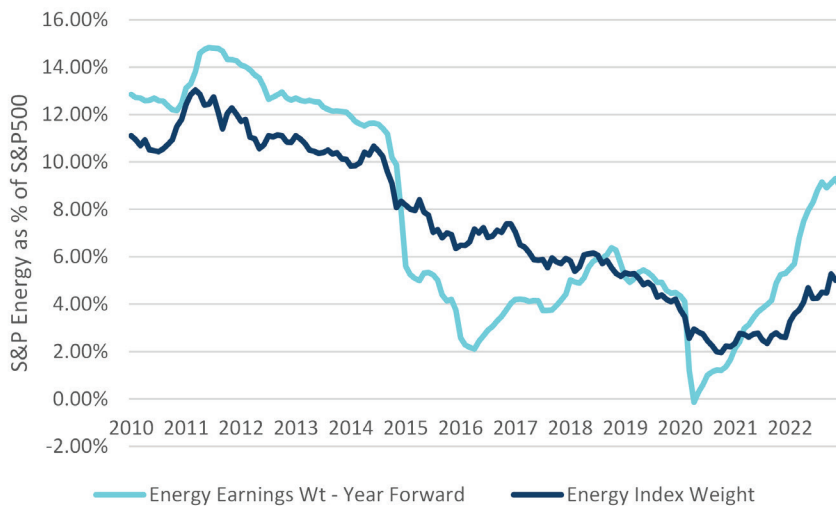


# Energy infrastructure

## 4Q 2022 QUARTERLY COMMENTARY

The broad energy sector, as represented by the S&P Energy Select Sector® Index returned 22.86% for the fourth quarter. Energy finished the year strong, as investors continued to rotate into the sector. The energy sector's weight within the S&P 500 Index rose

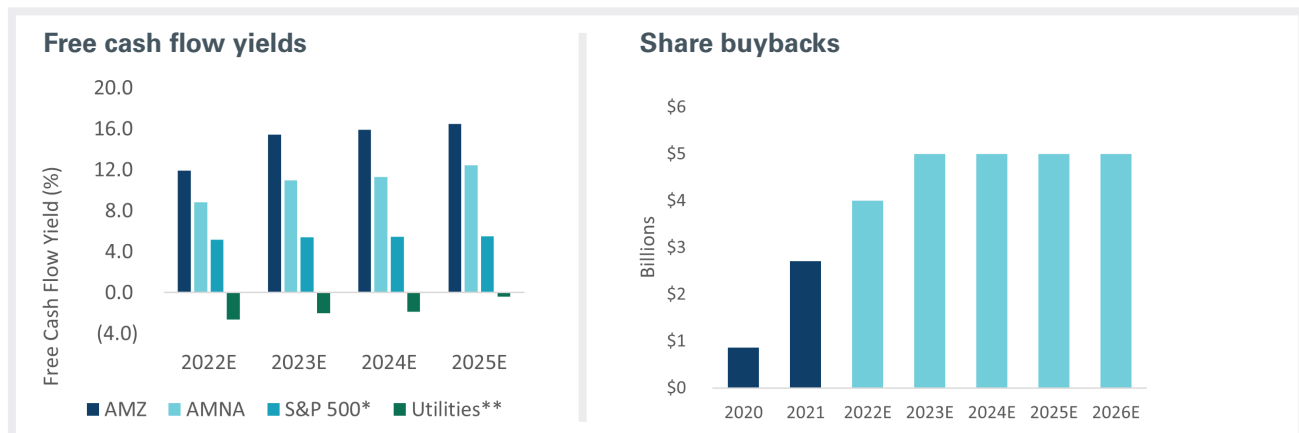
### Energy sector weight and return contribution



to above 5% for the first time since 2019 as investors sought inflation protection, rotated to a value bias from growth bias and saw the Russia and Ukraine conflict bring energy security into focus. 2022 was the eighth consecutive year of underinvestment in oil and gas. With supply sources more finite, there is a renewed opportunity for short-cycle North American energy. In 2022, U.S. oil production crossed 12 million barrels per day (mm b/d), a level not seen since April 2020. Global underinvestment resulting from environmental, social and governance (ESG) commitments and energy transition is likely to keep global stock balances extremely tight for the foreseeable future.

Source: Bloomberg, TCA

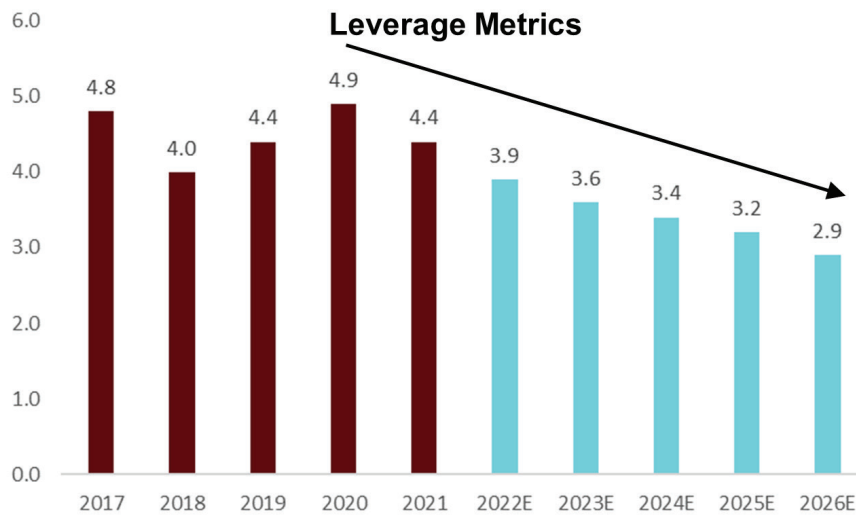
Investor sentiment rebounded with positive retail flows coupled with companies buying back stock in the open market. In fact, 2022 was the first year since 2018 where midstream fund flows were positive. Beyond the constructive technical setup, we believe midstream serves as a hedge to many current risks investors face. In our view, midstream's strong fundamentals, attractive valuations, defensive characteristics in a higher rate and inflationary environment and improved free cash flow should support outperformance on a relative basis.



