American Listed Infrastructure
Review and outlook

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The American Listed Infrastructure (ALI) asset class increased 24% in 2021, performing closer to equities than bonds[1]

The investment fundamentals for ALI in 2022 look positive with robust earnings growth, decarbonisation driven capex, M&A in the USA and supply chain improvements[2]

Less supportive financial market conditions may pressure investor returns for ALI in 2022 relative to a strong 2021

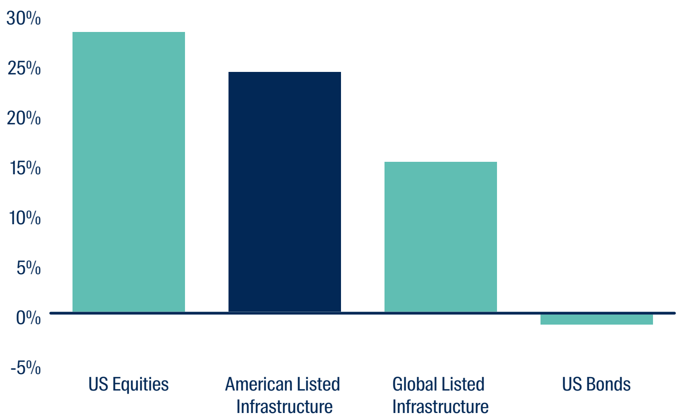
Within this lower expected return environment, we believe ALI is well positioned to deliver attractive risk-adjusted returns relative to equities, bonds and other liquid real assets

The American Listed Infrastructure (ALI) asset class increased 24% in 2021. The following article provides a review of investment performance and events that impacted the asset class in 2021. It then provides an outlook into the key themes we expect will impact the asset class in 2022.

Review of 2021

The ALI asset class increased 24% in 2021. This robust performance saw ALI perform closer to US equities (28%) than US bonds (-1%). ALI also produced returns above the Global Listed Infrastructure (GLI) asset class, which finished 2021 up 15%.

Asset class returns[3] in 2021



Source: Bloomberg, First Sentier Investors.

1 Past performance is not indicative of future performance.

2 Certain statements, estimates, and projections in this document may be forward-looking statements. These forward-looking statements are based upon First Sentier Investors' current assumptions and beliefs, in light of currently available information, but involve known and unknown risks and uncertainties. Actual actions or results may differ materially from those discussed. Readers are cautioned not to place undue reliance on these forward-looking statements. There is no certainty that current conditions will last, and First Sentier Investors undertakes no obligation to correct, revise or update information herein, whether as a result of new information, future events or otherwise.

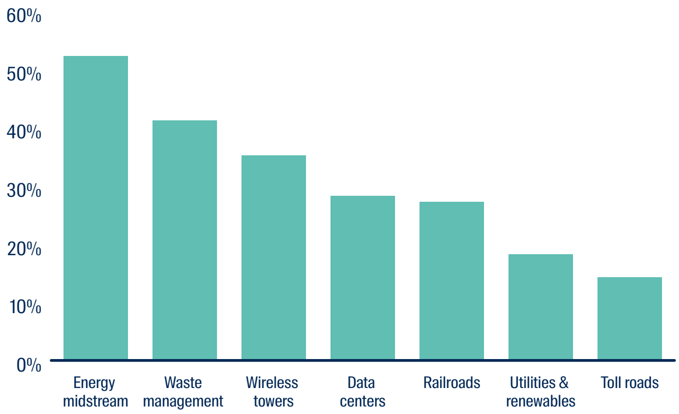
3 US Equities: S&P 500 Index, Net TR. American Listed Infrastructure: FTSE USA Core Infrastructure Capped Net TR Index. Global Listed Infrastructure: FTSE Global Core Infrastructure 50/50 Index, Net TR. US Bonds: Bloomberg US Corporate TR Value Unhedged USD.

ALI's strong investment performance in 2021 was driven by earnings upgrades, robust investment opportunities, a benign interest rate environment and significant Merger & Acquisition (M&A) activity.

