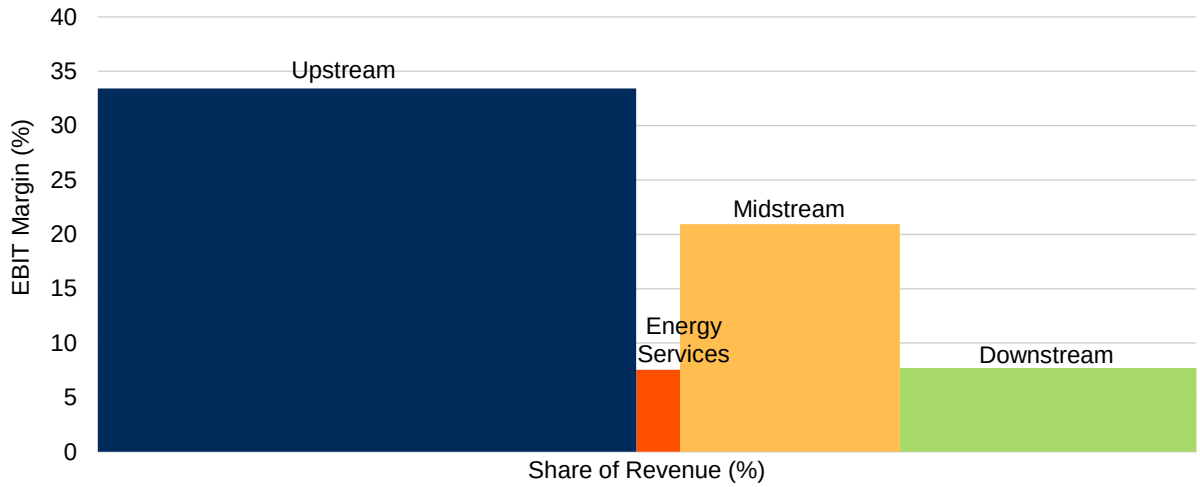


Source: U.S. Energy Information Administration.

- Exports of crude oil averaged 3.60 MMb/d in 2022, up 21.7% from 2021. Average exports of natural gas increased to 18.9 Bcf/d in 2022, up 3.7% compared to 2021 due to strong liquefied natural gas (LNG) demand overseas.
- The EIA expects natural gas exports to continue to grow in 2023 and 2024 amid strong foreign LNG demand.

INDUSTRY TRENDS

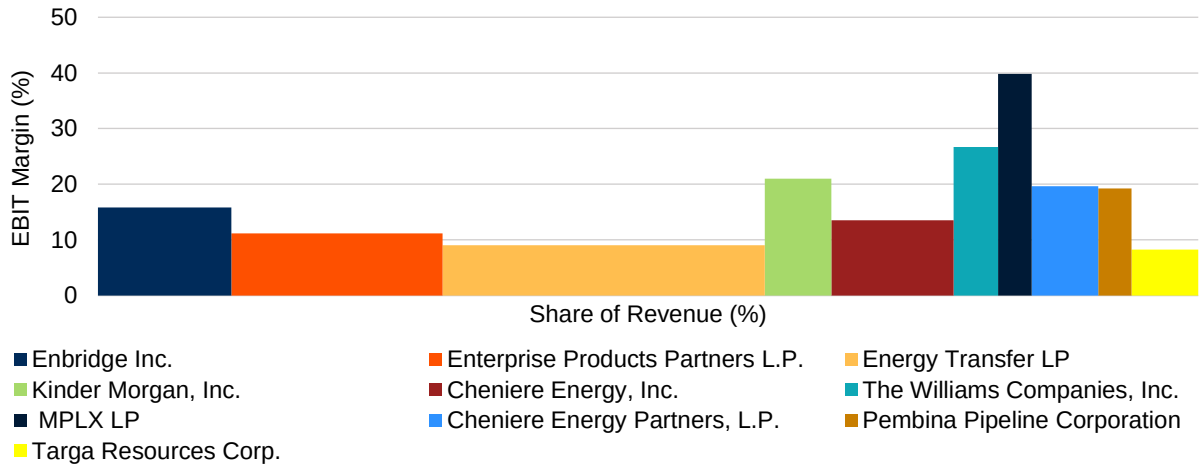
PROFIT-POOL MAP OF U.S. ENERGY SECTOR
(for the full year of 2022)



Source: CFRA, S&P Global Market Intelligence.

The U.S. energy sector consists of four major segments of the value chain: upstream, midstream, downstream, and energy services. In 2022, the upstream segment has the largest share of revenue at 49.1%, followed by downstream (26.7%), midstream (19.8%), and energy services (4.4%). In terms of earnings before interest and tax (EBIT) margins, the upstream segment also posts the highest margin at 33.4%.

PROFIT-POOL MAP OF TOP 10 MIDSTREAM COMPANIES BY MARKET CAP*
(for the calendar year 2022)



*Market cap as of February 28, 2023.
Source: CFRA, S&P Global Market Intelligence.

In breaking down the performance of the midstream space by revenue, components in the Transportation space represented the most substantial sub-industry segment in 2022. Transportation companies are comprised of midstream giants, such as Energy Transfer, with the largest revenue share of 29.1%, followed by Energy Products Partners (18.8%) and Enbridge Inc. (12.7%).

Competitive Environment

Below, we use the Porter's Five Forces framework as a tool to analyze the competitive environment of the U.S. midstream oil & gas industry.

Porter's Five Forces Analysis	
Degree of Rivalry/Competition (High)	The Permian, Bakken, Eagle Ford, and Appalachia basins are served by major pipeline companies such as Enbridge, Enterprise Products Partners, Kinder Morgan, etc. Pipelines operated by the larger midstream companies are usually longer (such as interstate) with larger capacity. Oil and gas producers and pipeline companies typically sign long-term contracts (between 10 and 20 years), in which the transportation rates are negotiable and based on delivered volumes. Competition is more intense during periods of low utilization, and pipeline companies will offer generous discounts to fill up their pipeline capacity.
Bargaining Power of Customers (Low)	In 2018 and the early part of 2019, the Permian, Bakken, and Appalachia regions were hit by pipeline capacity constraints, resulting in too many producers chasing too little pipe capacity, which resulted in a weak customer. The midstream industry added more capacity in 2019, which quelled those constraints to a degree. However, with U.S. producers likely to hit record levels of production by 2023, we think midstream capacity could again become scarcer, especially in the Permian Basin. Compounding the problem was an ESG-driven slowdown in the pace of midstream capacity additions.
Bargaining Power of Suppliers (Low)	The bargaining power of suppliers is inflecting lower, in our view, although likely on a temporary basis. The launch of several new pipelines in the first half of 2020, such as Gray Oak and EPIC, brought a slew of new capacity to market and providing customers – who used to be starved for options – more flexibility. However, much like the addition of new lanes on a highway that eventually get filled by new drivers, we think demand will ultimately rise enough to fill the incremental capacity, barring a major macroeconomic shock (*e.g.,* a recession).
Threat of Substitutes (Moderate)	Besides using pipelines, oil can also be transported by rail or by truck, as can natural gas liquids; natural gas, however, as a gas, must be compressed and delivered via pipeline. Nevertheless, pipelines are still the primary mode of transportation for oil and natural gas as they are the cheapest transportation choice – followed by rail, which is about 10x cheaper than by truck. However, producers would opt for rail or truck to transport oil and natural gas in the event of pipeline bottlenecks (as seen in the Permian and Bakken regions, which resulted in higher demand for rail shipments) or a substantial hike in pipeline transportation rates.
Threat of New Entrants or New Entry (Low)	The barrier to entry is high, as the industry is extremely capital-intensive and highly regulated. To establish itself as a viable competitor, a new entrant must invest heavily in R&D spending and specialize in gas gathering and processing. Midstream companies must comply with state and environmental regulations, as well as obtain approvals for new pipeline projects from the Federal Energy Regulatory Commission (FERC).

Operating Environment

NGL Volume Provides Surprising Upside

Crude oil volume was generally depressed in 2020, but global natural gas liquid (NGL) volume remained relatively strong due to demand from China and India. The key catalyst, in our view, was the rising demand for plastics from Asia. The pandemic spurred considerable worldwide demand for consumer packaging, such as higher demand for bottles of hand sanitizer. Creating those incremental bottles uses some of the purity products that are derived from a barrel of raw mix NGLs, as does demand for propane heaters with more people spending time outdoors in winter despite the cold weather. Thus, even in the depths of the pandemic in early 2020, we noted relatively good demand from overseas for NGLs.

As a result, midstream players with high NGL exposure benefited from the strong demand. Targa Resources' Permian inlet volumes increased 57% in 2022, following a 16% rise in 2021. ONEOK's NGL raw feed throughput volume climbed 3.3% in 2022, following an 11% increase in NGL raw volume in 2021 versus 2020. For 2023, ONEOK guides for a 7% increase in total NGL volume.

New Pipeline Capacity Gets Canned After Overbuild – Regrets?

After a decade of massive capacity buildout in the pipeline infrastructure to match the U.S. fossil fuel fracking growth, demand for pipeline drops as the Covid-19 pandemic slashes demand for the oil and gas sector. The pandemic hit the U.S. oil and gas sector hard, particularly to the oil production in the Permian Basin – the largest petroleum-producing basin in the U.S. Permian oil production fell as much as 24.9% Y/Y in February 2021. However, due to strong oil prices (thanks to continued supply discipline from OPEC and non-OPEC producers) and a modest recovery in global oil demand, Permian oil production began to make a meaningful recovery in Spring 2021. The table below is a list of recently announced pipeline projects/expansions in U.S. that have not begun construction.

NATURAL GAS DEVELOPMENT PROJECTS*

PROJECT NAME	OWNER	YEAR IN SERVICE	CAPACITY (BTU)	EXPANSION LENGTH (MILES)
Alaska Stand Alone Pipeline	Alaska Gasline	2023	0.487	763
Haynesville Global Access Pipeline	Haynesville	2023	1.947	160
NGTL Intra-Basin System Expansion	TransCanada PipeLines	2023	0.301	74
Tioga to Emerson Pipeline	WBI Energy Transmission	2023	0.584	330
Trail West Pipeline (NWP N-MAX)	Trail West Pipeline	2023	0.450	106
M6 System	Momentum Midstream	2024	2.434	275
Venture Global Delta Express Pipeline	Venture Global Delta Express	2024	3.895	287
Whistler Pipeline Expansion	West Texas Gas, Stonepeak Partners, MPLX, WhiteWater Midstream	2024	2.434	43
CP Express	Venture Global CP Express	2026	3.895	85.4
Bakken Header Supply Lateral	Northern Border Pipeline	NA	0.195	89
Eastern Panhandle Expansion Segment 2	Mountaineer Gas	NA	0.300	29
Greater Philadelphia Expansion	Texas Eastern Transmission	NA	0.475	35
Pecos Trail Pipeline	Pecos Trail Pipeline	NA	1.801	468
Steady Eddy Pipeline	WhiteWater Midstream	NA	0.500	23
Tall Oak III (ARC Pipeline) (East STACK)	Tall Oak Midstream III	NA	0.389	50
Valley Crossing Pipeline Expansion	Valley Crossing Pipeline	NA	0.001	10

*S&P Global Market Intelligence guarantees coverage on natural gas pipeline projects longer than 10 miles, storage projects over 0.1 Bcf, and LNG terminals filed with FERC and that are over 0.1 Bcf. S&P Global Market Intelligence does not comprehensively cover projects below this threshold.

*Data as of March 5, 2023.

Source: CFRA, S&P Global Market Intelligence.

As a direct response to demand destruction due to the Covid-19 pandemic, on September 10, 2020, Enterprise Products Partners became the first company to abandon a major 0.45 MMb/d Permian crude pipeline project in Texas. The cancellation of the Midland to ECHO 4 pipelines is in line with other delayed energy projects, including export terminals and pipeline builds, hurt by lower demand after U.S. crude production cut output to survive amid weakening oil prices. Phillips 66 and Plains All American Pipeline deferred a final investment decision on their joint venture, the 0.4 MMb/d Red Oak Pipeline project, until mid-2021, which (if completed) will connect both the Permian Basin and Cushing to key markets along the Texas Gulf Coast.

Even before the Covid-19 outbreak, the Permian Basin was headed for an overbuilding of capacity. Several new pipeline projects connecting the Permian Basin with Corpus Christi have become operational since the second half of 2019: the 0.67 MMb/d Cactus II pipeline by Plains All American Pipeline came online in August 2019; the 0.9 MMb/d Gray Oak Pipeline, jointly owned by Phillips 66 Partners, Marathon Petroleum, Enbridge and Diamondback Energy, entered into full service in December 2019.

The EIA also expects U.S. crude oil production to rise to a record high of 12.5 MMb/d in 2023 and 12.7 MMb/d in 2024. With the recent surge in production, CFRA thinks some of the recently canceled projects (*e.g.,* Red Oak and Liberty Pipeline) could get dusted off and be brought back if production levels continue to rise while prices stay firm.

Midstream Players Chart a Path To Renewable Energy

Midstream companies are diversifying their businesses to include renewable energy, such as solar, geothermal, wind, and other low carbon sources. While this may in part be a function of allaying shareholder concerns about the long-term value of fossil fuel-driven assets (as goals for environmental, social, and corporate governance or ESG continue to rise), it may also be to help reduce operating costs.

