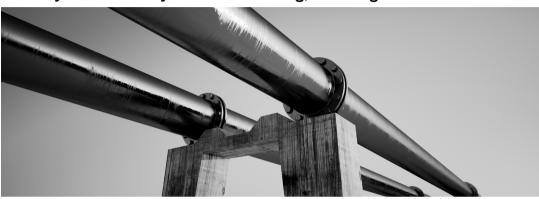
S&P Global Ratings

Industry Top Trends 2022

Midstream Energy

Industry Credit Quality On Sound Footing, But Long-Term Risks Remain



What's changed?

Demand recovery. Demand for crude oil, natural gas, and refined products has rebounded from pandemic lows. Economic reopenings, unseasonable weather, robust global demand for liquefied natural gas (LNG), and the phasing out of coal means that hydrocarbon demand will likely continue to outpace supply.

Consolidation accelerating. We expect industry consolidation to gain momentum, given significant excess free cash flow, limited organic growth opportunities, and financial sponsors who may be looking to exit investments and recycle cash.

Improving credit quality. We forecast credit ratios will continue to improve and free cash flow to remain fairly robust, particularly for higher-rated issuers. More discretionary cash will go to shareholder friendly initiatives, but the focus on the balance sheet will be paramount.

What are the key assumptions for 2022?

Modest capital spending. Capital spending will increase 10%-12%, still about 50% below pre-pandemic levels. Spending will target small projects to build out infrastructure, increase asset integrity, reduce emissions, and improve efficiencies.

Moderate volume growth. Higher commodity prices have stimulated production in the most economic basins. This trend will support higher asset utilization and could result in increased midstream spending.

Capital allocation shift. We expect an increased focus on returning cash to shareholders after a few years of debt reduction. We expect discretionary share buybacks but also some dividend increases.

What are the key risks around the baseline?

Accelerated energy transition. Increased focus on environmental, social, and governance (ESG) issues and a shift towards cleaner energy alternatives could impact our credit view.

COVID demand shock. Future virus mutations may cause additional shutdowns and slow economic activity, which could dampen demand for hydrocarbons.

This report does not constitute a ratings action

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S&P Global Ratings

Ratings trends and outlook

Global Midstream Energy

Chart 1

Ratings distribution

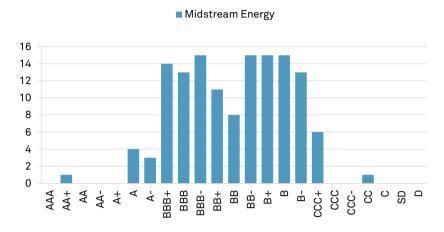


Chart 2
Ratings outlooks

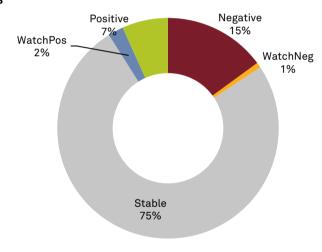
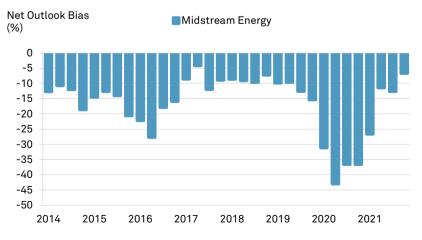


Chart 3
Ratings outlook net bias



Source: S&P Global Ratings. Ratings data measured at quarter end.

Midstream Energy

Ratings trends and outlook

The North American midstream energy industry's credit quality strengthened in 2021, rebounding from the effects of the pandemic and subsequent credit stress. The economic reopening and surge in demand, coupled with broader supply chain issues and rising inflation, caught producers and midstream companies alike somewhat flatfooted. Domestic upstream producers have remained disciplined, living within cash flow, which has led to more modest growth expectations, but high utilization rates in the most favorable basins such as the Delaware and the Appalachian.

Currently, 75% of midstream ratings are stable, 9% are positive, and 16% are negative. This is greatly improved from the same time last year when 57% of ratings were stable, 4% were positive, and 39% were negative.