The strongest performing ALI sub-sectors were energy midstream (+52%), waste management (+41%) and wireless towers (+35%). Energy midstream and waste management benefited from earnings upgrades, capital discipline and improving post-COVID business outlooks. Wireless towers enjoyed earnings upgrades and an improving leasing environment for US towers as the big 3+1 carriers ramp up their deployment of new spectrum for 5G wireless service.

The lagging sub-sectors were toll roads (+15%) and utilities & renewables (+18%). Toll roads were held back by COVID re-opening concerns. Utilities & renewables delivered earnings and investment upside but this was offset by concerns around higher interest rates and customer bill impacts from higher energy costs.

American Listed Infrastructure 2021 returns by sector



Source: Bloomberg, First Sentier Investors.

The below tables provide longer term performance of ALI relative to US equities, bonds, liquid real assets and GLI[4].

Total Returns from US asset classes

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Infrastructure 20%	Infrastructure 19%	Equities 15%	Equities 32%	Infrastructure 25%	Equities 1%	Infrastructure 23%	Equities 21%	Infrastructure 2%	Equities 31%	Equities 18%	Equities 28%
Equities 14%	Bonds 8%	Bonds 10%	Infrastructure 20%	Equities 13%	Bonds -1%	Equities 11%	Infrastructure 18%	Bonds -3%	Infrastructure 30%	Bonds 10%	Infrastructure 24%
Bonds 9%	Equities 1%	Infrastructure 9%	Bonds -2%	Bonds 7%	Infrastructure -18%	Bonds 6%	Bonds 6%	Equities -5%	Bonds 15%	Infrastructure 4%	Bonds -1%

Total Returns from US Liquid Real Assets

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MLPs 36%	Infrastructure 19%	REITs 18%	MLPs 28%	REITs 30%	REITs 3%	Infrastructure 23%	Infrastructure 18%	Utilities 4%	Infrastructure 30%	Infrastructure 4%	REITs 43%
REITs 28%	MLPs 14%	Infrastructure 9%	Infrastructure 20%	Utilities 29%	Utilities -6%	MLPs 18%	Utilities 13%	Infrastructure 2%	Utilities 27%	Utilities 3%	MLPs 40%
Infrastructure 20%	REITs 9%	MLPs 5%	Utilities 11%	Infrastructure 25%	Infrastructure -18%	Utilities 17%	REITs 5%	REITs -5%	REITs 26%	REITs -8%	Infrastructure 24%
		Utilities -1%	REITs 2%	MLPs 5%	MLPs -33%	REITs 9%	MLPs -7%	MLPs -12%	MLPs 7%	MLPs -29%	Utilities 18%

Total Returns from Listed Infrastructure asset classes

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
American 20%	American 19%	Global 13%	American 20%	American 25%	Global -9%	American 23%	Global 18%	American 2%	American 30%	American 4%	American 24%
Global 12%	Global 6%	American 9%	Global 14%	Global 15%	American -18%	Global 11%	American 18%	Global -4%	Global 25%	Global -4%	Global 15%

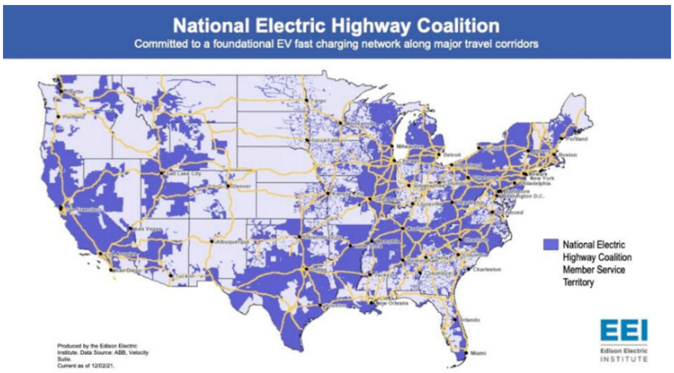
4 US Equities: S&P 500 Index, Net TR. American Listed Infrastructure: FTSE USA Core Infrastructure Capped Net TR Index. US Bonds: Bloomberg US Corporate TR Value Unhedged USD. MLPs: Alerian MLP TR Index US REITs: MSCI US REIT Gross TR. US Utilities: PHLX Utility Sector TR Index. Global Listed Infrastructure: FTSE Global Core Infrastructure 50/50 Index, Net TR.