Midstream companies can be energy intensive. For example, liquid pipelines that transport liquefied petroleum products consume tons of power, and providing that power is not cheap. With a decade of declining costs, renewable power has become increasingly cheaper than any new electricity capacity based on fossil fuels, according to the International Renewable Energy Agency (IRENA). As a result, renewable energy would be one of the options to help midstream companies reduce operating costs, plus the goodwill and PR value obtained from taking more ESG-friendly actions.

In the midstream space, Enbridge is the first midstream firm to invest in a wind farm (2002). Since then, Enbridge has expanded its wind farm projects in England, Germany, France, and Canada. Meanwhile, The Williams Companies has committed to investing in new solar installations and renewable natural gas projects in a move to become a net-zero emitter in 2050.

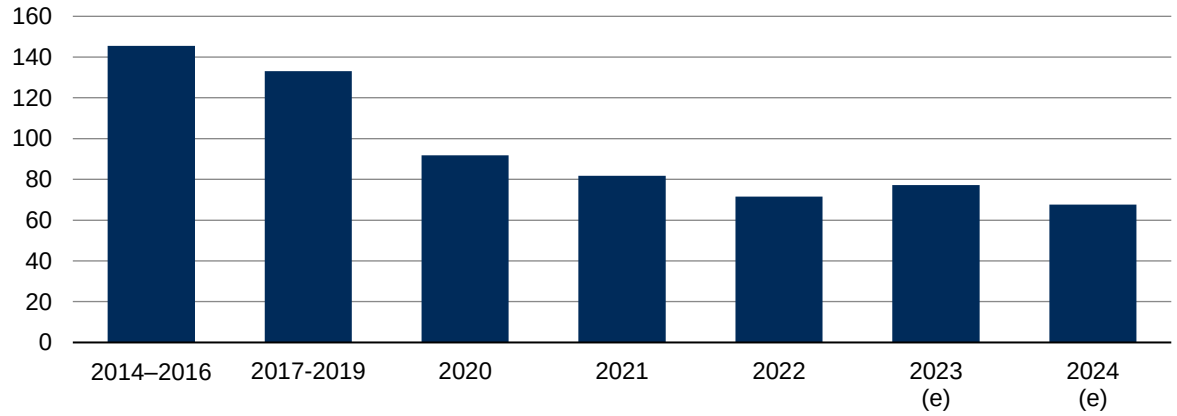
Midstream Capital Spending Is Likely To Follow Suit

Midstream companies have generated a lot of cash since the rapid recovery in crude prices started in mid-2020. And should it persist, it is likely to spur incremental growth capital spending by the midstream crowd. The key question in our view is whether they will spend prudently or to excess, like in past upcycles.

As with upstream companies, midstream operators have learned to live within their means. And just as we think E&Ps will invest in growth but not to the detriment of free cash flow, so we too expect midstream firms to follow suit. In part, this is because a fairly tough ESG crowd will likely limit how much incremental midstream capacity can be built. We think it may be easier to sell regulators and constituents on new capacity that “twins” existing midstream infrastructure, rather than new arteries that connect otherwise unconnected points, but we harbor no illusions that even twinning will be easy. The heavily embroiled Line 5 replacement in Michigan, for example, is trying to add infrastructure on the same route as before.

Based on our projections, the median dividends and growth capex as a percentage of cash from operations will likely improve to 77.2% in 2023 and 67.6% in 2024, compared to 81.7% in 2021 and 91.8% in 2020 (remember: with this metric, lower is better). Declining growth capital spending was underway well before Covid-19 disrupted the oil and gas sector. The decline of crude production growth and management emphasis on capital discipline resulted in lower capital spending in 2020 and 2021. Pipeline cancellations and deferrals in the wake of the March oil price collapse drove further declines in capital spending.

DIVIDENDS & GROWTH CAPEX AS A PERCENTAGE OF CASH FROM OPERATIONS
(STARS universe for oil & gas storage & transportation, in percent)*



*Stock Appreciation Ranking System.
Source: CFRA, S&P Global Market Intelligence.

U.S. LNG Exports Could Expect Another Record Year in 2023

The U.S. liquefied natural gas (LNG) export capacity has snowballed in recent years – from virtually none at the start of 2016, U.S. LNG exports surged significantly in 2021, breaking a record high with net exports averaging 9.8 Bcf/d, making the U.S. one of the largest global LNG exporters. U.S. LNG exports broke another record in 2022 with the help of capacity additions that include Train 6 at Sabine Pass and Calcasieu Pass LNG, which came online during the year.

The U.S. became Europe's largest source of LNG in 2021, accounting for 26% of all LNG imported by European Union (EU) member countries (EU-27) and the U.K., followed by Qatar with 24% and Russia with 20%, according to EIA estimates. We believe the Russia-Ukraine war will continue to drive up demand for U.S. LNG. That, along with the return of Freeport LNG export facility, will bolster U.S. LNG exports in 2023.

Natural Gas Prices Fell as the U.S. and Europe Faced Warm Winter

Since our last publication, natural gas prices have tumbled sharply to $2+ per Mmbtu in February 2023 from $8 per Mmbtu in just six months. The main culprit of the steep fall in natural gas prices is a record-breaking warm winter in both the U.S. and Europe, and ample storage of natural gas due to a less-than-normal natural gas consumption during the warm winter. In addition, the EU's effort to ration gas also helped, as the member states pledged to reduce their national gas consumption between August 1, 2022 and March 31, 2023 by at least 15% compared to their average consumption in the same period during the five preceding years. The combined result was a 19.3% drop in natural gas consumption for the EU in the August 2022-January 2023 period, according to the Eurostat.

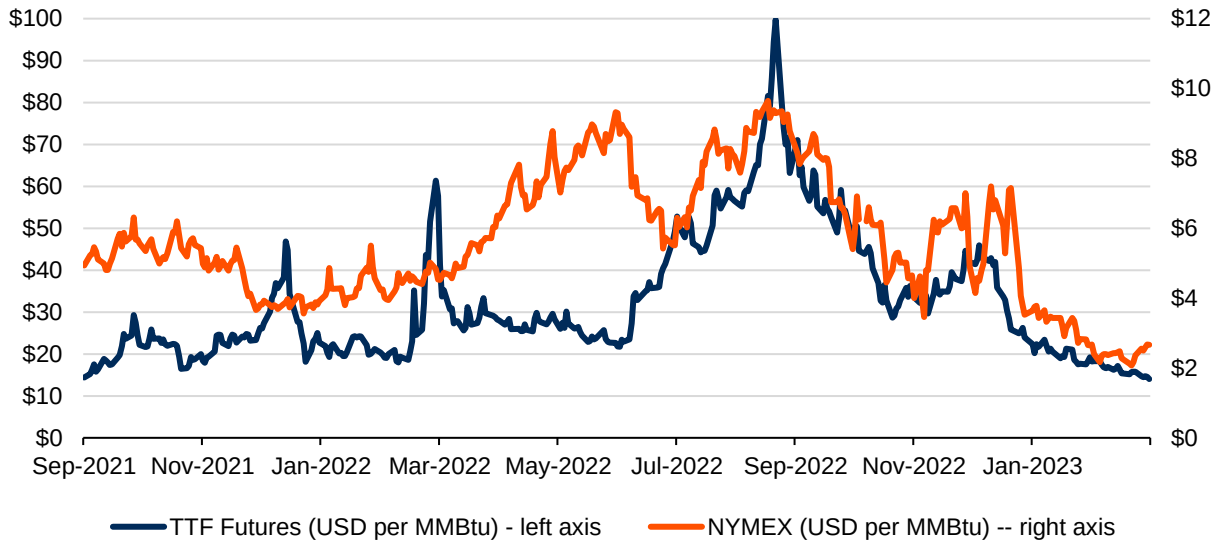
Weekly gas in storage as of March 3, 2023 stood at 2.03 billion cubic feet, or 21.5% above the five-year average for this time of year. In fact, storage levels are right around the high end of the range. And yet, if

one tracks gas inventories through the winter season, it was only recently that inventories shot up. As of January 6, 2023, for example, inventories of 2.90 Bcf were 1% below the five-year average for this time of year. Essentially, what the data is telling us is that this winter has been unusually warm and demand for gas has faltered. Assuming reversion to the mean on temperatures will eventually occur, we would expect inventories to get consumed (perhaps starting in the next withdrawal season) and for prices to rise.

In its February 2023 outlook, the EIA adjusted its natural gas price forecast downward to $3.40 Mmbtu in 2023 and $4.04 Mmbtu in 2024, versus the January forecast of $4.90 Mmbtu in 2023 and $4.80 Mmbtu in 2024 (a -31% adjustment for 2023 and -16% for 2024 versus January's forecast) as a result of significantly warmer-than-normal weather in January that led to less-than-normal consumption of natural gas for space heating and pushed inventories above the five-year average.

U.S. LNG was a windfall for Western Europe at the outset of the Ukraine war, and likely prevented the panic embedded in European natural gas prices from being even worse than they were. To be sure, prices were high enough that consumers and businesses began discussing demand rationing in order to cope. And then, salvation: warm weather. Western Europe benefited from a warm winter and those nosebleed prices from earlier in the year relented. Storage levels in Europe re-filled, helped by U.S. LNG. As a result, the normal price divergence between U.S. and European gas prices (as seen below) has been restored. That price divergence is enough to encourage U.S. gas to move overseas, but not so high that European consumers are likely to self-ration demand.

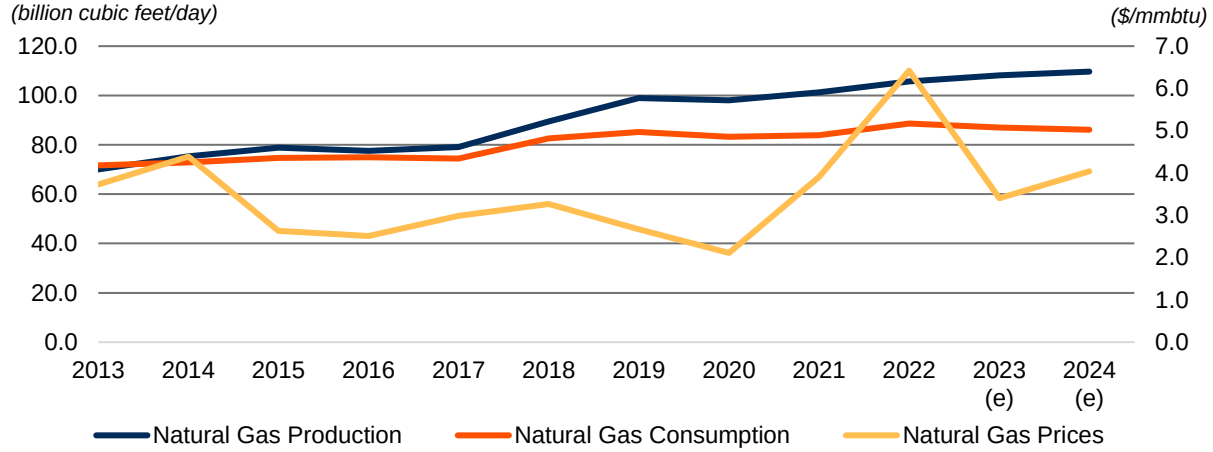
U.S. AND EUROPEAN NATURAL GAS BENCHMARK PRICING*



*Data through March 3, 2023.
Source: CFRA, Investing.com.

A drop in production considers the relationship between oil and associated gas production. Production has risen as tight oil operators return to the oil patch in response to rising prices after curtailing production. The EIA expects U.S. crude oil production to increase to an average of 12.5 MMb/d in 2023 and 12.7 MMb/d in 2024, up from 11.9 MMb/d in 2022.

NATURAL GAS PRODUCTION & CONSUMPTION VS. NATURAL GAS PRICES

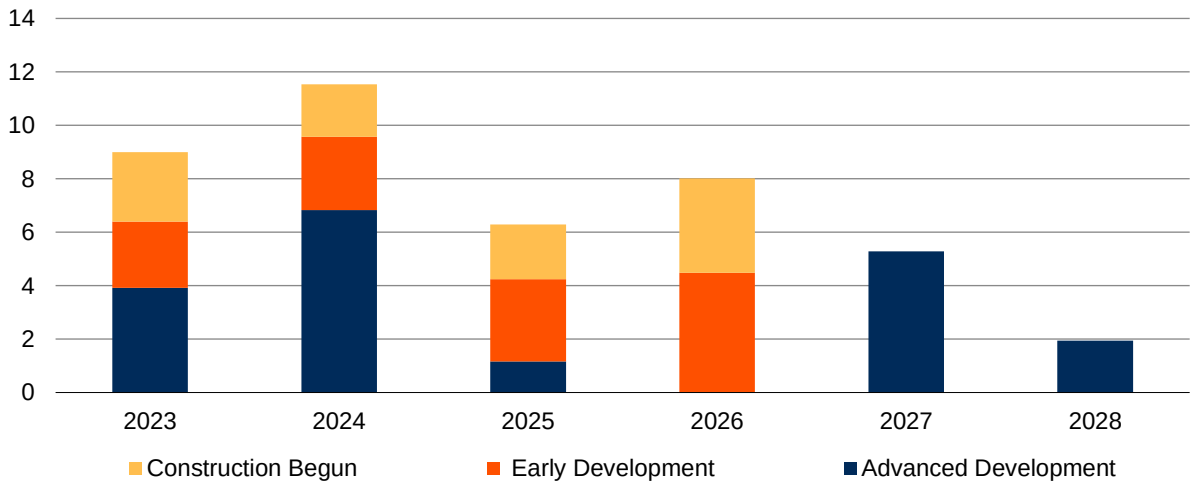


Source: U.S. Energy Information Administration.