Gathering and processing companies responded quickly to the 2020 credit stress, cutting capital spending to almost maintenance levels and significantly reducing and in certain instances eliminating their distributions. The industry segment benefited the most in 2021 as prices and volumes rebounded. Most companies used excess discretionary cash flow to reduce debt and strengthen balance sheets, which is linked to most of the ratings improvement during the last 12 months. Conversely, single-asset pipelines as an asset class exhibited some credit stress, as legacy contracts rolled off and were replaced at lower rates or were not renewed. We expect more credit pressure with crude oil pipelines due to overcapacity in some areas, but regional natural gas pipelines have also come under pressure as rigs have shifted and above-market legacy contracts have rolled off. Diversified energy companies were best positioned to manage through the cycle in the last 24 months, benefiting from broad and diverse asset footprint and asset diversity. Many of these companies used their vast networks of pipelines and storage assets to capitalize on the natural gas supply constraints caused by the Texas winter storms, capturing one-time cash flow benefits to provide extra cushion in credit measures.

Main assumptions about 2022 and beyond

1. Measured capital spending increases

We expect modest capital spending increases, primarily among the large, diversified companies that are finishing multiyear growth initiatives or small bolt-on organic growth projects. Companies that are more volume dependent are spending modestly to maintain current volume levels or to expand processing capacity in areas with higher natural gas volumes. Most of this spending with be funded internally, protecting balance sheets.

2. Moderate volume growth

Strong commodity prices have stimulated production in highly economic areas such as West Texas, North Dakota, and Appalachia. Crude oil production is set to reach prepandemic levels in 2022, and higher gas-to-crude oil ratios will likely require additional natural gas infrastructure expansions or greenfield projects to move volumes for domestic use and for export.

3. Capital allocation shift

Most midstream companies will continue to generate significant discretionary cash flow after capital spending and dividends. After two consecutive years of directing most of this excess cash toward debt repayment, we expect a greater share of this excess cash flow will be directed to shareholder returns, mostly in the form of share repurchases but also more robust dividend increases. We expect companies to remain mindful of balance sheet leverage and not sacrifice credit quality when making capital allocation decisions.

Diversified Midstream Energy

Most of the large, diversified midstream energy companies across North America were free cash flow positive in 2021 and we expect them to continue on that trend through 2022. With relatively stable cash flows, we expect EBITDA to continue to remain at similar levels when excluding any one-time gains they may have realized from the Texas winter storm in February 2021. These companies used excess cash to repay billions of dollars in debt in 2021 and we expect them to continue focusing on capital discipline while they improve their leverage profile through the first half of 2022. Over the past decade, the diversified midstream energy companies spent billions of dollars to meet the infrastructure needs in North America. Although growth opportunities have declined from previous years, we expect these companies to continue to focus on organic growth. We forecast TC Energy Corp. and Enbridge Inc. to spend roughly \$14 billion in 2022 as they continue to expand their footprint across the U.S. and Canada. We expect the U.S.-based diversified entities, including Kinder Morgan Inc., Energy Transfer L.P., The Williams Cos. Inc., and MPLX L.P. will keep their capital programs somewhat in line with 2021 levels and will be largely made up of bolt-on opportunities.

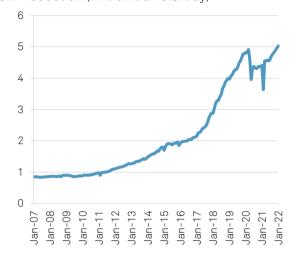
We expect the diversified energy companies will continue to pursue buyback opportunities or in certain cases even distribution growth with the remaining excess cash to help improve their unit prices. This may even allow some to target accretive acquisitions of smaller competitors using a balanced mix of equity or cash. We believe these diversified entities are better positioned to pursue mergers and acquisitions than their smaller competitors. Energy Transfer L.P. completed its acquisition of Enable Midstream Partners L.P. in December 2021, adding natural gas transportation and processing assets in the Anadarko and Arkoma basins and Haynesville shale. Earlier this month, Enterprise Products Partners L.P. announced it would buy Navitas Midstream from Warburg Pincus for \$3.25 billion in cash and if the commodity price environment remains supportive, we expect similar announcements throughout 2022.

Gatherers And Processors

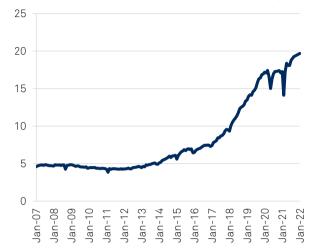
In 2022, we expect gatherers and processors (G&Ps) as well as diversified midstream companies with G&P operations to continue to focus on the Permian basin, where volumes are growing the quickest among all major U.S. basins. According to the Energy Information Administration (EIA), as of January 2022 the Permian represented roughly 60% and 22% of U.S. crude oil and natural gas production, respectively. In addition, both crude and natural gas volumes grew about 13%-14% in the Permian in January 2022 compared with January 2021. Oil production was about 5 million barrels per day (bbls/d) and natural gas production was about 19.5 billion cubic feet equivalent per day (Bcfe/d) as of December 2021 (see charts 4a and 4b). In 2022, we expect to see oil and natural gas volumes grow robustly in the Permian, which is supported by the rig count being up 60% year over year and robust commodity prices including West Texas Intermediate of about \$84/bbl and natural gas of \$4.10 as of Jan. 17, 2022.