The key themes for the ALI asset class in 2021 were earnings upgrades, increased investment opportunities, high levels of M&A activity, inflation/pricing power, higher energy prices, supply chain disruptions and increased extreme weather events.

Firstly, ALI delivered strong earnings growth in 2021 with forecasts being upgraded as we progressed through the year. These earnings upgrades were driven by stronger than expected economic recovery from COVID, higher energy prices, increased investment opportunities and favourable weather. Energy midstream, waste management, utilities & renewables and wireless towers all enjoyed earnings upgrades in 2021. Railroads and data centers' earnings lagged due to supply chain disruptions and a weaker pricing environment respectively.

Secondly, the asset class enjoyed strong investment opportunities in 2021. These opportunities are focused around renewable energy (solar and storage were the kings of 2021), grid resiliency and hardening, decarbonisation of transport, waste recycling and expanded data centers.

ALI utilities investing in EV charging infrastructure

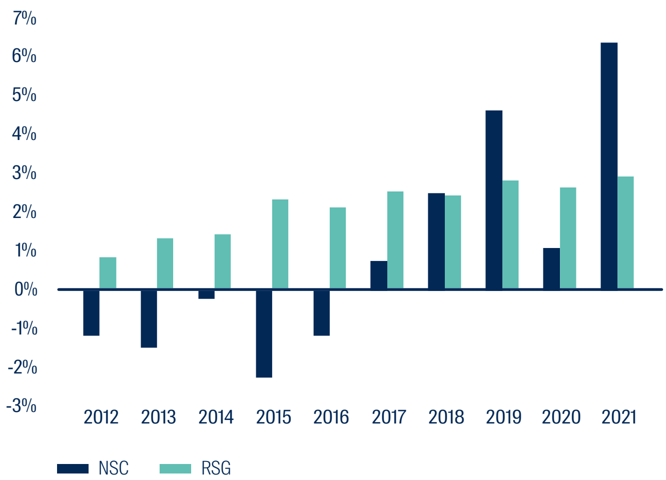


Source: Edison Electric Institute.

Thirdly, low interest rates, high levels of corporate confidence and a large pool of uninvested private capital saw a high level of M&A activity in ALI. In 2021, there were seven[5] takeover bids for ALI companies with an average premium to market value of 29% and average forward EV/EBITDA multiple of 19x. Four of these bids came from private market buyers (KKR, GIP, EQT, Blackstone and Colony Capital[6]) with the remaining three bids coming from existing ALI companies.

Fourthly, ALI had to navigate high levels of inflation in 2021. Overall this was a positive driver of the asset class. On the pricing side, railroad and waste management companies achieved very strong pricing outcomes of 3-6%. Only the data center sector suffered from pricing pressures. On the cost side, utilities & renewables and wireless towers were able to offset cost increases with efficiency gains or contracted price rises.

Pricing growth of railroads and waste management



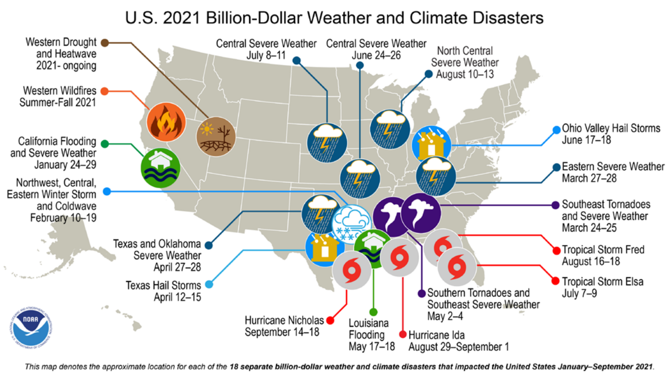
Source: Norfolk Southern (NSC) and Republic Services (RSG) company reports, First Sentier Investors.

Fifthly, higher energy prices rippled through ALI in 2021 with multiple impacts. These higher prices were very positive for the energy midstream sector driving strong cash flows, increasing investment opportunities and reducing counter party credit risk. Higher commodity prices also increased profits from waste management's recycling businesses. Offsetting these positives were increased political and legal risks for electric & gas utilities as these higher energy prices pressured customer bills. Heavy electricity users, data centers, suffered from higher operating costs in 2021 which squeezed operating margins.