Natural Gas Project Development on the Upswing

Natural gas demand is expected to continue to strengthen in 2023 as consumption is expected to surpass pre-pandemic level, according to the IEA. Based on data from SNL, which is part of S&P Global Market Intelligence, there is a considerable amount of natural gas pipeline capacity in the works over the next few years relative to supply today. As of February 2023, the EIA projects U.S. dry gas production at about 100.3 Bcf/d in 2023, up from 2022's 98.1 Bcf/d. In that context, SNL data indicates that new gas pipeline projects going into service in 2023 will enable additional movement of 9.0 Bcf/d of gas, followed by 11.5 Bcf/d in 2024, and another 21.5 Bcf/d between 2025 and 2028. However, it may not be quite as much capacity as it seems, since about 55% of it (22.9 Bcf/d) is listed by SNL as being only in early development or just beginning construction. Pipeline projects at that stage can be thwarted by any number of roadblocks – regulatory hiccups, cost overruns, construction delays, and so on.

NATURAL GAS PIPELINE PROJECTS BY YEAR IN SERVICE
(pipeline capacity, in million Dekatherm)



Note: S&P Global Market Intelligence guarantees coverage on natural gas pipeline projects longer than 10 miles, storage projects over 0.1 bcf, and LNG terminals filed with FERC and that are over 0.1 bcf. S&P Global Market Intelligence does not comprehensively cover projects below this threshold.

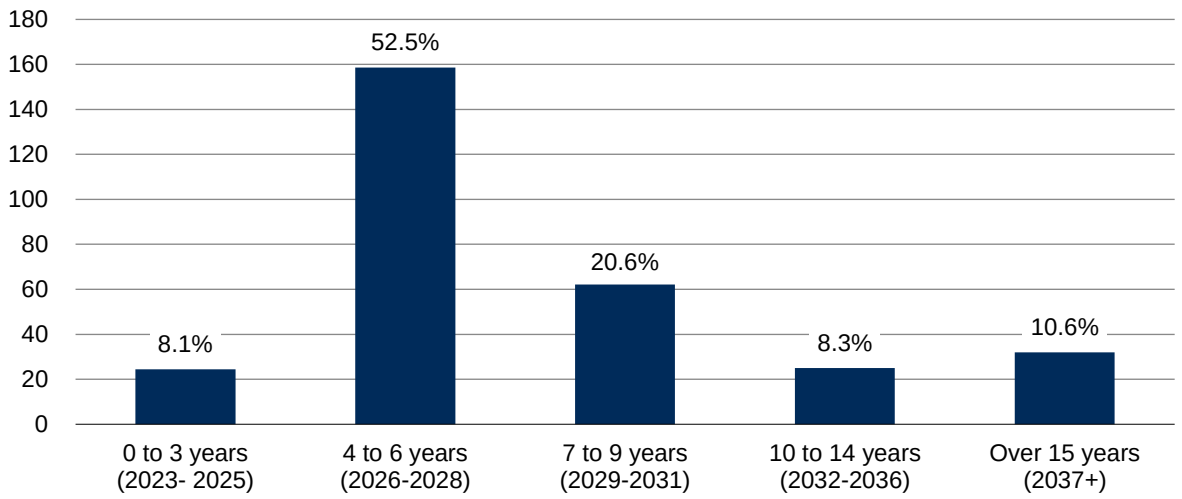
Source: S&P Global Market Intelligence.

Long-term Deals for Natural Gas Development

Generally, natural gas pipeline contracts in midstream are for long duration, often 15 to 25 years, according to SNL. However, recent data suggest that term lengths are undoubtedly shifting toward shorter contracts and increasingly flexible commercial terms. Based on SNL's data, we estimate that about 61% of the total natural gas pipeline contracts will expire in six years. Contract expiration in the other categories tends to be more even. In other words, the need for long-term contracting in the future is significantly diminished.

CONTRACTED NATURAL GAS PIPELINE VOLUME BY CONTRACT TERM*

(total daily transportation volume, in billion cubic feet)



*Reporting period as of Q1 2023.
Source: S&P Global Market Intelligence.

Scrapped Pipeline Imperils Appalachia Rebound

The Appalachian region saw its natural gas production soar over the last decade or so; from 1.7 Bcf/d in July 2009, the region's natural gas production grew to 35.0 Bcf/d in February 2023, according to the EIA. As of this writing, Appalachia is the largest natural gas producer in the country, followed by the Permian Basin, with total gas production of 22.1 Bcf/d in February 2023.

The main concern with the Appalachian production is pipeline bottlenecks. In July 2020, the region's pipeline capacity was downsized by the decision by Dominion Energy Inc. and Duke Energy Corp. to abandon the Atlantic Coast project, which costs $8 billion with 20.8 Bcf/d of transportation capacity. In February 2020, Oklahoma-based The Williams Companies scrapped two pipelines into the region, and canceled its natural gas pipeline after it failed to gain a water permit from the state of New York; in May 2020, the company announced it would not refile another permit for a different gas pipeline that would route gas from Appalachia to the state. In addition to the pipeline cancellation, some projects stalled until early 2021, such as the $4.7 billion Mountain Valley Pipeline being developed by EQM Midstream Partners, Consolidated Edison Inc., NextEra Corp., and others.

CFRA thinks the Appalachian Basin will run into capacity constraints in the medium term, and bottlenecks could develop sooner if drillers ramp up for the loss of associated gas. The bottlenecks could be bad news for the large producers, including Southwestern Energy, Cabot Oil & Gas, and EQT. A lack of new pipelines in the Appalachian Basin will weigh on gas supply, which may hobble Appalachian producers and potentially hasten the pace of transition to renewable energy.

Buyback Programs Going to the Back Burner?
Several midstream firms have existing unit buyback programs already approved by their respective boards of directors, but given the current weakness, we think such programs may get shelved temporarily. At first glance, one might think that buybacks would be precisely the place to allocate capital if unit prices suffer in the market meltdown. The problem, in our view, is that even as the share prices suffer, so do operational metrics. We would not be surprised if some of the larger programs remained untapped by the end of 2023, such as Enterprise's or Kinder's, in order to preserve cash on the balance sheet.

BUYBACK PROGRAMS

COMPANY NAME	AUTHORIZED BUYBACK PROGRAM (MILLIONS)
Antero Midstream	$300
Enterprise Products Partners	$2,000
Kinder Morgan	$3,000
Magellan Midstream Partners	$750

*Data as of February 28, 2023.
Source: CFRA, company reports.

M&A Environment

Midstream Acquisitions Slowed Significantly in 2022
The total value of deals announced in 2022 slowed significantly to $17.5 billion compared to $61.2 billion in 2021 and $46.5 billion in 2020, based on S&P Capital IQ data. Deloitte reported that global midstream M&A fell 44% to $53 billion, the second lowest point since 2012.

A notable recent deal is the offer by Phillips 66 to acquire DCP Midstream in August 2022. Under the deal, which would value DCP Midstream at $7.2 billion, Phillips 66 would increase its stake in DCP Midstream to 43.3% from 28.3%, while Enbridge would reduce its stake in the company by 15.1% and receive $400 million in cash from Phillips 66.

CFRA believes the consolidation trend we saw in the past may likely continue, as we see many willing sellers looking for an exit while other players actively seek synergies to improve cost efficiencies via M&A.

Regulatory Updates

Inflation Reduction Act Could Benefit Gas Infrastructure
One of the key signatories to the Inflation Reduction Act, Joe Manchin, may have horse-traded his way into better midstream access for the industry, although the details remain to be seen. The long-troubled Mountain Valley Pipeline (MVP) would add considerable natural gas takeaway capacity for Appalachian gas producers and Manchin, a Democratic senator from West Virginia, could help his constituents with a completed MVP. This project could mean the difference between gas production growth in the region, or not, because the only avenue for gas to move away from a wellhead is via pipeline. Technically, the Inflation Reduction Act does not specifically provide for more gas infrastructure, but we think it is possible that the MVP project could find its regulatory hearings being expedited. At the moment, we expect the project to be operational by late 2023, but we note significant risks to the project, including the possibility of cancellation.

Mega Pipeline Projects Are No Longer Feasible?

In the span of less than a day in July 2020, the oil sector saw a wave of bad news where several pipelines experienced being shut down or canceled. On July 5, 2020, Dominion Energy and Duke Energy decided to abandon the controversial Atlantic Coast gas pipeline along the U.S. East Coast. The cancellation is mainly due to delays, and rising costs threatened the viability of the projects. The project aims to provide the pipeline capacity to meet the robust demand for low-cost and low-emitting natural gas. But due to environmental group-driven lawsuits and regulations, the estimated cost of the project nearly doubled to $8 billion from about $4.5 billion since the project was first announced in 2014. The business environment remained cloudy and led both companies to cancel the pipeline project eventually.

On July 6, 2020, U.S. District Judge James Boasberg issued a ruling to order pipeline operator Energy Transfer to shut down its Dakota Access Pipeline (DAPL) by August 5, 2020. Judge Boasberg ordered Dakota Access to undertake a 12- to 15-month environmental impact statement (EIS) review, which, if satisfied, would enable DAPL to once again resume operations in late 2021. Dakota Access appealed the lower court ruling that affirmed the need for a more thorough environmental study after Judge Boasberg allowed the pipeline to operate in May and dismissed the lawsuit filed by the Standing Rock Sioux Tribe against Dakota Access in June 2021, but was eventually rejected in February 2022.

The demise of the Atlantic Coast also casts a dark cloud on other pipeline projects, such as the Mountain Valley Pipeline developed by EQM Midstream and its joint venture partners NextEra Corp, Consolidated Edison, WGL Midstream, and RGC Midstream. Also, Enbridge Inc's Line 5 crude pipelines remain entangled in court battles and regulatory pushback. The State of Michigan will likely see a hard fightback from Canada. Canadian Minister of Natural Resources Seamus O'Regan said in March 2021 that Canada is fighting for Line 5 on every front and that the operation of Line 5 is non-negotiable. Enbridge Inc's Line 3 pipeline, however, was ruled on by the Minnesota Court of Appeals, affirming a state regulator's decision that there is sufficient need for Line 3 oil pipeline replacement, and it has been operating since October 2021.

All in all, the keep-it-in-the-ground movement will get litigated easily from time to time, as they require federal and state permits. And these battles are getting contentious and making the industry difficult to build mega-projects that are no longer feasible in the face of unprecedented opposition to fossil fuels and the infrastructure that supports them.

HOW THE INDUSTRY OPERATES

The energy sector has four major segments: exploration and production (E&P) of oil and natural gas (the upstream); the drilling and oilfield services (the energy services); the transportation, storage, and trading of crude oil, refined products, and natural gas (the midstream); and refining and marketing of crude oil (the downstream). Participants include integrated oil and gas companies, and pure-play companies in various areas, including E&P, midstream services, refining and marketing, and oilfield services and drilling. This survey covers only the midstream category.

International Integrated Oil and Gas Companies

Integrated oil and gas companies are involved in almost every aspect of the oil and natural gas business: the upstream, the midstream, and the downstream. Many integrated oil and gas companies also make and sell petrochemicals. International integrated oil and gas companies conduct their operations worldwide and are among the largest and most recognized firms in the world.

International integrated oil and gas companies based outside the U.S. include both publicly owned and state-owned firms. In some countries, local governments retain significant ownership shares in the otherwise publicly owned oil company domiciled in that nation.

Saudi Aramco, owned by Saudi Arabia, is that nation's primary source of income and it is estimated to be the largest oil and gas company in the world. The largest publicly owned firms – BP plc, Chevron Corp., ExxonMobil, Royal Dutch Shell plc, and Total SA – are known as the "supermajors". Each has a market capitalization of approximately $100 billion or more.

Major Integrated Oil and Gas Companies

Large integrated oil and gas companies – typically with market capitalization of less than $100 billion – are known as the "majors". They explore for and develop oil and natural gas worldwide, but their refining and marketing operations are generally focused on their local markets.

Independent E&P Companies

E&P companies are often referred to as independents because their "upstream" operations are not integrated with "downstream" operations such as refining or petrochemical production. Most such firms were spun off from larger corporations, including railroads, integrated oil and gas companies, pipeline companies, or utilities. A number of companies originated in a single field, and grew by acquiring smaller competitors or individual properties from larger competitors.

Independents with oil and gas reserves predominantly in the Americas tend to have higher cost profiles than their international counterparts, because the American continent is a geographically mature region with many oil and gas fields in the late stages of their lives. In many cases, these independents bought their properties from the international integrated oils, which were focused on higher-return operations abroad.

The independent E&P companies in the North American natural gas sector are cost competitive, due to tight supply and demand conditions and a lack of competition from cheaper imports. Thus, they are key players in North American natural gas. New drilling technologies have also allowed for more cost-effective onshore crude oil and NGL extraction from previously economically unviable unconventional resource basins. This has made independent E&P companies more competitive in North American oil production.

Energy Equipment & Services Companies
There are four major types of energy equipment & services businesses: offshore oil rigs, onshore oil rigs, drilling equipment, and services. Drilling companies provide the rigs and operate them, either on a project or long-term contract basis. Typically, land drillers operate under varying types of contracts, with rates charged either by the day, foot drilled, or on an all-inclusive or "turnkey" basis. Offshore drilling contracts are mostly written on a daywork basis, with an occasional turnkey contract. Major drilling companies include Helmerich & Payne, Transocean, Patterson-UTI Energy, and Ensco.