Chart 4
Oil And Natural Gas Production Of Permian Region

a) Oil Production (Million Barrels/Day)



b) Natural Gas Production (Billion Cubic Feet/Day)



Source: FIA.

The next two largest areas for oil production in the U.S. are the Bakken and Eagle Ford shales, which saw relatively flat oil production in January 2022 compared with January 2021. Appalachia, home to the Marcellus and Utica shales, and the Haynesville region represented the other two large areas of U.S. natural gas production. Volumes were relatively flat in Appalachia in January 2022 versus January 2021, while the Haynesville saw modest growth during this same period.

In 2022, we expect continued consolidation of smaller, regional G&Ps, especially in the private equity-backed companies in the Permian. We believe larger, diversified midstream companies could look to acquire smaller Permian G&Ps, especially due to diversified midstream companies' stronger balance sheets and ample discretionary cash flow. The consolidation of smaller Permian G&Ps provides an opportunity for EBITDA growth, larger scale, and the ability to ensure volume flows to keep current assets at close to full capacity. If funded in a conservative manner, these acquisitions could support credit quality due to the creation of midstream companies with greater scale. However, we would view a debt-funded acquisition as harming credit quality if credit metrics weakened.

Indeed, in the past few months we have already seen consolidation of Permian G&Ps. Besides the acquisition of Navitas Midstream, BCP Raptor Holdco--the parent of Eagleclaw Midstream Ventures LLC and BCP Raptor II LLC--announced several months ago that it is merging with Altus Midstream--Apache Corp.'s midstream subsidiary with gathering and processing and long-haul pipeline capabilities--to create one of the largest Delaware Basin G&Ps. We believe there is more consolidation to come in 2022. We believe smaller Permian G&Ps closest to the wellhead and largely dependent on production volumes could be low-hanging fruit for their larger, diversified midstream peers looking for a larger geographic footprint to ensure volume flow remains steady or grows. Plains All American Pipeline L.P. formed a new joint venture with Oryx Midstream Services Permian Basin LLC, whereby Oryx merged its gathering assets with Plains' to become one of the largest crude gathering and processing companies in the region. Enbridge Inc. purchased Moda Ingleside Energy Center LLC's storage and export assets in Corpus Christi, giving Enbridge critical access to the U.S. Gulf crude oil export market.

Smaller Permian G&Ps could also see improvement in credit quality even if they were not acquired. This would be a result of improved cash flows as volumes increase in the Permian in 2022, improving credit metrics.

Pipelines

We expect crude takeaway capacity in the Permian basin to continue to be oversupplied in 2022. When Wink-to-Webster pipeline enters full service, crude pipeline capacity in the Permian will be greater than 7.5 mm bbls/d. According to the EIA, Permian production is likely to hit a new high in 2022, producing approximately 5 mm bbls/d in January 2022. The more than 2.5 mm bbls/d of overcapacity will hurt both tariffs and volumes on pipelines with uncommitted capacity or those whose contracted capacity matures in the next 12-24 months, in our opinion. As contracted capacity matures, competitive pressures will drive down cash flows for crude pipeline operators unless there is a rationalization of capacity. We believe the larger, diversified operators are likely to perform better than their smaller single-asset peers, given the former's flexibility to ship barrels to multiple destinations and demand centers through their pipeline network. Many of these midstream companies also operate their own marketing businesses, which will allow them to direct volumes through their own pipes.

We expect natural gas pipelines' cash flows to be more resilient in comparison to crude's in 2022. Both the Permian and the Northeast are short takeaway capacity. This will benefit the pipes and operators in both regions given strong natural gas pricing and growing production. The EIA forecasts dry natural gas production of 96 bcf/d for all of 2022 up from 93.5 bcf/d in 2021. Equitrans' long-term project, Mountain Valley Pipeline (MVP) is expected to come online by the end of the year, which will add 2 bcf/d of takeaway capacity from the Northeast. Given the cancellations of the PennEast Pipeline in September 2021 and Atlantic Coast in July 2020, it is unlikely additional greenfield pipes will be built in the Northeast in the future, increasing the value of existing pipes in the ground.