Sixthly, global supply chain disruptions adversely impacted volumes for railroads, especially for automotive and intermodal traffic. The build out of renewable energy projects was also disrupted with projects behind schedule and above budget.

Lastly, an increase in extreme weather events impacted infrastructure assets across the country. The National Oceanic and Atmospheric Administration (NOAA) estimated weather and climate disaster events caused $104 billion damage in the first 9 months of 2021 with 18 weather events causing over $1 billion damage.

US weather and climate disaster events in 2021



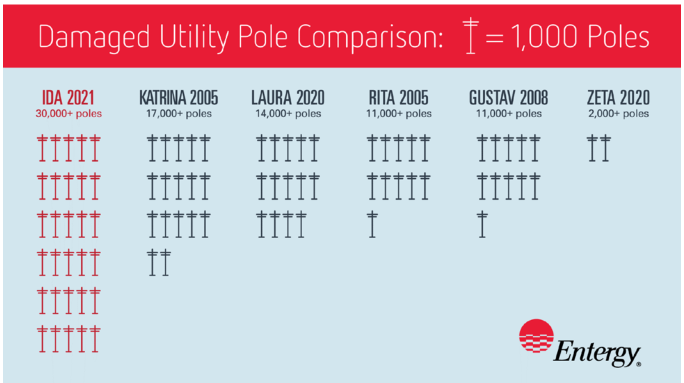
Source: NOAA.

[5] 3 data centers (QTS Realty, CyrusOne and CoreSite Realty), 1 waste management company (Covanta), 1 railroad received two bids (Kansas City Southern) and 1 communications infrastructure company (Boingo Wireless).

[6] For illustrative purposes only. Reference to the names of each company mentioned in this communication is merely for explaining the investment strategy and First Sentier Investors does not necessarily maintain positions in such companies. Any fund or stock mentioned in this presentation does not constitute any offer or inducement to enter into any investment activity nor is it a recommendation to purchase or sell any security.

For ALI, droughts in the west increased wildfire risks and reduced hydroelectric output for electric utilities. They also disrupted grain and operational flow in western railroads. The 21 named hurricanes[7] and tropical storms in 2021 caused billions of dollars of damage to electric grids on the Gulf and Atlantic coasts. Gulf Coast electric utility, Entergy, estimated its system suffered $2.5 billion in damage from Hurricane Ida alone. February winter storm Uri caused blackouts in Texas and parts of the midcontinent, massively disrupting electric and gas infrastructure assets with significant customer, financial and regulatory ramifications.

Comparison of hurricane damage to Gulf Coast utility



Source: Entergy.

Outlook for 2022

The investment fundamentals for the ALI asset class in 2022 are positive. At a macro level, we expect above trend US GDP growth of between 3.5% and 4.0%, albeit with the March quarter being disrupted by Omicron. This robust economic growth is expected to be driven by strong consumer spending, inventory rebuild and non-residential investment. Offsetting to these positives will be a less stimulatory monetary policy. We expect inflation will moderate (but remain elevated) as we progress through the year from lower energy prices and less supply chain disruptions. Below are some of the keys themes we expect will impact ALI in 2022.

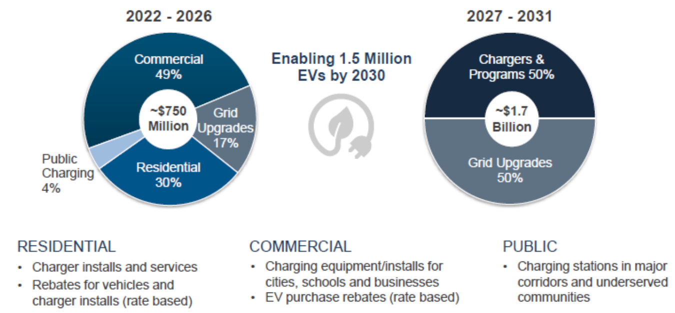
Robust earnings growth of 6-8%

We expect the ALI asset class to deliver earnings[8] growth of between 6% and 8% in 2022[9]. This growth will be driven by strong pricing increases, modest volume growth, operating efficiencies, robust capital investment and lower shares on issue. On a sub-sector basis, we are forecasting earnings growth of 10-12% railroads, 9-10% data centers, 8-9% waste management, 6-8% wireless towers, 5-6% utilities & renewables and 4-5% energy midstream. We see upside risk for utilities & renewables, wireless towers and waste management sectors but downside risk to railroads, data centers and energy midstream.

