

MAGELLAN INFRASTRUCTURE STRATEGY

The strategy seeks to provide efficient access to the stable returns offered by infrastructure and utility stocks while protecting capital in adverse markets by investing in infrastructure companies that provide essential services and generate predictable long-term earnings. Infrastructure and utility stocks that will help achieve these aims generally have strong underlying financial performance over the medium to long term, which is expected to translate into reliable, inflation-linked returns. The strategy typically holds between 20 and 40 stocks. The unhedged version of the strategy makes no attempt to protect returns from currency movements.



Gerald Stack,
Head of Investments
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PERFORMANCE

Global stocks fell over the 12 months to June after Russia's invasion of Ukraine clouded the global economic outlook and boosted energy and food prices, central banks tightened monetary policies to tame inflation at decade highs, higher interest rates prompted talk the US economy was headed for recession, and China added to worries about shortages and inflation by locking down cities to enforce a policy of zero covid-19.

- The Magellan Infrastructure Fund recorded a return after fees of 6.6%¹ for the 12 months.
- The Magellan Infrastructure Fund (Currency Hedged) (Managed Fund) recorded a return after fees of 6.5%¹ for the 12 months.
- The Magellan Infrastructure Fund (Unhedged) recorded a return after fees of 10.7%² for the 12 months.

Within the underlying global portfolio, the companies that contributed were the investments in Sempra Energy of the US (+1.2 percentage points of the total portfolio return in Australian Dollar (AUD) terms), Atlantia of Italy (+1.1 ppts) and WEC Energy Corp of the US (+0.9 ppts). Sempra Energy rose after investors assessed that one fall-out of the Russia-Ukraine war is faster growth for the energy infrastructure's North American LNG export business. Atlantia surged after the Benetton family, the largest shareholder in the motorway and airport infrastructure company with a 33% stake, announced a takeover of 23 euros a share to take the company private. WEC Energy jumped after the company that supplies electricity and gas to Midwestern states announced first-quarter earnings that beat expectations thanks to strong demand for gas during winter and growth in its 'rate base'.

The companies that detracted the most were the investments in Aena of Spain (-0.7 ppts), Royal Vopak of the Netherlands (-0.4 ppts) and Vinci of France (-0.4 ppts). Aena tumbled as covid-19 variants disrupted travel and

the world's largest airport operator reported disappointing earnings due to higher energy prices. Vopak slid as the storage operator's earnings reports disappointed, occupancy rates in its terminals fell and the 'backwardation' in oil markets (when the spot price is higher than the futures price) stirred uncertainty. Vinci fell as investors expressed concern that an economic downturn and soaring fuel prices could hamper the company's toll road and construction businesses.

POSITIONING AND OUTLOOK

The strategy has invested in a portfolio of listed infrastructure companies that the investment team considers to be high quality and that are expected to generate reliable long-term earnings that ultimately lead to reliable investment returns.

In addition to reliable underlying earnings, the portfolio is exposed to structural growth that could potentially enhance returns to investors:

- The transition of the global economy to net-zero emissions will require significant investment in electricity transmission and distribution that will enable regulated electricity utilities to grow their assets and earnings.
- Strong growth in the volume of data flowing across communications networks will require additional investment in communications infrastructure.
- Growth in economies will lead to increased road and aviation traffic that can be expected to increase revenues and earnings for toll roads and airports.

The past 12 months have seen central banks tighten monetary policy with consequent increases in prevailing bond yields leading to increased market volatility. Notwithstanding turbulence in equity markets, we expect that underlying earnings of infrastructure and utilities companies in our defined investable universe should prove reliable. These reliable

earnings provide confidence that a portfolio of high-quality infrastructure companies will deliver the investment performance we expect.

Top-10 holdings at 30 June 2022³

Security	Weight (%)
Transurban Group	8.1
Vinci SA	6.1
Dominion Energy Inc	5.1
United Utilities Group Plc	4.6
Sempra Energy	4.5
American Tower Corporation	4.5
Crown Castle International	4.1
Atlantia SpA	4.1
Atlas Arteria	3.8
Eversource Energy	3.8
Total	48.7

PORTFOLIO STRATEGY

Our investment philosophy has not changed since we launched the strategy in 2007. We seek to build a portfolio of outstanding infrastructure and utility companies that generate the predictable long-term earnings with predictable earnings being the bedrock of reliable long-term investment returns for infrastructure investors.