LNG Market

While the COVID-19 pandemic led some LNG developers to put new projects on hold, the subsequent rebound in economic activity and global demand for natural gas in 2021 has led to renewed efforts to build out LNG capacity around the world. The supply demand imbalance in the past year led to record high prices in Europe and Asia, and the market continues to be supportive of natural gas, which many view as a "bridge fuel" in the energy transition.

The recovery in demand for volumes in 2021 further demonstrated the ability of LNG producers to operate through credit cycles. While the contractual structure of the tolling or supply and purchase arrangements in the U.S. market largely caps the upside potential of incumbent producers, it provides long-term predictable cash flows through credit cycles, thus supporting strong credit metrics and investment-grade ratings. The pandemic-induced downturn of 2020 demonstrated the resiliency of the U.S. LNG market despite high numbers of canceled cargoes and weather events, while the subsequent rebound in global demand for LNG in 2021 has led to increased export volumes and sustained stable cash flows at U.S. projects. Some projects captured higher margins via sales of excess cargos above contracted volumes, providing additional upside to equity. From an operational point of view, a number of LNG producers experienced problems with feed gas failing to meet technical specifications during 2021. While this led to a temporary reduction in volumes of LNG available for export, these issues have been largely resolved.

Our forecast for the sector is robust for 2022. Short of a significant economic slowdown from China, we expect demand to stay strong. Moreover, a slowdown in Russian LNG flows into Europe or a further delay in Nord Stream 2 could keep Title Transfer Facility prices up, resulting in continued high-priced merchant cargoes from the U.S. The normal backwardation that we expect through summer months could stay elevated, making 2022 a bumper year for U.S. LNG providers. We note that longer term, eastern Australia and the U.S. continue to be swing suppliers.

We expect the supply demand imbalance will keep prices elevated and we expect to see additional capacity take final investment decision (FID) in the U.S., Qatar, and Australia as well as possibly in Canada and Mexico. The U.S. EIA forecasts total LNG production capacity will reach a peak capacity of 13.9 bcf/d by the end of 2022, which would make the U.S. the largest LNG exporter in the world with 44 liquefaction trains across seven major LNG export facilities. Newer players such as Venture Global have successfully signed substantial long-term offtake agreements both at the Calcasieu Pass facility (currently under construction with commercial operation date expected early 2023), and the Plaquemines facility (currently under development with FID expected in 2022) and in doing so have effectively marked the second wave of LNG development. We continue to believe long-term offtake contracts are necessary to secure financing and underpin successful project financings. Finally, amid all of this, the ever-increasing influence of ESG factors continues to weigh on LNG projects. We believe that ESG attributes will remain a key consideration for new projects seeking commercialization.

Credit metrics and financial policy

The midstream industry's rebound is evident when looking at the improvement in credit measures across sectors and ratings. We forecast that the commodity price and demand recovery will result in average aggregate EBITDA growth of about 1.5%. Lower spending and dividend cuts from years past have contributed to a windfall of excess discretionary cash for the industry, which has mainly been directed to debt repayment for the last several years. Balance sheets have improved considerably, with average debt to EBITDA for the industry declining from a high of over 5.5x in 2019 to 4.5x in 2021, and our expectations for 4x in 2022. Funds from operations to debt improved from 19% to almost 30% over the same period.

We believe commodity prices and demand will continue to be supportive to the industry's credit quality in 2022. Capital spending will increase modestly but remain well below 2019 spending levels, and in our opinion is unlikely to increase substantial in the future as North American infrastructure is generally adequate, with some exceptions, for meeting current supply and demand needs. Capital spending dollars are being directed to the areas where it's needed, mostly relating to natural gas infrastructure in West Texas and expanding export capabilities along the Texas Gulf Coast and Houston Ship Channel.

The midstream industry has embraced a more conservative financial policy in recent years, after double-digit-percent growth rates slowed and equity investors put a stop to easy capital market access. We believe companies will look to reward institutional and retail equity investors with share repurchase programs and dividend increases in the next few years after companies have put their capital structures in good order. We believe companies will remain conservative and will not reward shareholders at the expense of the debtholders.

Key risks or opportunities around the baseline

1. Accelerated energy transition

A more intense investor focus on ESG factors and legislation that will seek to address climate change could bring change to the oil and gas industry more quickly than we expect. We believe a secular shift in demand patterns will likely take decades to make a meaningful industry impact; midstream companies are beginning to develop strategies to be part of the solution as the energy transition accelerates.

2. COVID-19 demand shock

While the various virus mutations have impaired supply chains and many industries to varying degrees, the recent resurgence in infection rates has not materially affected demand or shut down economic activity. That said, the pandemic is ongoing, and its economic effects are unpredictable.