Decarbonisation dominating investment opportunities

We expect ALI firms will increase investment in various decarbonisation opportunities in 2022. For utilities & renewables; solar, battery storage, wind generation and electric vehicle (EV) charging infrastructure will continue its structural growth albeit at a slower rate due to likely cost increases. We do not expect to see any slowdown on announcements of closures of coal fired power plants. Investment in electric transmission and distribution assets will need to accelerate to better enable the transition to a more decentralised and decarbonised electric grid.

Xcel Energy's EV charging capital investment plans



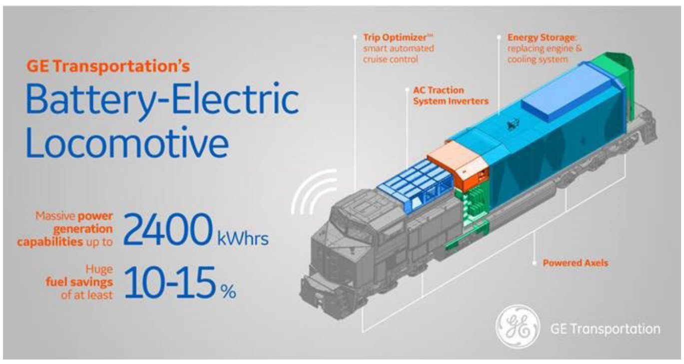
Source: Xcel Energy investor presentation December 2021.

Renewable Natural Gas (RNG) investments are expected to grow significantly in 2022 as gas utilities look to reduce their carbon output. Hydrogen and heat pump capital investment is likely to remain in the R&D phase for 2022 as corporates try to reduce costs of these out-of-the-money technologies[10].

For energy midstream, significant multibillion dollar expansion of US LNG export infrastructure in 2022 will be driven by decarbonisation efforts of emerging market economies with natural gas displacing coal leading to a net reduction in carbon.

Railroads are exploring battery-electric, hybrid and hydrogen powered locomotives with specific goals[11] to increase the use of low carbon fuels. Supporting rail volumes in 2022 and beyond is the increasing focus of ESG from stakeholders, and specifically the environmental benefits of shifting freight from truck to rail. This is becoming an increasingly differentiating factor for the railroads as they emit 75% less GHG than moving freight by truck. In our view the decarbonisation benefits of railroads relative to trucks will gain more customer and investor interest in 2022.

Decarbonisation of railroads



Source: General Electric.

7 The National Hurricane Center ranked 2021 as third highest number of storms on record.
8 On either an Earnings Per Share (EPS) or Adjusted Funds From Operations (AFFO) per share basis.
9 The foregoing performance objective is solely intended to express an objective or target for a return on your investment and represents a forward-looking statement. It does not represent and should not be construed as a guarantee, promise or assurance of a specific return on your investment. Actual returns may differ materially from the performance objective, and there are no guarantees that you will achieve such returns. We cannot and do not warrant the accuracy or the validity of the performance objective and are not liable if actual returns differ in any way from such performance objective.

10 Interesting that US utility, Xcel Energy, has stated hydrogen could represent an investment opportunity of between $2 and $4 billion by 2031.
11 Union Pacific is working to increase the percentage of low-carbon fuels consumed to 10% by 2025 and 20% by 2030.