Oilfield service companies provide the tools and services required to expedite the drilling of the well. These companies manufacture equipment or build it on site, maintain it once in operation, and provide related products and services, including geological evaluations. Their customers may include oil and gas producers, as well as drilling companies. Service providers encompass the companies that provide ancillary services (often of a highly technical nature) to the actual drilling. Schlumberger, Halliburton, Baker Hughes, and National Oilwell Varco are among the largest oilfield services companies in the U.S.

Midstream Services Companies
Services provided to oil and gas producers by the midstream firms include transportation, storage, and trading of oil, natural gas, and refined products. Many of these companies are structured as limited partnerships, which confer tax advantages for their unit holders. Major independent participants include Enterprise Products Partners LP, Kinder Morgan Inc., TransCanada Corp., and The Williams Companies.

Refining and Marketing Companies
Refining and marketing firms refine and sell crude oil products such as gasoline, jet fuel, heating oil, motor oil, and various lubricants. These companies included HollyFrontier Corp., Marathon Petroleum Corp., Phillips 66 Co., Tesoro Corp., and Valero Energy Corp. Several large privately held participants include Koch Industries Inc., PDV America Inc., and Motiva Enterprises LLC.

ENERGY VALUE CHAIN

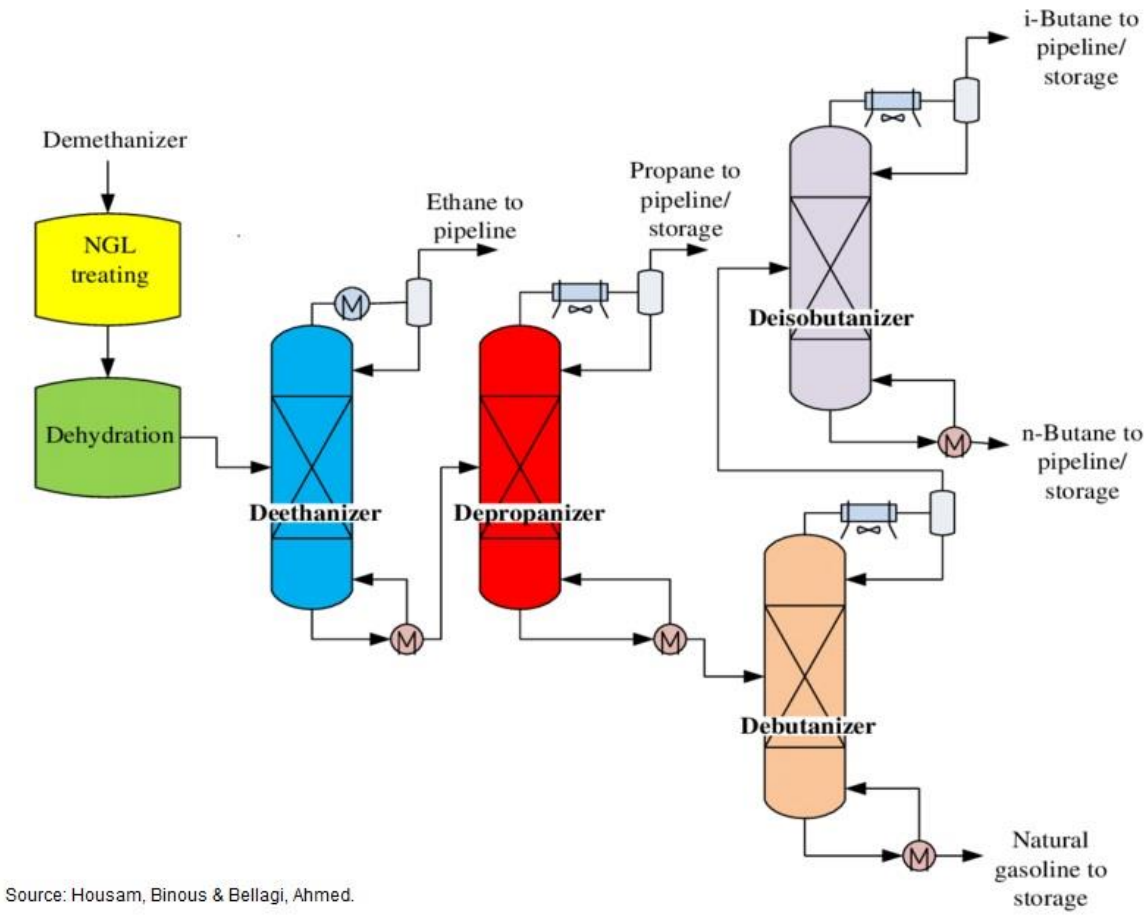
Source: CFRA.

What Drives Demand?

The midstream space comprises processing complex hydrocarbons into individual streams and transportation of those streams to centers of demand. Often, the supply centers (such as the Permian Basin, which is found in West Texas and New Mexico) are located hundreds of miles from either key demand centers (such as Chicago or New York), or major refineries (the U.S. Gulf Coast, which handles about half of all U.S. refining capacity, and is a major hub for exports). Generally speaking, the lowest cost method of transportation for dry natural gas or liquids is a pipeline.

Complex Streams

Upstream producers that bring liquids to the surface have to do something with the heterogeneous stream of hydrocarbons that are produced. Imagine going to a restaurant and discovering that the kitchen can only make one meal, comprised of every item in their refrigerator, and whether you like it or not. This is similar to the situation that producers face. A producing well can bring, to the surface, a combination of crude oil, natural gas, NGLs, sand, rock cuttings, water, and wastewater. All of them need to go to different places. Some of them are relatively easier to handle (wastewater, for example, is often disposed of via re-injection wells), but others are more complicated. NGLs actually have to be separated twice – first, by removing the dry gas, and then second, by breaking down the raw NGLs into their so-called purity products.



Source: Housam, Binous & Bellagi, Ahmed.

HOW TO ANALYZE A COMPANY IN THIS INDUSTRY

At CFRA, we recommend a top-down approach to valuation. An examination of the industry drivers outlined on page 8 – liquids prices and volumes, natural gas spot prices, interest rates, and crude oil exports – is a good starting point.

Industry Drivers

◆ **Oil and gas volumes.** Volumes are more relevant than prices – the opposite of what matters more for upstream producers. Most midstream firms are essentially toll collectors. The inherent value of the hydrocarbons being moved from A to B is for the most part irrelevant – just that they need moving at all. There are some lines of business, or some companies, that choose to use percent-of-proceeds for revenues, in which case the inherent prices do matter, but those are less common.

◆ **Oil and gas prices.** Having just said that, prices don't really matter; they do, but mainly for downside risk. If prices fall so far that upstream firms say "enough is enough", and stop producing, then the pipelines to which they are contracted are not needed. Midstream firms protect themselves from this risk via take-or-pay contracts, but eventually, these long-term deals expire. A major customer on a pipeline who elects not to renew is sort of like an anchor tenant at a suburban mall. Once the anchor tenant is gone, it's possible that the mall will founder.

◆ **Interest rates.** The level and direction of interest rates may influence how active a company will be in making acquisitions and in other uses of cash, such as capital expenditures, dividends, and stock repurchases. High or rising interest rates increase the cost of borrowing; this in turn may reduce companies' willingness to make big outlays, such as those needed to undertake a sizable facility expansion, or a share repurchase program. The reverse is also true: low or falling interest rates decrease the cost of borrowing, thus making capital expenditures and the like more affordable. Longer-term U.S. interest rates can be influenced by various factors, including credit demand, foreign investors' interest in owning U.S. debt, and the U.S. inflation rate.

In addition, income-oriented investors are sensitive to interest rates when evaluating a midstream company's shares. If interest rates are rising, these investors may be able to receive comparable returns elsewhere and, consequently, would be less likely to purchase a midstream stock that did not provide a comparable yield.

◆ **Fractionation spread (frac spread).** Fractionation involves separating the NGLs into their purity products so that the right purity product can be sent to the right place before being consumed. The frac spread is a metric designed to measure the margin between the value of purity products (ethane, propane, butane, isobutane, and natural gasoline) and the cost of natural gas. NGL purity products that have additional carbon atoms in their chemical compositions are more valuable. Typically, ethane has relatively low value, and natural gasoline has relatively high value. Negative frac spread usually occurs when the increase in natural gas prices is not accompanied by an increase in the prices of purity products.

Company Analysis

After gaining an understanding of the industry's drivers, an analyst should then focus on company-specific analysis. Company-specific analysis focuses on a range of factors – both qualitative and quantitative – and should be used to evaluate a firm's strengths and weaknesses, as well as assess its overall position within the overall midstream landscape.

Qualitative Measures

Product Mix
Natural gas, NGLs, crude oil, refined products – all variations with different market pricing.

Location
Appalachia Basin, Gulf Coast access, Permian Basin, etc.

Quantitative Measures

Quantitative factors in the company analysis include trends in revenue, profit margins, EPS, cash flow items, and balance sheet items. Investors use various performance measures to identify firms with the greatest potential for growth and performance. For peer comparison, performance measures for midstream companies are usually normalized on a "per-barrel" basis. The first step, however, is to review recent and historical financial results.

Revenues
In reviewing revenues, growth is good to see – but it is also relative. A company's revenue growth rate should be compared with those of both its markets and its competitors. It is important to determine the sustainability of revenue. If one-time factors have either inflated or depressed results in a prior period, these should be examined as well. Also, equally important is the reason behind any revenue growth. Does it come from price increases or volume gains? Has the company made acquisitions? Is the company gaining market share, or is it just riding market growth?

For many companies, it is also important to look at revenue growth over a full year or on a year-over-year basis, rather than making sequential (quarter-to-quarter) comparisons. Seasonal factors can influence revenues in any given quarter. The midstream space is a volume-driven section of the energy value chain, and movement of hydrocarbon volumes are affected by both commodities prices and demand for petrochemicals from the U.S. and international markets.

Watch Out! *When companies engage in material related party transactions, there can be no assurance that such transactions were conducted (1) on terms that two independent parties would have realized or (2) in the best interests of shareholders. In the oil and gas industry, related party transactions often arise, particularly at companies operating with master limited partnership (MLP) structures. Related party transactions in this sector typically involve the company investing in a venture that will, in turn, purchase (or sell) products and services from (or to) the company. CFRA typically reviews the governance policies and committees when reviewing companies with related party transactions.*

Profit Margin
Profitability ratios or margins are measures of how successful a company is in turning revenues into profits. When analyzing profitability ratios, the investor should compare a company against its own past performance and against the performance of similar companies while considering the sustainability of such profits. In CFRA's view, trends in profit margins should be evaluated. Several factors – including acquisitions, fluctuations in necessary raw material costs, and changes in pricing – can cause significant volatility.

A company's cost structure should be examined. How important are input costs (*e.g.*, natural gas prices) and labor? CFRA advises trying to learn if the company has locked in a price on some of the costs for the year ahead. (Locking in a price is sometimes known as hedging.)

Watch Out! *Losses can be deferred, or earnings smoothed by gaming hedge accounting. Economic activity (hedging that does not meet the requirements of FASB ASC Topic 815) can mask trading activities and speculation. When hedge accounting is inappropriately applied, companies may fail to reflect changes in the market value of derivatives in the income statement as required.*

It is advisable to keep an eye on a company's overall operating profit margin. If it starts to narrow, this could be a warning signal that the company's cost structure is deteriorating. However, sometimes a company will incur additional short-term costs from which it expects to receive longer-term benefits.

Earnings Per Share (EPS)

EPS can be analyzed in several ways. Be on the lookout for special (sometimes called "extraordinary" or "nonrecurring") items, such as asset sales and restructuring charges (*e.g.,* for plant closings or employee layoffs) that can significantly affect the reported EPS. Adjusting EPS to exclude special items may provide a more meaningful growth comparison between different quarters or years. In addition, adjusted EPS can be an important benchmark for valuing the company's stock against those of its peers, as well as against companies outside the industry. However, special charges may occur regularly over a multi-year period, and this should be considered when assessing the business.

U.S. accounting standards give companies substantial flexibility to prop up per share earnings, at least for a short time. For example, this can be accomplished by capitalizing interests or by stretching out a depreciation or depletion schedule. In addition, year-over-year results may be affected by a more extensive accounting change, such as using a different method for valuing inventory.

Watch Out! *Companies can boost current earnings and cash flow from operations by capitalizing an excessive amount of interest costs to fixed assets rather than expensing the costs as incurred. To detect potential manipulation of capitalized interest, investors can analyze trends in capitalized interest relative to total interest costs as well as capitalized interest relative to total capital expenditures. If these ratios are increasing, a company may be manipulating earnings by capitalizing interest costs that are normally expensed.*

Watch Out! *Companies can boost earnings by extending the depreciable/depletable lives of property, plant and equipment (PP&E) beyond the implied reserve life and/or reasonable useful lives. All companies in the oil and gas sector are fixed asset intensive and depreciation/depletion is a significant expense for most of these companies. Companies with exploration and production operations (integrated oils, independent producers, some natural gas pipelines) generally depreciate/deplete their proved property costs using the units-of-production method, which is based on an estimate of units (either barrels of oil or million cubic feet of natural gas) held in hydrocarbon reservoirs. Since depreciation/depletion is based on reserves volume estimates, management can manipulate this estimate to manage earnings.*

Watch Out! *Oil and gas companies incur costs involving reclamation such as earthwork, sealing mines, re-vegetation, water treatment, demolition of buildings, and post-closure maintenance. An estimate of reclamation costs requires management to make estimates about capacity, the cost of materials and labor required for reclamation, the timing of payments (which include estimates of inflation), and discount rates. Companies may boost earnings by underestimating the retirement obligation liability or extending the time over which the related asset account is depreciated. Companies may also create an excessive liability which could be reversed into earnings in future periods.*

Cash Flow Analysis

Reported earnings do not always provide a clear reflection of cash flow generation or financial strength. It is important to evaluate businesses based on how much cash they generate and absorb. These figures may differ substantially from reported earnings. To analyze sources and uses of cash, CFRA advises consulting a company's consolidated statement of cash flows.