The types of infrastructure assets in which the strategy invests are generally natural monopolies that provide an essential service to the community. We exclude infrastructure companies whose earnings are exposed to competition, sovereign risk and changes in commodity prices, with the aim of limiting our investment universe to stocks that provide investors with predictable, through-the-cycle, inflation-linked returns. Infrastructure assets offer investors protection from inflation because their real earnings are generally protected in various ways.

The universe of infrastructure assets that we consider for the strategy mainly comprises two sectors:

- **Regulated utilities**, which includes energy and water utilities. We estimate that utilities comprise about 60% of the potential investment universe for the strategy. Utilities are typically regulated by a government-sponsored entity. Such regulation requires the utility to efficiently provide an essential service while allowing the utility to earn a fair rate of return on the capital it has invested.
- **Infrastructure**, which includes airports, ports, railroads, toll roads, communications assets and energy infrastructure (oil and gas pipelines). Typically, infrastructure companies are involved in the transport of people, goods or data. Regulation of infrastructure companies is generally less intensive than for utilities and allows companies to benefit from growth in the use of the infrastructure offered. As economies and technology develop, we expect the volume of aviation, shipping, rail and vehicle traffic to increase, along with demand for data transported through communications networks.

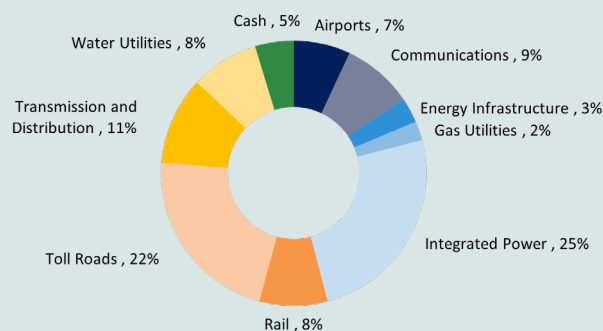
Utilities and infrastructure companies provide essential services while facing limited, if any, competition. Because the services are indispensable, the prices charged can be adjusted with limited impact on demand. As a consequence, earnings are more reliable than those for a typical industrial

company and generally enjoy inherent protection against inflation. Over time, the stable revenue or cash-flow streams derived from infrastructure assets are expected to deliver income and capital growth for investors.

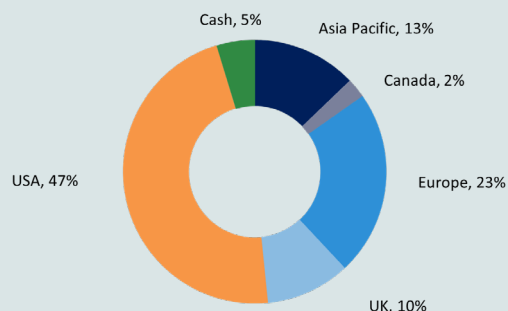
Over the 15 years we have been managing infrastructure investments, we have faced many periods of investment market uncertainty. Ultimately, we believe the use of a conservatively defined infrastructure investment universe has meant that the long-term earnings derived by the companies that we invest in have grown in a predictable manner and this has led to reliable long-term wealth accumulation for investors.

PORTFOLIO OUTLOOK

Sector Exposure⁴



Geographical Exposure⁴



As the chart above shows, at the end of June 2022 the portfolio was composed of approximately equal investment in infrastructure and utilities and a small allocation to cash. While the generation of reliable long-term earnings is a key characteristic of these investments, some sectors that the portfolio has invested in enjoy attractive long-term structural growth.

The **regulated electricity utilities** in the portfolio (categorised as 'integrated power' and 'transmission and distribution' in the chart above) typically operate within regulatory frameworks that protect their earnings against increases in fuel and purchased power costs. In most instances, regulatory mechanisms also moderate the sensitivity of earnings to changes in customers' consumption of electricity. Reflecting these supportive regulatory settings, almost all the electricity utilities in the portfolio reported 2021 calendar-year financial results that were in line with or ahead of guidance issued at the beginning of the year, notwithstanding the impact of sharp rises in wholesale energy prices, and the ongoing effects of the pandemic.