Legislation, regulation and politics

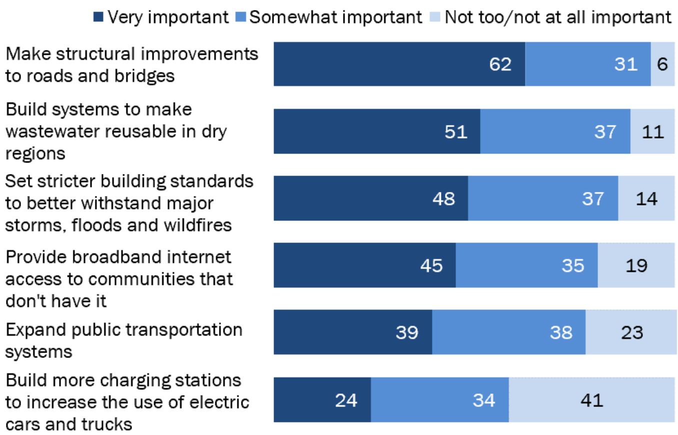
The bipartisan $550 billion Infrastructure Investment and Jobs Act should have a modest positive impact on ALI towards the end of 2022 in the areas of lead water pipe replacement, electricity transmission investment and EV charging infrastructure. While we believe the more substantial $1.75 trillion Build Back Better Act has a fairly low probability of passing the Senate in its current form, we are somewhat optimistic that a separate bill, focused just on the $555 billion climate change related renewables tax credits could pass the legislature in the June quarter. This has the potential to accelerate the decarbonisation of the US electricity generation fleet which would likely increase the investment and earnings growth rates for many ALI electric utilities.

On the regulatory side, offshore wind regulator, Bureau of Ocean Energy Management (BOEM) should accelerate development approvals in 2022. The Federal Energy Regulatory Commission (FERC) has a large backlog of important decisions in 2022 and needs to better align itself with the pro-electric transmission agenda of the Biden White House. In railroads, we believe there is a modest probability (say 25%) that the Surface Transportation Board (STB) rejects the Canadian Pacific takeover of Kansas City Southern in the back end of 2022 or early 2023.

Infrastructure investment remains popular with US voters. Hence it is not surprising that despite being in a hyper partisan political environment, infrastructure is one of the few issues that enjoys strong support from both Democrats and Republicans[12]. At both state and federal levels, we expect strong public policy support for infrastructure investment in 2022. In the national midterm elections and the 36 governor races, we expect to see promises of increased infrastructure investment and little negativity or opposition. Last year's extreme weather events highlighted to voters and politicians the cost of not investing in their infrastructure, be it in red, purple or blue states.

Majority views structural improvements to roads and bridges as a very important infrastructure goal

% of U.S. adults who say each is a ____ goal for the federal government to do the following to improve infrastructure



Note: Respondents who did not give an answer are not shown.
Source: Survey conducted Sept. 13-19, 2021.

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Strong balance sheets and high free cash flow

ALI enters 2022 with strong Balance Sheets, robust credit metrics and high free cash flow (FCF) generation. We expect this attractive combination will see railroads, waste management and to a lesser extent wireless towers and energy midstream sectors buying back between 1 to 5% of their shares on issue on top of funding organic capital investment opportunities. Utilities & renewables and data centers are likely net issuers of equity to partly fund their significant capital investment opportunities. We expect dividends to grow inline or at a slightly higher pace than earnings in 2022.

M&A in the USA

With relatively low interest rates, easy access to credit, rising geopolitical risks and economic growth outside the US languishing, we expect to see strong foreign interest in acquiring safe harbour ALI assets in 2022. In addition we continue to see a large disconnect between valuations of public market (listed) and private market (unlisted) infrastructure assets. In our view, these above mentioned issues should see strong M&A activity in ALI in 2022.

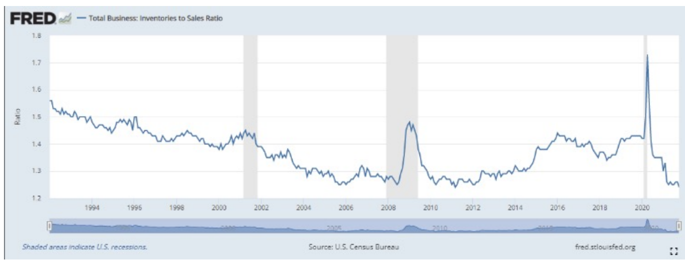
In utilities & renewables, foreign utilities like ENEL, Iberdrola, SSE plc and Ørsted are looking at buying US assets. Industry giant, NextEra Energy, is seeking to consolidate the US electric utility sector via M&A. We believe several US electric utilities (Pinnacle West Corp, FirstEnergy, Avista Corp) look vulnerable to M&A due missteps in 2021. Furthermore, we expect Sempra, OGE Energy and Public Service Enterprise Group to sell non-core assets to achieve a re-rating of their core utility franchises.