Companies frequently have cash outlays that are not included on the income statement, such as capital expenditures on new construction and renovations, debt repayment, and dividends to shareholders. These items, which appear on the cash flow statement and are reflected on the balance sheet, are sometimes discretionary and should be considered when evaluating a company's cash flow.

It is important for a company to find the optimal balance between reinvesting surplus cash in its businesses and using the cash to reward present shareholders. A variety of factors may affect a company's dividend policy and stock repurchase activity, including how much cash the company generates and what the tax laws are.

Both earnings and cash flow are subject to various interpretations of accounting rules. The cash flow statement gives a detailed look at where a company's cash comes from and where it goes. An important question to ask is how much of that cash was generated from recurring earnings rather than various accounting adjustments and nonrecurring items. It is cash flow, not earnings, that determines whether a company will be able to cover its future spending. Cash flow growth is an important confirmation of EPS growth. Investors look for consistent growth trends for earnings and cash flow and prefer companies that can use their own cash to finance future growth. Negative cash flow may signal unsustainable cash burn for companies with little growth. However, if it yields high growth, it may signal a valuable investment.

Balance Sheet Analysis

Balance sheet ratios may offer a view of a company's financial health. They also may indicate how well a company is putting its assets or capital to work. Book value measures the balance sheet value of a company's assets minus its liabilities. Particular attention should be paid to "tangible" book value, which gives credit to assets like land, buildings, and equipment, but excludes items such as goodwill (which may include a portion of the purchase price of previous acquisitions).

Keep in mind that balance sheet valuations may not reflect assets' replacement cost or their worth to someone else. In addition, the extent to which intangible assets (like a brand name or customer loyalty) contribute to a company's worth may not be adequately reflected in a company's book value, even though they may add greatly to the company's worth.

Also, look for non-core assets that could possibly be divested, generating proceeds that may be used to reduce debt, repurchase stock, or invest in other businesses. When considering significant potential divestitures, it is advisable to take into account whether an asset sale would likely lead to a sizable tax bill.

In addition, it is advisable to consider whether a company's physical assets are adequately maintained or refreshed. For companies that own properties, a portion of capital spending (known as maintenance capital expenditures) typically goes toward maintaining or refreshing their facilities. Other capital expenditures may be oriented toward expansion or growth (expanding pipeline or storage capacity).

Balance sheet ratios should be examined to spot possible cash flow problems. A significant change in a company's current ratio can signal a potential drain in the capital needed to run the business.

The ratio of net debt-to-total capitalization varies considerably among the midstream companies. However, companies with strong and relatively stable cash flow should generally be able to accommodate higher relative debt levels. Analysts must weigh the benefits of higher debt, which could leverage EPS growth and shareholder returns, with the benefits of a "cleaner" balance sheet, which is likely to provide a higher degree of safety and more-ready availability of funds. Too much debt increases financial risk, but too little might mean missed opportunities.

In addition, consider whether the company has any commitments or prospective liabilities that are not included on its balance sheet. This could include a conditional guarantee to repay debt of another firm or a commitment to buy back, upon request, some of its own debt at a future point. Try to determine the existence or likelihood of any triggering events that could cause debt holders to demand early repayment.

Watch Out! *Companies may structure agreements, interests in entities, and other transactions to avoid consolidation. This financial engineering has the potential to mislead investors about a company's financial position and/or future obligations and give investors an incomplete picture of future cash requirements and/or other risks. While the FASB's elimination of the purely quantitative consolidation assessment should make it more difficult for entities to structure contracts, agreements, and transactions to avoid financial statement consolidation, CFRA still raises concern that some entities may avoid consolidation of variable interest entities through financial structuring. The lack of consolidation serves to distort financial ratios and does not clearly communicate the risk associated with an entity's operations.*

Valuation Measures

Valuation measures are used to determine how much a company, or its stock, is worth. Common measurements include multiples of cash flow and earnings, with growth rates used as a tool to decide which multiple to pay.

Valuations depend on various factors, including overall investor sentiment, industry conditions, the level of interest rates, and the extent to which future earnings seem predictable. As is the case with other measures, valuations of a particular company should be compared with those of similar companies in the same industry.

◆ **Relative valuation approaches.** Relative valuation approaches shed light on what the market will bear. These include multiple valuation methods, which do not forecast cash flows, but infer the value of a target company by its performance relative to comparable companies. Critical to the success of these methods is the careful selection of firms with business lines that are like those of the target company. Commonly compared ratios are forward stock price-to-earnings (P/E); forward price-to-cash flow; forward P/E to long-term growth (PEG); and enterprise value to earnings before interest, taxes, depreciation, and amortization (EV/EBITDA).

CFRA thinks that, on average, the market yields higher multiples to rapidly growing companies and lower multiples to stagnant firms.

◆ **Discounting of estimated future cash flows.** The discounting of estimated future cash flows is theoretically appealing, but the forecasting of future oil and natural gas prices and discount rates involves considerable uncertainty. Furthermore, since a large portion of a firm's cash flow occurs in later years, the choice and estimation of the terminal value is critical.

GLOSSARY

Btu—British thermal unit; the amount of heat required to increase the temperature of one pound of water by one degree Fahrenheit. Used as a common measure of heating value for different fuels.

C Corporation (C-Corp)—A legal structure for a corporation in which the owners, or shareholders, are taxed separately from the entity.

Crack spread—The spread differential typically used in the financial markets as a measure of the refining margin. It is the difference between weighted spot prices of refined petroleum products and an associated crude oil feedstock, expressed on a per-barrel basis.

Deepwater—Underwater drilling operations located in depths of 3,000 to 5,000 feet. Ultra-deepwater refers to depths greater than 5,000 feet.

Development—The preparation of a mineral deposit for commercial production, including construction of access and extraction facilities.

Development costs—Expenses incurred to obtain access to proven reserves of oil and gas and to provide facilities for extracting, treating, gathering, and storing.

Henry Hub—A pipeline hub on the Louisiana Gulf Coast that is the delivery point for the natural gas futures contract on the New York Mercantile Exchange (NYMEX).

Hydrocarbon—An organic chemical compound of hydrogen and carbon in the gaseous, liquid, or solid phase. The molecular structure of hydrocarbon compounds varies from simple (*e.g.,* methane, a constituent of natural gas) to very heavy and very complex (*e.g.*, asphalt).

Liquefaction train—A liquefaction and purification facility used in industrial process to convert natural gas into liquefied natural gas.

Liquefied natural gas (LNG)—Natural gas (primarily methane) that has been liquefied by reducing its temperature to –260 degrees Fahrenheit at atmospheric pressure.

Liquefied petroleum gases (LPG)—A group of hydrocarbon-based gases derived from crude oil refining or natural gas fractionation. They include ethane, ethylene, propane, propylene, normal butane, butylene, isobutane, and isobutylene. For convenience of transportation, these gases are liquefied through pressurization.

Master limited partnership (MLP)—A business venture that exists in the form of a publicly traded limited partnership. All partnerships (including MLPs) in the U.S. pay no income tax at the partnership level, which could help to reduce cost of capital in capital-intensive businesses, such as energy sector.

Mcf—One thousand cubic feet; the standard measure of natural gas volume.

Natural gas liquid (NGL)—The portion of natural gas (including ethane, propane, and butane) that is stripped out as liquids at the Earth's surface by special processing facilities.

Organization of the Petroleum Exporting Countries (OPEC)—A cartel formed by nations that are substantial net exporters of oil. Founded in 1960 by Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela, OPEC today has 12 member countries and is headquartered in Vienna, Austria. The cartel has the following stated objectives: to coordinate and unify the petroleum policies of its member countries; to safeguard its members' individual and collective interests; to stabilize the price of oil; to provide an efficient, economic, and regulated petroleum supply to oil-consuming nations; and to provide a fair return on capital (ROC) to those investing in the petroleum industry.

Proved reserves—Estimated quantities of energy sources that analysis of geologic and engineering data demonstrates with reasonable certainty are recoverable under existing economic and operating conditions. In such reserves, the location, quantity, and grade of the energy source are usually well established.

West Texas Intermediate (WTI) crude oil—The global energy industry currently considers the U.S. benchmark for crude oil as "WTI for delivery at Cushing, Oklahoma". While traders now refer to the "NYMEX Light Sweet Crude" futures contract, the contract allows delivery of other grades (including six U.S. grades and six non-U.S. grades).

INDUSTRY REFERENCES

PERIODICALS

Natural Gas Week
Oil Daily
Petroleum Intelligence Weekly
energyintel.com
Newsletters and special reports on oil and gas pricing, and developments of domestic and international significance.

Offshore
Oil & Gas Journal
offshore-mag.com
ogj.com
Journals containing analysis, charts, illustrations, and market statistics on the oil and gas industry.

Oil and Gas Investor
oilandgasinvestor.com
Contains analysis and market statistics on the petroleum and power industry.

Oil Market Report
iea.org/oilmarketreport
Covers world oil demand, supply, stocks, prices, and outlook.

Oilgram Price Report
Platts Oil Arbitrage Wire
Platts Oilgram News
platts.com
Newsletters reporting on oil and gas developments of international significance. S&P Global Platts is a division of S&P Global.

RESEARCH FIRMS

IHS Markit
ihs.com
Research company that provides comprehensive economic, financial, and political coverage to support planning and decision-making.

TRADE ASSOCIATIONS

American Petroleum Institute
api.org
Trade association representing all branches of the U.S. petroleum industry. Publishes statistics covering all aspects of the oil and gas industry, including weekly inventory reports for crude oil and petroleum products.

GOVERNMENT AGENCIES

Energy Information Administration
eia.gov
Established by Congress in 1977; a statistical agency of the U.S. Department of Energy that provides policy-independent data, forecasts, and analyses related to domestic energy industries.

Environmental Protection Agency
epa.gov
Federal agency that oversees the nation's environmental safety; enacts and enforces environmental laws. Many states also maintain environmental agencies.

Eurostat
https://ec.europa.eu/eurostat
Provides statistical information to the institutions of the European Union and to promote the harmonization of statistical methods across its member states and candidates for accession as well as EFTA countries.

International Energy Agency
iea.org
An energy forum for 28 of the 30 member countries of the OECD, which have governments committed to taking joint measures to meet oil supply emergencies. Members, which include the U.S., share energy information, coordinate their energy policies, and cooperate in the development of rational energy programs.

International Renewable Energy Agency
irena.org
International organization mandated to promote the adoption and sustainable use of renewable energy.

U.S. Department of Energy
energy.gov
Federal agency that manages the nation's nuclear infrastructure and administers the nation's energy policy.

Organisation for Economic Co-operation and Development (OECD)
oecd.org
With 34 member countries, including the U.S., the OECD is a forum for these market democracies to discuss, develop, and refine economic and social policies, including energy policies.

Organization of the Petroleum Exporting Countries
opec.org
Permanent intergovernmental organization of 12 oil-exporting developing nations, which coordinates and unifies the petroleum policies of its member countries, all of which are substantial net exporters of oil.

Petroleum Planning & Analysis Cell
ppac.org
An Oil Coordination Committee attached to the Ministry of Petroleum and Natural Gas, Government of India.

CORPORATE INFORMATION

Baker Hughes Rig Count
bakerhughes.com
Estimates of rotary rig counts, provided by Baker Hughes to the petroleum industry since 1944. Includes free weekly estimates of U.S. and Canadian rotary rig counts, monthly international rotary rig counts, and the U.S. and Canadian workover rig count.

BP Statistical Review of World Energy
bp.com
Published by oil company BP plc, this annual report provides an overview of trends and developments in the energy market.

Investing.com
Investing.com
A financial platform and news website; one of the top three global financial websites in the world.

Oil Patch Bankruptcy Monitor
haynesboone.com
Published by law firm Haynes and Boone LLP, this report includes details on oil and gas producers that have filed for bankruptcy since the beginning of 2015.