3. Commodity prices and production

While OPEC+ policy has been supportive of oil prices, any member disagreements, compliance failures, or geopolitical tensions could lead to price volatility. U.S. exploration and production producers' disciplined approach to drilling appears to be holding too, but if industry drilling outpaces internally generated cash flow, it will once again lead to the boom-bust cycles that could keep investors on the sidelines for good.

Despite headwinds, the industry is stable and resilient. We believe most midstream companies are well positioned to weather the challenges presented by the lingering effects of the COVID pandemic and have cushion in their credit measures for future dips in the commodity and economic cycles. We acknowledge that the energy transition will continue forward and cannot predict the pace at which it will do so. We also think that the infrastructure the industry collectively operates will remain a critical part of energy value chain as it delivers hydrocarbons to demand centers globally, despite policies to curb their use over time. We believe the continued use of oil and particularly natural gas will serve as bridge fuels over the next several decades as governments and countries seek to replace them with renewable sources of energy.

Related Research

- ESG Credit Indicator Report Card: Midstream Energy, Nov. 29, 2021
- Updated Key Credit Factors For The Midstream Energy Industry, Nov. 15, 2021
- Peer Comparison: 'BBB' Rated Midstream Companies Are Energized, Oct. 11, 2021

Industry forecasts

Midstream Energy

Chart 5

Debt growth (adjusted)

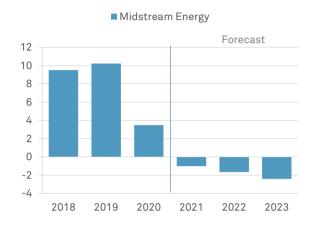


Chart 6
Capex growth (adjusted)

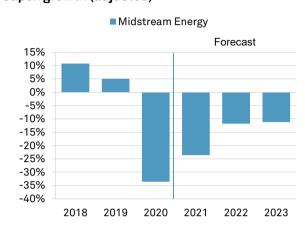
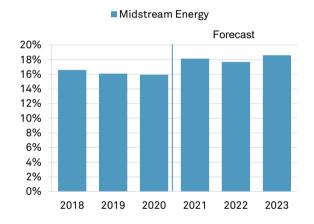


Chart 7

Debt / EBITDA (median, adjusted)

■ Midstream Energy Forecast 5.0x 4.5x 4.0x 3.5x 3.0x 2.5x 2.0x 1.5x 1.0x 0.5x 0.0x2018 2019 2020 2021 2022 2023

Chart 8
FFO / Debt (median, adjusted)



Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.

Cash, debt, and returns

Global Midstream Energy

Chart 9

Cash flow and primary uses

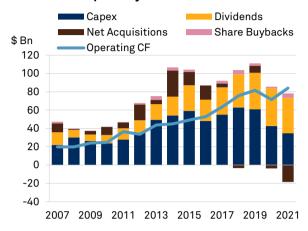


Chart 11

Fixed versus variable rate exposure

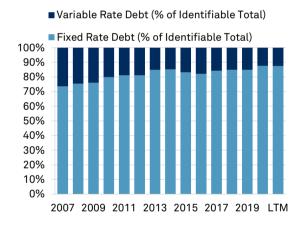


Chart 13

Cash and equivalents / Total assets

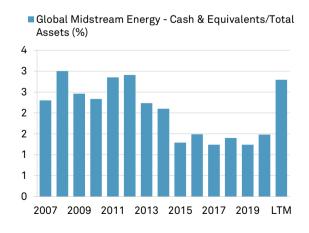


Chart 10

Return on capital employed

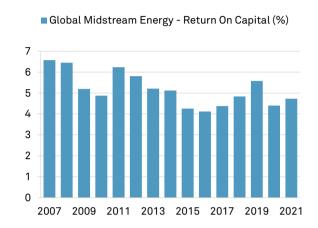


Chart 12

Long term debt term structure

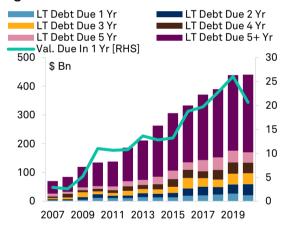
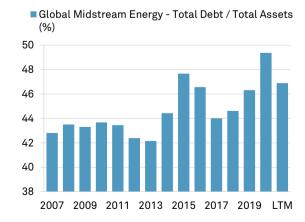


Chart 14

Total debt / Total assets



Source: S&P Global Market Intelligence, S&P Global Ratings calculations. Most recent (2021) figures are using last twelve months (LTM) data.

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