Source: Bloomberg, TCA, UBS, Goldman Sachs, Morgan Stanley  
Reflects TCA views and opinions as of date herein which are subject to change at any time based on market and other conditions.

Source: TCA, Bloomberg, Company Press Releases. Projections on this page are no guarantee of future outcomes. It is not possible to invest directly in an index.

As more volumes flowed through pipeline systems in 2022, cash flow increased for midstream companies. The balanced return of capital story continued for investors via debt reduction, share buybacks and increased distributions. Specifically, deleveraging continued as companies target leverage between 3.0x-4.0x after years of leverage between 4.0x-5.0x, distribution growth accelerated to 7% in 2022 as companies targeted a return to pre-COVID levels and share buybacks accelerated with \$3.4 billion repurchased through the Q3. The other use of capital has been mergers and acquisitions (M&A). There were several accretive bolt-on acquisitions of private assets completed by larger energy infrastructure companies. These assets largely were complementary to existing assets, allowing operators to control energy volumes across more midstream activities.



Source: TCA and Wells Fargo

Reflects TCA views and opinions as of date herein which are subject to change at any time based on market and other conditions.

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Recession concerns weighed on investor psyche the second half of the year. While there were several recessions in the last 40 years, energy demand increased in 38 out of the last 40 years (2008 and 2020 decreased). Due to actions taken during 2020 recession, we believe the energy sector, and specifically midstream, is well prepared to deal with another potential recession. The world remains undersupplied in energy, and we believe sector balance sheets are in much better shape than in past recessions including 2001, 2008 and 2020. 2022 earnings exceeded expectations with energy the one part of the market where earnings grew at an accelerated rate.

While inflation expectations started to moderate in the fourth quarter, they remain top of mind for investors. Pipelines typically have long-term contracts with inflation protection from regulated tariff escalators. Federal Energy Regulatory Commission (FERC) indexing could be a material driver of liquid pipeline cash flows with rates potentially increasing double digits next summer on top of an 8.7% increase that went into effect July 1, 2022. Interest rates also rose significantly in 2022 as the Federal Reserve took a more hawkish approach and started raising the Fed Funds rate. Historically, midstream energy displays strong historical returns in rising rate environments.\* In the 15 time periods of rising rates since 2001, midstream energy, represented by the Tortoise North American Pipeline Index<sup>SM</sup>, returned an average return of 7.7%, compared to a S&P 500 Index average return of 6.1%, and bond return of -2.4% represented by the Bloomberg Barclays U.S. Aggregate Bond Index.

The global energy markets remained dynamic throughout 2022. In early October, the crude oil market tightened as the Organization of the Petroleum Exporting Countries+ (OPEC+) responded to softening economic conditions in the Organisation for Economic Co-operation and Development (OECD), namely Europe, by cutting production 2mm b/d. Separately, sanctions around exports of Russian

\*Time periods are determined using end of month yields and returns. Periods shown are those where the 10-year Treasury yield increased by at least 50 basis points over one or more consecutive months. Returns are period-specific and are not annualized.

energy took effect at the end of 2022 and are expected to increase in 2023 driven by an embargo of Russian crude above the price cap of \$60. While Russian crude was more resilient than expected in 2022, volumes are projected to decline and/or face longer transit times to their end market. Given these disruptions, the focus remains on the supply side of the equation. For 2023, the Energy Information Agency (EIA) forecasts that U.S. production will increase 0.3 mm b/d to 12.6 mm b/d, up from 12.3 mm b/d at the end of 2022. On the demand side, global inventories continued to be drawn upon and are well below their 5-year averages. The scarcity of commodities comes at a time when global demand should be boosted by China re-opening from COVID lockdowns in 2023.

Transitioning to natural gas, with energy security a higher priority and low natural gas inventories, Europe is increasingly importing U.S. liquefied natural gas (LNG). Throughout 2022, LNG exporters contracted almost 6 billion cubic feet per day (Bcf/d) of new contracts, signing 15-25-year contracts with European and Asian counterparties. The market awaits several Final Investment Decisions (FIDs) in 2023 which would put the U.S. on track to roughly double LNG export capacity by end of the decade. We expect a more mixed setup for natural gas in 2023, as supply outpaces demand and unseasonably warm weather lessened gas demand for Europe and North America. One short-term positive is the expected restart of Freeport LNG, which has been offline since the second half of 2022.

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Free Cash Flow is the cash a company produces through its operations, less the cost of total capital expenditures (growth and maintenance).

Liquefied Natural Gas is natural gas that has been cooled to a liquid state for shipping and storage - the volume in this state is about 600 times smaller than in its gaseous state, able to transport for much longer distances when pipeline transport is not feasible.

Liquefied Petroleum Gas (LPG) is a group of hydrocarbon gases, primarily propane, normal butane and isobutane, derived from crude oil refining or natural gas processed. They may be marketed individually or mixed. They can all be liquefied through pressurization for convenience of transportation or storage.

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**It is not possible to invest directly in an index.**