COMPARATIVE COMPANY ANALYSIS

Ticker		Company	Yr. End	Operating Revenues Million $ 2022	2021	2020	2019	2018	2017	2016	CAGR(%) 10-Yr.	5-Yr.	1-Yr.	Index Basis (2008=100) 2022	2021	2020	2019	2018	2017
GATHERING & PROCESSING																			
AM	†	ANTERO MIDSTREAM CORPORATION	DEC	990.7	968.9	971.4	849.6	0.0	0.0	16.9	NA	NA	2.2	5847	5718	5733	5014	0	0
DCP		DCP MIDSTREAM, LP	DEC	15,196.0	11,325.0	6,146.0	7,638.0	9,863.0	8,502.0	6,916.0	18.6	12.3	34.2	220	164	89	110	143	123
ENLC		ENLINK MIDSTREAM, LLC	DEC	9,527.8	6,845.0	3,915.8	6,038.5	7,693.8	5,743.8	4,263.5	17.4	10.7	39.2	223	161	92	142	180	135
TSX:KEY		KEYERA CORP.	DEC	5,216.6	3,939.1	2,364.2	2,788.6	3,272.3	2,721.8	1,861.2	9.1	15.6	41.6	280	212	127	150	176	146
SMLP		SUMMIT MIDSTREAM PARTNERS, LP	DEC	369.6	401.6	384.4	444.7	508.2	490.3	402.8	7.8	(5.5)	(8.0)	92	100	95	110	126	122
WES		WESTERN MIDSTREAM PARTNERS, LP	DEC	3,251.7	2,877.2	2,772.6	2,746.2	2,299.7	2,429.6	1,804.3	13.8	6.0	13.0	180	159	154	152	127	135
TRANSPORTATION																			
TSX:ENB		ENBRIDGE INC.	DEC	39,388.4	37,195.9	30,675.7	38,602.7	33,988.0	35,386.9	25,729.2	8.0	3.7	13.3	153	145	119	150	132	138
ENB		ENERGY TRANSFER LP	DEC	89,876.0	67,417.0	38,954.0	54,213.0	54,087.0	40,523.0	31,792.0	18.1	17.3	33.3	283	212	123	171	170	127
EPD		ENTERPRISE PRODUCTS PARTNERS L.P.	DEC	58,186.0	40,807.0	27,200.0	32,789.2	36,534.2	29,241.5	23,022.3	3.2	14.8	42.6	253	177	118	142	159	127
NFE		NEW FORTRESS ENERGY INC.	DEC	2,368.3	1,322.8	451.7	189.1	112.3	97.3	21.4	NA	89.4	79.0	11069	6183	2111	884	525	455
GEL		GENESIS ENERGY, L.P.	DEC	2,789.0	2,125.5	1,824.7	2,480.8	2,912.8	2,028.4	1,712.5	(1.9)	6.6	31.2	163	124	107	145	170	118
GLP		GLOBAL PARTNERS LP	DEC	18,877.9	13,248.3	8,321.6	13,081.7	12,672.6	8,920.6	8,239.6	0.7	16.2	42.5	229	161	101	159	154	108
HEP		HOLLY ENERGY PARTNERS, L.P.	DEC	547.5	494.5	497.8	532.8	506.2	454.4	402.0	6.5	3.8	10.7	136	123	124	133	126	113
KMI	[]	KINDER MORGAN, INC.	DEC	19,200.0	16,610.0	11,700.0	13,209.0	14,144.0	13,705.0	13,058.0	6.8	7.0	15.6	147	127	90	101	108	105
IPL		MAGELLAN MIDSTREAM PARTNERS, L.P.	DEC	3,200.4	2,733.1	2,322.0	2,600.9	2,826.6	2,507.7	2,205.4	6.1	5.0	17.1	145	124	105	118	128	114
MPLX		MPLX LP	DEC	11,137.0	9,706.0	8,505.0	8,751.0	6,758.0	3,789.0	3,103.0	37.5	24.1	14.7	359	313	274	282	218	122
NS		NUSTAR ENERGY L.P.	DEC	1,683.2	1,618.5	1,481.6	1,498.0	1,520.3	1,444.8	1,756.7	(11.9)	3.1	4.0	96	92	84	85	87	82
LNG		CHENIERE ENERGY, INC.	DEC	33,306.0	17,531.0	9,293.0	9,157.0	7,995.0	5,646.0	1,287.0	62.1	42.6	90.0	2588	1362	722	711	621	439
TSX:PPL		PEMBINA PIPELINE CORPORATION	DEC	8,579.0	6,817.1	4,672.0	5,574.3	5,387.2	4,305.9	3,175.2	13.0	16.5	34.6	270	215	147	176	170	136
CQP		CHENIERE ENERGY PARTNERS, L.P.	DEC	17,206.0	9,434.0	6,167.0	6,838.0	6,426.0	4,304.0	1,100.0	51.8	31.9	82.4	1564	858	561	622	584	391
PAA		PLAINS ALL AMERICAN PIPELINE, L.P.	DEC	57,342.0	42,078.0	23,290.0	33,669.0	34,055.0	26,223.0	20,182.0	4.3	16.9	36.3	284	208	115	167	169	130
PPL	[]	TARGA RESOURCES CORP.	DEC	20,929.8	16,949.8	8,260.3	8,671.1	10,484.0	8,814.9	6,690.9	13.9	18.9	23.5	313	253	123	130	157	132
NYSE:TRP		TC ENERGY CORPORATION	DEC	11,066.0	10,578.5	10,201.7	10,219.5	10,024.6	10,724.2	9,341.0	6.5	2.2	11.9	118	113	109	109	107	115
WMB	[]	THE WILLIAMS COMPANIES, INC.	DEC	11,352.0	10,775.0	7,724.0	8,199.0	8,686.0	8,031.0	7,499.0	4.3	7.2	5.4	151	144	103	109	116	107

Note: Data as originally reported. CAGR-Compound annual growth rate. []Company included in the S&P 500. #Of the following calendar year.
Souce: S&P Capital IQ.

Net Income

Ticker		Company	Yr. End	Million $ 2022	2021	2020	2019	2018	2017	2016	CAGR(%) 10-Yr.	5-Yr.	1-Yr.	Index Basis (2008=100) 2022	2021	2020	2019	2018	2017
GATHERING & PROCESSING																			
AM	†	ANTERO MIDSTREAM CORPORATION	DEC	326.2	331.6	(122.5)	(355.1)	66.6	2.3	9.7	NA	168.8	(1.6)	3,360	3,415	NM	NM	686	24
DCP		DCP MIDSTREAM, LP	DEC	1,052.0	391.0	(306.0)	(101.0)	134.0	65.0	188.0	19.6	74.5	169.1	560	208	(163)	(54)	71	35
ENLC		ENLINK MIDSTREAM, LLC	DEC	361.3	22.4	(421.5)	(1,119.3)	(13.2)	212.8	(460.0)	16.9	11.2	1512.9	(79)	(5)	92	243	3	(46)
TSX:KEY		KEYERA CORP.	DEC	242.6	256.2	48.7	342.0	295.2	231.2	161.4	9.7	2.5	1.3	150	159	30	212	183	143
SMLP		SUMMIT MIDSTREAM PARTNERS, LP	DEC	(123.5)	(19.9)	192.4	(184.5)	33.1	76.2	(45.5)	NA	NM	518.9	272	44	(423)	406	(73)	(168)
WES		WESTERN MIDSTREAM PARTNERS, LP	DEC	1,189.6	896.5	515.9	662.3	369.4	376.6	334.4	34.5	25.9	32.7	356	268	154	198	110	113
TRANSPORTATION																			
TSX:ENB		ENBRIDGE INC.	DEC	2,218.8	4,890.6	2,639.3	4,398.5	2,112.1	2,279.8	1,540.3	15.6	1.0	(51.5)	144	318	171	286	137	148
ENB		ENERGY TRANSFER LP	DEC	4,752.0	5,464.0	(647.0)	3,514.0	1,746.0	952.0	992.0	31.7	37.9	(13.0)	479	551	(65)	354	176	96
EPD		ENTERPRISE PRODUCTS PARTNERS L.P.	DEC	5,490.0	4,638.0	3,776.0	4,591.3	4,172.4	2,799.3	2,513.1	8.5	14.4	18.4	218	185	150	183	166	111
NFE		NEW FORTRESS ENERGY INC.	DEC	194.5	97.1	(182.1)	(33.8)	(78.1)	(31.7)	(32.9)	NA	NM	100.3	(591)	(295)	553	103	237	96
GEL		GENESIS ENERGY, L.P.	DEC	75.5	(165.1)	(416.7)	96.0	(6.1)	82.6	113.2	(2.4)	(1.8)	NM	67	(146)	(368)	85	(5)	73
GLP		GLOBAL PARTNERS LP	DEC	355.1	57.2	100.8	34.5	102.9	58.4	(198.1)	22.8	43.5	520.6	(179)	(29)	(51)	(17)	(52)	(29)
HEP		HOLLY ENERGY PARTNERS, L.P.	DEC	216.8	214.9	170.5	224.9	178.8	160.0	101.1	11.7	6.3	0.9	214	213	169	223	177	158
KMI	[]	KINDER MORGAN, INC.	DEC	2,548.0	1,784.0	119.0	2,190.0	1,609.0	183.0	708.0	23.3	69.3	42.8	360	252	17	309	227	26
IPL		MAGELLAN MIDSTREAM PARTNERS, L.P.	DEC	1,036.4	982.0	817.0	1,020.8	1,333.9	869.5	802.8	9.1	3.6	5.5	129	122	102	127	166	108
MPLX		MPLX LP	DEC	3,944.0	3,077.0	(720.0)	1,434.0	1,990.0	512.0	241.0	40.6	50.4	28.2	1,637	1,277	(299)	595	826	212
NS		NUSTAR ENERGY L.P.	DEC	222.7	38.2	(199.0)	(105.7)	205.8	148.0	104.5	NA	8.5	482.7	213	37	(190)	(101)	197	142
LNG		CHENIERE ENERGY, INC.	DEC	1,428.0	(2,343.0)	(85.0)	648.0	471.0	(393.0)	(610.0)	NA	NM	NM	(234)	384	14	(106)	(77)	64
TSX:PPL		PEMBINA PIPELINE CORPORATION	DEC	2,195.2	981.4	(248.0)	1,161.9	936.6	704.1	346.9	29.4	27.5	139.2	633	283	(71)	335	270	203
CQP		CHENIERE ENERGY PARTNERS, L.P.	DEC	2,498.0	1,630.0	1,183.0	1,175.0	1,274.0	490.0	(171.0)	NA	38.5	53.3	NM	(953)	(692)	(687)	(745)	(287)
PAA		PLAINS ALL AMERICAN PIPELINE, L.P.	DEC	1,037.0	593.0	(2,590.0)	2,171.0	2,216.0	856.0	333.0	2.8	3.9	74.9	311	178	(778)	652	665	257
PPL	[]	TARGA RESOURCES CORP.	DEC	1,195.5	71.2	(1,553.9)	(209.2)	1.6	54.0	(187.3)	41.1	85.8	1579.1	(638)	(38)	830	112	(1)	(29)
NYSE:TRP		TC ENERGY CORPORATION	DEC	552.7	1,544.9	3,622.7	3,191.9	2,713.0	2,517.4	173.5	(5.8)	(25.0)	(61.7)	319	891	2,088	1,840	1,564	1,451
WMB	[]	THE WILLIAMS COMPANIES, INC.	DEC	2,049.0	1,517.0	211.0	850.0	(155.0)	2,174.0	(424.0)	9.1	(1.2)	35.1	(483)	(358)	(50)	(200)	37	(513)

Note: Data as originally reported. CAGR-Compound annual growth rate. []Company included in the S&P 500. #Of the following calendar year.
Souce: S&P Capital IQ.