We expect the transition to a net-zero economy to require sustained high levels of investment, leading to attractive rates of earnings growth for our regulated electricity utilities for a

generation. Electrification of end-use consumption lies at the heart of policymaker plans to achieve net-zero emissions, while the International Renewable Energy Agency projects the contribution of electricity to total energy consumption will increase from 19% in 2019 to 50% in 2050.⁵ A meaningful portion of the remaining demand for energy in a net-zero economy is expected to be met by green hydrogen and advanced biofuels synthesised in grid-connected electrolyzers, and 'power-to-x' facilities that use renewable electricity as an input to production, further accentuating the contribution of electricity infrastructure. Having regard to the critical role electricity utilities play towards a net-zero economy, investors can be confident that significant network investment is likely to attract regulatory support.

The International Energy Agency (IEA) estimates that global renewable generating capacity will need to triple over the period to 2030 and increase nine-fold over the period to 2050 if the world is to achieve net-zero emissions by mid-century.⁶ The IEA further projects that investments in electricity grids will triple to 2030, remaining at elevated levels until 2050.⁷ In the US, Princeton University estimates that the transition to a net-zero emissions economy will require investments in new wind and solar capacity of US\$3.4 billion to \$6.2 trillion and in new transmission capacity of US\$2.5 billion to \$3.7 trillion.⁸ Electricity distribution networks to support the electrification of transportation will require further significant investment. Under the regulatory construct, these investments boost the earnings potential of our electricity utilities, presenting investors with an opportunity to compound attractive risk-adjusted investment returns for a generation.

Water utilities are among the most defensive assets in the infrastructure investment universe. Stable underlying demand for water and wastewater services confers on the earnings of these companies a high degree of predictability. The replacement of ageing pipes and water treatment plants coupled with efforts to enhance the resilience of networks against the impacts of climate change support expectations of predictable growth in earnings well into the future.

Gas utilities operate within regulatory constructs that protect their earnings against increases in volatile natural gas prices. In many instances, these businesses also benefit from weather-normalisation clauses and revenue-decoupling mechanisms that moderate the sensitivity of earnings to changes in customer consumption. As a consequence of this favourable treatment, the gas utilities in the strategy delivered robust financial results during 2021, sharp rises in gas prices and the ongoing impact of the pandemic.

The significant investment required to replace ageing cast iron, bare steel and vintage plastic pipe within gas distribution networks supports attractive earnings growth rates for many gas utilities. We expect the space heating loads that dominate demand for gas to prove resilient to electrification in the regions where we invest, reflecting the superior economics and technical properties of gas-fired heating relative to electric heat pumps.

The **communications infrastructure** assets in the portfolio generate highly defensive earnings streams. Leases over communications tower assets are typically struck with an initial term of five to 10 years, provide for multiple renewal terms, and limit the termination rights of tenants. Moreover,

lease agreements ordinarily embed rent escalation clauses, with rents typically escalating at a rate of about 3% p.a. in the US and at prevailing inflation rates in international markets.

With mobile data consumption expected to grow at rates in excess of 25% p.a. in key international markets over the next five years,⁹ communication infrastructure companies in the portfolio are poised to benefit from strong tenancy growth as wireless carriers add cell sites to deliver adequate network coverage. Having regard to the operating leverage inherent in the tower companies' business models, this revenue growth is expected to yield outsized growth in earnings and cash flow.

The **toll-road** companies in the strategy are among the most structurally advantaged infrastructure assets in the world. Congestion on alternative routes implies that these assets face limited competition and capture a disproportionate share of incremental growth in traffic. Moreover, concession agreements typically provide for tolls to escalate at CPI or fixed nominal rates above CPI, preserving the real value of cash flows in an inflationary environment. As the covid-19 health crisis has abated, restrictions on movement have eased, supporting a rapid recovery in traffic volumes. The traffic levels for most of the toll roads we follow are now back above pre-pandemic levels, demonstrating the robust underlying demand for the efficient transportation that these essential assets provide.