Energy midstream is ripe for consolidation with its strong FCF generation but limited growth opportunities in a structurally declining industry. We expect Canadian giants Enbridge and TC Energy to acquire US natural gas midstream assets. We believe several Master Limited Partnerships (MLPs) will either look to convert to C-Corps or be acquired by parent / sponsor.

Supply chain improvement will drive railroad volumes

COVID related supply chain disruptions are reducing and we expect them to be a positive driver of railroad volumes in 2022. Once congestion has eased, the backdrop of high consumer savings and low inventory levels will provide strong demand as we progress through the year. This should support positive volumes of 3-4% for the railroads.

US inventory to sales ratio very low

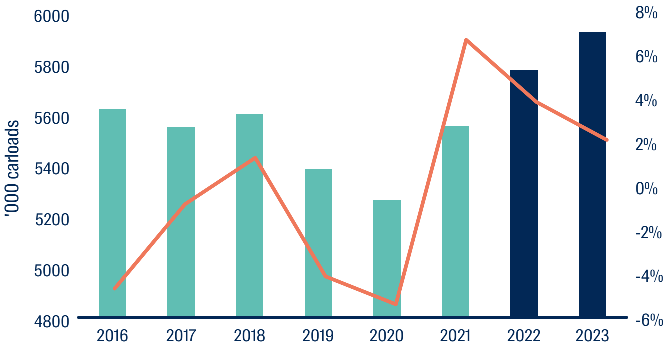


Source: St Louis Federal Reserve.

[12] Perhaps with the exception of former President Trump's dislike of wind farms.

Some companies are moving from an inventory strategy of 'just in time' to 'just in case' on the fears of recurrent supply chain issues with new COVID outbreaks in the future. This supports a runway of strong volumes once supply chain issues ease. The graph below for eastern railroad, CSX Corp., shows that although 2021 rail volumes have not yet returned to pre-COVID levels due to supply chain issues, the next two years volumes are expected to strongly rebound as the supply chain improves.

CSX railroad volumes (ex-coal)



Source: Company reports, First Sentier Investors forecasts.

Weaponisation of energy
From the founding of OPEC in 1960 to its 1973 embargo, oil has long been used as a geopolitical weapon. However the rise of US shale oil production has significantly blunted this weapon over the last decade. More recently, natural gas has been used by Russia as a weapon in European international relations. Russia supplied 35% of Europe's natural gas needs in 2020[13]. In 2022 Russia seems intent on threatening to use this weapon as it agitates on issues around Ukraine's westward drift, Nord Stream 2 approvals and NATO expansion.

Weaponisation of energy has positive implications for ALI's energy midstream companies which own and operate energy export assets. Replacing Russian natural gas supply is becoming a strategic imperative for many European countries with US LNG the obvious solution. Specifically we expect to see new export contracts and expansion of LNG terminals in 2022 at Cheniere Energy's Corpus Christi LNG terminal and Sempra's Cameron and ECA LNG terminals.

If future relations between today's frenemies, Russia and China, were to deteriorate, this would further increase demand for US LNG. According to the Global Times website, customs data indicates that in 2020, 8% of Chinese imported natural gas was sourced from Russia.

Conclusion

The ALI asset class delivered strong investment returns in 2021. The investment fundamentals for the asset class look positive for 2022. That said, we expect financial market conditions for most assets to be less supportive as the Federal Reserve increases interest rates and reduces its stimulus measures. This macro environment may pressure trading multiples of ALI with the potential to limit investor returns in 2022 relative to a strong 2021. However, within this lower expected return environment for 2022, we believe ALI is well positioned to deliver competitive returns relative to equities, bonds and other liquid real assets. In our view the ALI asset class offers attractive risk adjusted returns for investors seeking inflation limited income and solid capital growth.

The answer (to decarbonisation) is blowing in the wind

Source: Xcel Energy's Rush Creek windfarm, Colorado.

[13] Source: Reuters