Ticker		Company	Yr. End	Return on Revenues (%)						Return on Assets (%)						Return on Equity (%)					
				2022	2021	2020	2019	2018	2017	2022	2021	2020	2019	2018	2017	2022	2021	2020	2019	2018	2017
GATHERING & PROCESSING																					
AM	†	ANTERO MIDSTREAM CORPORATION	DEC	32.9	34.2	NM	NM	0.0	0.0	5.6	6.0	NM	NM	139.6	7.8	14.6	14.1	NM	NM	286.7	18.0
DCP		DCP MIDSTREAM, LP	DEC	6.9	3.5	NM	NM	1.4	0.8	7.9	2.9	NM	NM	0.9	0.5	17.7	6.7	NM	0.3	4.1	3.3
ENLC		ENLINK MIDSTREAM, LLC	DEC	3.8	0.3	NM	NM	NM	3.7	4.2	0.3	NM	NM	NM	2.0	17.0	4.6	NM	NM	NM	5.9
TSX:KEY		KEYERA CORP.	DEC	4.6	6.5	2.1	12.3	9.0	8.5	3.8	4.0	0.8	5.9	6.1	4.9	12.0	12.0	2.1	15.2	15.3	13.4
SMLP		SUMMIT MIDSTREAM PARTNERS, LP	DEC	NM	NM	50.0	NM	6.5	15.5	NM	NM	7.7	NM	1.1	2.6	NM	NM	20.7	NM	3.2	6.7
WES		WESTERN MIDSTREAM PARTNERS, LP	DEC	36.6	31.2	18.6	24.1	16.1	15.5	10.6	8.0	4.4	5.4	3.2	4.7	40.3	31.5	16.6	18.9	10.2	14.2
TRANSPORTATION																					
TSX:ENB		ENBRIDGE INC.	DEC	5.6	13.1	8.6	11.4	6.2	6.4	1.7	3.7	2.1	3.5	1.7	1.8	4.6	9.9	5.1	8.2	4.7	6.9
ENB		ENERGY TRANSFER LP	DEC	5.3	8.1	NM	6.5	3.2	2.3	4.5	5.2	NM	3.6	2.0	1.1	14.4	18.5	0.4	14.6	12.0	9.7
EPD		ENTERPRISE PRODUCTS PARTNERS L.P.	DEC	9.4	11.4	13.9	14.0	11.4	9.6	8.1	6.9	5.9	7.4	7.3	5.1	20.7	18.3	15.2	18.7	18.0	12.7
NFE		NEW FORTRESS ENERGY INC.	DEC	8.2	7.3	NM	NM	NM	NM	2.5	1.4	NM	NM	NM	NM	10.8	7.8	NM	NM	NM	NM
GEL		GENESIS ENERGY, L.P.	DEC	2.7	NM	NM	3.9	NM	4.1	1.2	NM	NM	1.5	NM	1.2	6.7	NM	NM	4.1	NM	3.4
GLP		GLOBAL PARTNERS LP	DEC	1.9	0.4	1.2	0.3	0.8	0.7	11.2	2.0	4.0	1.2	4.2	2.5	55.0	11.9	21.3	7.3	22.9	14.4
HEP		HOLLY ENERGY PARTNERS, L.P.	DEC	39.6	43.5	34.2	42.2	35.3	35.2	7.9	9.9	7.9	10.2	8.5	7.4	28.1	37.5	32.7	42.4	34.2	38.8
KMI	[]	KINDER MORGAN, INC.	DEC	13.3	10.7	1.0	16.6	11.4	1.3	3.6	2.5	0.2	3.0	2.0	0.2	8.2	5.7	0.5	6.4	5.5	0.6
IPL		MAGELLAN MIDSTREAM PARTNERS, L.P.	DEC	32.4	35.9	35.2	39.2	47.2	34.7	13.4	12.2	10.0	12.1	17.2	11.8	47.9	44.4	31.4	36.9	55.9	41.2
MPLX		MPLX LP	DEC	35.4	31.7	NM	16.4	29.4	13.5	11.1	8.7	NM	3.5	5.1	2.6	30.0	23.1	NM	8.1	13.5	7.2
NS		NUSTAR ENERGY L.P.	DEC	13.2	2.4	NM	NM	13.5	10.2	4.5	0.7	NM	NM	3.2	2.3	15.1	2.2	NM	8.0	5.5	5.4
LNG		CHENIERE ENERGY, INC.	DEC	4.3	NM	NM	7.1	5.9	NM	3.5	NM	NM	1.8	1.5	NM	NM	NM	21.5	56.5	75.7	54.2
TSX:PPL		PEMBINA PIPELINE CORPORATION	DEC	25.6	14.4	NM	20.8	17.4	16.4	9.4	3.9	NM	4.6	4.8	3.5	19.7	8.5	NM	9.6	9.0	8.0
CQP		CHENIERE ENERGY PARTNERS, L.P.	DEC	14.5	17.3	19.2	17.2	19.8	11.4	12.7	8.4	6.2	6.1	7.1	2.8	NM	259.3	188.7	155.1	177.1	90.6
PAA		PLAINS ALL AMERICAN PIPELINE, L.P.	DEC	1.8	1.4	NM	6.4	6.5	3.3	3.7	2.1	NM	7.6	8.7	3.4	9.4	5.7	NM	17.3	19.3	8.7
PPL	[]	TARGA RESOURCES CORP.	DEC	5.7	0.4	NM	NM	0.0	0.6	6.1	0.5	NM	NM	0.0	0.4	28.1	7.0	NM	0.5	0.8	1.6
NYSE:TRP		TC ENERGY CORPORATION	DEC	5.0	14.6	35.5	31.2	27.1	23.5	0.7	1.9	4.6	4.2	3.7	3.7	2.3	6.1	14.9	14.0	12.2	12.8
WMB	[]	THE WILLIAMS COMPANIES, INC.	DEC	18.0	14.1	2.7	10.4	NM	27.1	4.2	3.2	0.5	1.8	NM	4.7	15.0	10.9	1.3	4.5	1.2	16.6

Note: Data as originally reported. CAGR-Compound annual growth rate. []Company included in the S&P 500. #Of the following calendar year.
Souce: S&P Capital IQ.

Ticker		Company	Yr. End	Current Ratio						Debt/Capital Ratio (%)						Debt as a % of Net Working Capital					
				2022	2021	2020	2019	2018	2017	2022	2021	2020	2019	2018	2017	2022	2021	2020	2019	2018	2017
GATHERING & PROCESSING																					
AM	†	ANTERO MIDSTREAM CORPORATION	DEC	0.9	0.7	1.0	0.4	0.2	0.4	60.5	57.7	56.1	47.9	0.0	0.0	NM	NM	NM	NM	0.0	0.0
DCP		DCP MIDSTREAM, LP	DEC	0.7	0.9	0.6	0.6	0.7	0.9	41.8	46.3	46.5	44.4	39.6	38.8	NM	NM	NM	NM	NM	NM
ENLC		ENLINK MIDSTREAM, LLC	DEC	1.1	1.0	0.7	1.0	0.8	0.8	61.9	59.4	56.9	55.6	44.7	38.9	4398.0	20296.3	NM	NM	NM	NM
TSX:KEY		KEYERA CORP.	DEC	1.1	1.2	1.3	0.8	1.0	1.6	56.5	56.5	53.8	46.4	44.2	42.0	3388.9	1855.6	2178.7	NM	177074.7	533.6
SMLP		SUMMIT MIDSTREAM PARTNERS, LP	DEC	0.8	1.1	1.2	1.6	1.0	1.1	62.6	57.3	57.1	66.6	50.7	43.1	NM	16663.5	9841.0	3224.3	NM	11591.0
WES		WESTERN MIDSTREAM PARTNERS, LP	DEC	1.0	0.6	1.0	0.8	0.5	0.6	67.9	67.4	71.9	70.4	51.6	47.0	NM	NM	NM	NM	NM	NM
TRANSPORTATION																					
TSX:ENB		ENBRIDGE INC.	DEC	0.6	0.5	0.5	0.5	0.6	0.6	55.0	52.9	50.4	47.0	45.9	47.7	NM	NM	NM	NM	NM	NM
ENB		ENERGY TRANSFER LP	DEC	1.2	1.0	1.1	1.0	0.7	1.4	54.0	55.0	61.5	59.5	58.0	59.3	2816.8	NM	13048.5	NM	NM	1567.5
EPD		ENTERPRISE PRODUCTS PARTNERS L.P.	DEC	0.9	1.1	1.1	0.9	0.8	0.7	48.9	51.5	52.9	49.8	50.4	48.8	NM	1710.3	3098.7	NM	NM	NM
NFE		NEW FORTRESS ENERGY INC.	DEC	1.0	1.0	4.0	2.1	0.4	4.8	75.6	65.3	76.8	61.5	0.3	19.9	NM	16810.0	217.3	569.4	(0.3)	56.5
GEL		GENESIS ENERGY, L.P.	DEC	1.2	1.1	1.5	1.4	1.3	1.4	66.1	59.1	65.3	58.8	58.0	57.3	2406.7	6541.9	1724.8	1931.1	3107.8	2057.2
GLP		GLOBAL PARTNERS LP	DEC	1.2	1.3	1.6	1.3	1.5	1.3	55.5	67.1	70.0	72.4	70.4	73.8	496.4	477.7	407.2	481.3	405.4	529.0
HEP		HOLLY ENERGY PARTNERS, L.P.	DEC	1.2	1.2	1.2	1.3	1.1	1.3	61.2	67.3	71.6	73.1	71.6	74.1	8999.8	7634.4	9866.0	7043.2	16543.1	7972.6
KMI	[]	KINDER MORGAN, INC.	DEC	0.5	0.7	0.6	0.6	0.8	0.4	52.5	49.0	49.7	47.8	53.8	50.5	NM	NM	NM	NM	NM	NM
IPL		MAGELLAN MIDSTREAM PARTNERS, L.P.	DEC	1.0	1.2	0.7	0.7	1.0	0.7	74.9	72.8	68.4	63.4	61.5	66.7	NM	3110.5	NM	NM	NM	NM
MPLX		MPLX LP	DEC	0.8	0.5	0.7	0.7	0.6	0.4	58.2	62.8	58.1	52.8	48.9	40.9	NM	NM	NM	NM	NM	NM
NS		NUSTAR ENERGY L.P.	DEC	1.0	0.9	1.5	0.3	2.3	0.4	70.6	66.2	65.9	55.1	52.8	57.5	43479.8	NM	3457.3	NM	739.1	NM
LNG		CHENIERE ENERGY, INC.	DEC	0.8	1.1	1.4	2.2	2.4	2.7	100.7	101.0	93.7	92.7	94.4	95.3	NM	8181.3	3150.2	1318.3	1140.4	1196.9
TSX:PPL		PEMBINA PIPELINE CORPORATION	DEC	0.7	0.5	0.6	0.7	0.7	0.9	38.8	41.6	40.6	37.4	32.8	35.2	NM	NM	NM	NM	NM	NM
CQP		CHENIERE ENERGY PARTNERS, L.P.	DEC	1.1	1.6	2.4	2.8	2.2	2.6	115.1	96.0	97.0	96.1	95.3	96.2	8139.7	1981.2	1404.2	1009.7	1247.4	1224.9
PAA		PLAINS ALL AMERICAN PIPELINE, L.P.	DEC	0.9	1.0	0.9	0.9	1.0	0.9	35.4	39.4	52.6	42.7	43.2	48.9	NM	NM	NM	NM	11884.4	NM
PPL	[]	TARGA RESOURCES CORP.	DEC	0.8	0.8	0.8	0.9	0.5	0.8	67.8	52.0	54.3	45.9	42.2	40.7	NM	NM	NM	NM	NM	NM
NYSE:TRP		TC ENERGY CORPORATION	DEC	0.4	0.6	0.4	0.6	0.4	0.5	67.0	64.6	61.9	62.7	62.4	61.8	NM	NM	NM	NM	NM	NM
WMB	[]	THE WILLIAMS COMPANIES, INC.	DEC	0.8	0.9	0.6	0.4	0.8	0.8	61.9	60.6	59.5	55.2	58.3	55.8	NM	NM	NM	NM	NM	NM

Note: Data as originally reported. CAGR-Compound annual growth rate. []Company included in the S&P 500. #Of the following calendar year.
Souce: S&P Capital IQ.

Ticker		Company	Yr. End	Price/Earnings Ratio (High-Low) 2022	2021	2020	2019	2018	2017	Dividend Payout Ratio (%) 2022	2021	2020	2019	2018	2017	Dividend Yield (High-Low, %) 2022	2021	2020	2019	2018	2017
GATHERING & PROCESSING																					
AM	†	ANTERO MIDSTREAM CORPORATION	DEC	17 - 13	17 - 11	NM - NM	NA - NA	NA - NA	NA - NA	133	142	NM	NM	130	689	8.7 - 7.9	10.2 - 7.8	18.3 - 7.7	62.1 - 16.2	26.9 - 3.8	4.1 - 1.1
DCP		DCP MIDSTREAM, LP	DEC	8 - 6	21 - 12	NM - NM	NM - NM	75 - 42	98 - 70	38	98	NM	NM	368	654	4.5 - 4.1	6.5 - 4.0	9.5 - 4.6	100.0 - 9.1	14.8 - 8.8	9.6 - 6.8
ENLC		ENLINK MIDSTREAM, LLC	DEC	17 - 9	185 - 80	NM - NM	NM - NM	NM - NM	17 - 13	61	834	NM	NM	NM	87	4.5 - 3.4	6.1 - 3.5	10.6 - 4.4	80.3 - 9.6	24.1 - 8.5	9.6 - 5.2
TSX:KEY		KEYERA CORP.	DEC	24 - 18	24 - 15	129 - 37	17 - 12	20 - 13	28 - 23	129	131	682	89	88	106	6.8 - 6.0	7.1 - 5.4	8.6 - 5.5	18.3 - 5.3	7.3 - 5.0	6.4 - 4.4
SMLP		SUMMIT MIDSTREAM PARTNERS, LP	DEC	NM - NM	NM - NM	1 - 0	NM - NM	357 - 169	26 - 19	0	0	0	NM	595	222	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	100.0 - 0.0	37.6 - 10.9	19.2 - 10.2
WES		WESTERN MIDSTREAM PARTNERS, LP	DEC	10 - 7	11 - 6	18 - 3	22 - 11	25 - 16	28 - 20	62	60	135	146	136	117	8.0 - 7.0	8.9 - 4.7	9.5 - 5.3	81.0 - 8.6	14.0 - 6.9	8.5 - 5.1
TRANSPORTATION																					
TSX:ENB		ENBRIDGE INC.	DEC	NA - NA	19 - 14	39 - 23	20 - 16	35 - 26	35 - 27	243	115	206	111	133	108	6.9 - 6.3	7.2 - 5.8	8.2 - 6.2	9.5 - 5.7	7.4 - 5.7	7.1 - 5.3
ENB		ENERGY TRANSFER LP	DEC	9 - 6	6 - 3	NM - NM	12 - 8	16 - 10	23 - 18	64	35	NM	87	96	106	9.6 - 7.9	9.0 - 5.9	10.0 - 5.4	26.9 - 8.9	10.9 - 7.8	8.6 - 6.2
EPD		ENTERPRISE PRODUCTS PARTNERS L.P.	DEC	NA - NA	12 - 9	17 - 7	15 - 11	NA - NA	NA - NA	75	85	103	84	89	128	8.1 - 7.1	8.7 - 6.5	9.2 - 7.1	14.5 - 6.1	7.4 - 5.7	7.1 - 5.8
NFE		NEW FORTRESS ENERGY INC.	DEC	66 - 22	121 - 46	NM - NM	NM - NM	NA - NA	NA - NA	51	91	NM	0	0	0	9.1 - 0.8	2.0 - 0.6	1.7 - 0.7	1.5 - 0.7	0.0 - 0.0	0.0 - 0.0
GEL		GENESIS ENERGY, L.P.	DEC	NM - NM	NM - NM	NM - NM	136 - 101	NM - NM	76 - 41	197	NM	NM	326	NM	389	6.6 - 5.1	7.6 - 4.6	10.3 - 4.6	73.3 - 5.4	12.3 - 9.2	14.1 - 8.4
GLP		GLOBAL PARTNERS LP	DEC	4 - 2	21 - 13	7 - 3	26 - 19	7 - 5	12 - 9	28	161	71	222	64	107	8.3 - 6.5	11.6 - 7.2	12.0 - 8.2	28.0 - 10.1	13.8 - 9.5	12.1 - 9.1
HEP		HOLLY ENERGY PARTNERS, L.P.	DEC	11 - 9	11 - 7	15 - 5	14 - 10	20 - 16	17 - 13	78	70	102	121	148	113	8.1 - 7.1	8.9 - 7.0	10.3 - 6.0	35.8 - 8.1	12.7 - 8.7	9.8 - 7.6
KMI	[]	KINDER MORGAN, INC.	DEC	18 - 14	25 - 17	475 - 213	22 - 16	30 - 22	2324 - 1698	98	142	2051	99	110	697	6.5 - 5.8	7.1 - 5.5	7.7 - 5.6	10.0 - 4.5	5.4 - 3.9	5.1 - 2.5
IPL		MAGELLAN MIDSTREAM PARTNERS, L.P.	DEC	11 - 9	12 - 9	18 - 8	15 - 13	13 - 9	21 - 17	84	92	113	90	65	92	8.6 - 7.7	9.4 - 7.8	10.2 - 7.7	14.8 - 6.3	7.2 - 6.0	6.5 - 4.9
MPLX		MPLX LP	DEC	9 - 7	11 - 8	NM - NM	36 - 23	17 - 13	36 - 29	77	116	NM	212	314	579	9.9 - 8.8	10.1 - 8.0	12.9 - 8.7	32.8 - 10.0	12.0 - 7.3	8.0 - 6.0
NS		NUSTAR ENERGY L.P.	DEC	50 - 36	NM - NM	NM - NM	NM - NM	NM - NM	47 - 23	136	792	NM	NM	183	328	10.9 - 9.3	12.5 - 9.0	11.6 - 7.8	35.5 - 8.4	11.8 - 8.1	22.3 - 8.3
LNG		CHENIERE ENERGY, INC.	DEC	32 - 18	NM - NM	NM - NM	28 - 23	37 - 27	NM - NM	24	NM	0	0	0	0	1.1 - 0.9	1.3 - 0.8	1.5 - 1.2	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
TSX:PPL		PEMBINA PIPELINE CORPORATION	DEC	10 - 7	21 - 15	NM - NM	19 - 15	21 - 17	25 - 21	56	122	NM	88	98	88	5.9 - 5.3	6.7 - 4.7	8.4 - 5.9	15.2 - 4.7	5.8 - 4.5	5.6 - 4.7
CQP		CHENIERE ENERGY PARTNERS, L.P.	DEC	19 - 13	15 - 11	19 - 8	21 - 16	16 - 11	28 - 22	75	79	105	100	83	58	8.9 - 7.1	10.1 - 4.8	7.9 - 5.8	13.6 - 5.8	6.5 - 5.1	7.1 - 5.6
PAA		PLAINS ALL AMERICAN PIPELINE, L.P.	DEC	11 - 8	22 - 15	NM - NM	9 - 6	10 - 7	35 - 19	0	121	NM	55	47	163	8.5 - 6.7	9.1 - 6.0	8.9 - 5.9	43.8 - 5.9	8.5 - 4.8	6.3 - 4.4
PPL	[]	TARGA RESOURCES CORP.	DEC	20 - 13	NM - NM	NM - NM	NM - NM	NM - NM	NM - NM	32	263	NM	NM	56769	1561	2.1 - 1.8	2.5 - 0.7	1.7 - 0.7	77.0 - 1.5	11.2 - 7.6	8.4 - 6.2
NYSE:TRP		TC ENERGY CORPORATION	DEC	92 - 62	30 - 22	12 - 7	13 - 8	13 - 9	15 - 13	441	177	68	47	47	47	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0
WMB	[]	THE WILLIAMS COMPANIES, INC.	DEC	23 - 15	24 - 16	140 - 54	42 - 31	NM - NM	12 - 10	101	131	920	217	NM	46	6.0 - 4.9	6.5 - 4.5	8.0 - 5.5	17.3 - 6.3	6.9 - 5.0	5.7 - 3.6

Note: Data as originally reported. CAGR-Compound annual growth rate. []Company included in the S&P 500. #Of the following calendar year.
Souce: S&P Capital IQ.

Ticker		Company	Yr. End	Earnings per Share ($) 2022	2021	2020	2019	2018	2017	Tangible Book Value per Share ($) 2022	2021	2020	2019	2018	2017	Share Price (High-Low, $) 2022	2021	2020	2019	2018	2017
GATHERING & PROCESSING																					
AM	†	ANTERO MIDSTREAM CORPORATION	DEC	0.68	0.69	(0.26)	(0.80)	0.33	0.03	1.89	1.95	2.08	2.21	0.17	0.08	11.61 - 8.56	11.71 - 7.57	8.64 - 1.69	14.56 - 4.26	22.39 - 10.12	22.87 - 16.62
DCP		DCP MIDSTREAM, LP	DEC	4.71	1.59	(1.75)	(1.05)	0.61	0.43	27.42	24.29	24.19	27.04	42.44	44.84	40.23 - 25.79	33.85 - 18.37	26.26 - 2.20	34.28 - 20.40	46.67 - 24.18	42.45 - 29.70
ENLC		ENLINK MIDSTREAM, LLC	DEC	0.74	0.05	(0.86)	(2.38)	(0.07)	1.16	0.82	0.57	0.75	1.41	(5.27)	(6.19)	13.06 - 6.89	8.64 - 3.58	6.48 - 0.88	13.10 - 4.33	20.00 - 8.90	20.45 - 15.00
TSX:KEY		KEYERA CORP.	DEC	1.09	1.16	0.22	1.60	1.42	1.22	8.79	9.13	9.35	10.32	9.24	9.46	26.22 - 19.46	28.25 - 17.71	28.69 - 7.88	27.63 - 19.48	28.52 - 17.62	33.95 - 27.17
SMLP		SUMMIT MIDSTREAM PARTNERS, LP	DEC	(12.71)	(6.57)	71.19	(70.51)	0.90	14.70	47.26	78.34	89.83	11.76	125.23	151.66	26.22 - 11.52	46.64 - 12.40	55.05 - 7.50	216.75 - 42.15	344.25 - 150.60	397.50 - 274.50
WES		WESTERN MIDSTREAM PARTNERS, LP	DEC	3.00	2.18	1.18	1.59	1.69	1.72	5.86	5.50	4.83	4.40	4.81	(0.60)	29.50 - 21.69	23.79 - 13.88	22.11 - 2.90	35.75 - 17.46	42.92 - 25.89	47.82 - 33.92
TRANSPORTATION																					
TSX:ENB		ENBRIDGE INC.	DEC	0.94	2.27	1.16	2.03	1.07	1.32	6.06	6.36	7.30	8.75	9.02	5.96	44.10 - 36.12	42.67 - 32.11	44.99 - 25.95	40.22 - 32.10	37.40 - 27.38	46.47 - 35.01
ENB		ENERGY TRANSFER LP	DEC	1.40	1.89	(0.24)	1.33	1.19	0.83	6.14	5.47	3.85	3.94	3.70	(11.61)	12.95 - 8.26	11.55 - 6.03	13.86 - 3.75	15.98 - 10.84	19.34 - 11.68	20.05 - 15.03
EPD		ENTERPRISE PRODUCTS PARTNERS L.P.	DEC	2.50	2.11	1.71	2.09	1.91	1.30	7.85	7.69	7.12	7.11	6.64	6.07	28.65 - 22.01	25.69 - 19.28	29.22 - 10.27	30.87 - 24.23	30.05 - 23.10	30.25 - 23.59
NFE		NEW FORTRESS ENERGY INC.	DEC	0.93	0.47	(1.71)	(1.62)	(1.15)	(0.49)	2.05	4.30	1.84	1.00	2.99	4.25	63.06 - 19.17	65.90 - 20.75	60.42 - 7.01	19.50 - 8.90	0.00 - 0.00	0.00 - 0.00
GEL		GENESIS ENERGY, L.P.	DEC	(0.04)	(1.96)	(4.01)	0.18	(0.62)	0.50	1.18	1.69	3.18	8.11	10.01	12.38	13.44 - 7.61	13.48 - 5.73	22.20 - 2.58	24.04 - 17.70	25.87 - 17.55	37.88 - 20.43
GLP		GLOBAL PARTNERS LP	DEC	10.02	1.31	2.74	0.81	2.95	1.74	5.71	1.06	2.09	0.66	1.38	0.74	36.30 - 20.23	27.50 - 16.61	20.47 - 6.30	21.62 - 16.09	21.05 - 13.63	21.95 - 15.80
HEP	[]	HOLLY ENERGY PARTNERS, L.P.	DEC	1.77	2.03	1.61	2.13	1.70	2.28	3.60	1.39	0.54	0.09	0.40	(0.02)	20.00 - 15.12	23.69 - 13.71	24.59 - 6.57	31.08 - 20.81	34.00 - 26.09	38.09 - 30.11
KMI		KINDER MORGAN, INC.	DEC	1.12	0.78	0.05	0.96	0.66	0.01	3.99	4.07	4.03	4.25	3.90	3.78	20.20 - 15.78	19.29 - 13.48	22.58 - 9.42	21.50 - 15.10	19.83 - 14.62	23.01 - 16.68
IPL		MAGELLAN MIDSTREAM PARTNERS, L.P.	DEC	4.95	4.47	3.62	4.46	5.84	3.81	7.85	8.51	9.90	11.44	11.13	8.87	54.40 - 44.79	53.85 - 39.93	65.34 - 22.02	67.75 - 56.08	75.82 - 54.25	81.77 - 63.55
MPLX		MPLX LP	DEC	3.75	2.86	(0.80)	1.00	2.29	1.06	3.34	2.67	3.41	4.67	7.81	19.07	35.49 - 27.47	32.26 - 21.66	27.36 - 6.87	35.85 - 22.60	39.38 - 28.32	39.43 - 30.88
NS		NUSTAR ENERGY L.P.	DEC	0.36	(0.99)	(3.15)	(2.30)	(2.77)	1.18	(9.93)	(9.68)	(8.41)	(6.15)	(2.21)	(2.11)	18.05 - 12.80	20.73 - 13.53	29.36 - 4.98	30.06 - 20.41	35.91 - 19.22	55.64 - 26.21
LNG		CHENIERE ENERGY, INC.	DEC	5.64	(9.25)	(0.34)	2.51	1.90	(1.69)	(12.41)	(10.44)	(1.06)	(0.36)	(2.35)	(7.82)	182.35 - 100.13	113.40 - 58.26	67.11 - 27.06	70.60 - 57.36	71.03 - 50.08	54.83 - 40.36
TSX:PPL		PEMBINA PIPELINE CORPORATION	DEC	3.78	1.57	(0.68)	2.07	1.67	1.48	9.93	7.97	8.09	10.42	10.84	10.53	39.59 - 27.71	33.98 - 24.09	42.21 - 11.98	39.05 - 30.64	35.06 - 27.56	36.82 - 31.13
CQP	[]	CHENIERE ENERGY PARTNERS, L.P.	DEC	3.27	3.00	2.20	2.25	2.51	1.20	(2.31)	2.12	1.48	1.64	1.69	1.30	62.08 - 40.20	45.75 - 34.54	42.88 - 17.75	49.30 - 35.25	40.56 - 27.79	33.47 - 26.41
PAA		PLAINS ALL AMERICAN PIPELINE, L.P.	DEC	1.19	0.55	(3.83)	2.65	2.71	0.95	11.34	8.11	8.99	10.33	8.83	7.25	12.75 - 9.10	12.38 - 8.07	19.39 - 3.00	25.27 - 16.77	27.70 - 19.34	33.24 - 18.38
PPL		TARGA RESOURCES CORP.	DEC	3.88	(0.07)	(7.26)	(1.44)	(0.53)	(0.31)	(0.30)	4.02	5.58	13.49	17.47	17.18	81.50 - 52.19	58.18 - 25.85	42.13 - 3.66	48.78 - 32.00	59.21 - 33.55	61.83 - 39.59
NYSE:TRP		TC ENERGY CORPORATION	DEC	0.47	1.47	3.72	3.29	2.87	2.74	13.53	13.86	12.31	11.42	8.92	7.22	59.38 - 39.11	55.34 - 40.17	57.92 - 32.37	53.95 - 35.19	49.89 - 34.58	51.85 - 44.90
WMB		THE WILLIAMS COMPANIES, INC.	DEC	1.67	1.24	0.17	0.70	(0.16)	2.62	3.36	3.28	3.54	4.43	5.67	1.05	37.97 - 26.02	29.89 - 19.87	24.17 - 8.41	29.55 - 21.53	33.67 - 20.36	32.69 - 26.82

Note: Data as originally reported. CAGR-Compound annual growth rate. []Company included in the S&P 500. #Of the following calendar year.
Souce: S&P Capital IQ.

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