While the global health crisis still weighs heavily on the results of our **airport** investments, easing pandemic restrictions have seen the recovery in aviation activity gather momentum over recent months. For the month of April (the most recently available data), the International Air Transportation Association (IATA) reported that global passenger demand remained about 37% below its 2019 level, with international demand operating at about 57% of its pre-pandemic level.¹⁰ Encouraged by the efficacy of vaccines, IATA's most recent projections call for world aviation activity to exceed 2019 levels in 2023, while major airports are guiding to a recovery to 2019 passenger volumes between 2023 and 2027.

North American **railroads** provide a basic and essential service to the freight industry by transporting freight across North America. From agriculture and automotive parts to chemicals and coal, railroads serve practically every industry. Rail is typically the most economical option for long-distance shippers, particularly when hauling low-value heavy goods such as minerals and grains.

North American railroad companies operate within duopoly markets, which means competitive pressures are limited. Within each market, the main operators have shown the discipline needed to expand margins while capital intensity, network effects and rights of way create barriers to new entrants.

Railroads have demonstrated an ability to more than account for inflation through pricing power. Railroads face light economic regulation that allows railroad operators to charge rates that support prudent capital outlays, assure the repayment of a reasonable level of debt, permit the raising of needed equity capital, and cover the effects of inflation while attempting to maintain sufficient levels of market-based competition. Arguably, this framework has provided

railroads with greater discretion around the rates they charge customers and thus, the ability to more than account for inflation.

Key risks for railroads include regulation and economic sensitivity. As is often the case in infrastructure, economic regulation is present but the regulation has historically been light handed and constructive. Rail companies are exposed to potential fluctuations in the volume of goods transported due to changing economic conditions but long-term underlying demand can be expected to grow with the economy.

Over the long term, we expect rail companies to benefit from modest volume growth and progressive improvement in operating efficiency. Improvements in operating efficiency are expected due to the adoption of 'precision scheduled railroading' initiatives. These initiatives have been implemented across the railroad industry over the past 20 years, leading to structural cost efficiencies and consequent improvements in profitability. These improvements are expected to continue.

The **energy infrastructure** companies in the strategy generate earnings by storing and transporting crude oil, natural gas and chemicals in their network of storage terminals and pipelines. The selective group of storage and pipeline assets that meet our strict definition of infrastructure derive the bulk of their earnings under long-term take-or-pay arrangements or from assets that are subject to economic regulation. Critically, these arrangements immunise earnings against the movements in commodity prices that erode the reliability of cash flows from most oil and gas pipelines. Moreover, while our energy infrastructure investments often bear some volume risk on their regulated assets, the advantaged producing regions and demand centres that these pipelines and storage assets serve have historically supported consistently high levels of use.

While the transition to a global economy that is less reliant on fossil fuels may challenge energy infrastructure companies in the long term, we expect their reliable earnings to be fundamentally undisturbed for at least the next 15 years. While most major auto manufacturers have signalled their intent to discontinue the sale of internal combustion engine passenger vehicles between 2030 and 2035, the existing fleet will support demand for crude oil well beyond this period. Indeed, Bloomberg New Energy Finance forecasts that there will still be more than 900 million fossil-fuel-powered vehicles on the road in 2040, representing more than half of the global fleet.¹¹ We expect demand from power generation and space heating to lend similar resilience to natural gas transportation assets.

Having regard to the advantaged characteristics and favourable prospects of the companies in the portfolio, we remain confident that the strategy will meet its objectives of delivering attractive risk-adjusted investment returns over the long term and protecting capital in adverse markets.

IMPACT OF INFLATION AND INTEREST RATES ON INFRASTRUCTURE INVESTMENTS

The emergence of inflation and withdrawal of ultra-accommodative monetary policy settings marked a paradigm shift in global markets during the last twelve months. Consequent increases in prevailing bond yields have led to increased investment market volatility. There are two key areas we focus on when considering interest rates:

- 1 **The impact on the businesses in which we invest:** We remain confident that the businesses that meet our investment-grade infrastructure criteria are well placed to meet our investment expectations through a period of elevated inflation and rising interest rates; and
- 2 **Impact on valuations and on debt and equity markets:** An increase in interest rates can be expected to lead to a higher cost of debt and an increase in long-term discount rates. We observe that stocks that are regarded as 'defensive,' a term that covers infrastructure businesses and utilities, are often subject to negative sentiment during periods when interest rates rise. Nevertheless, it is our experience that, provided the fundamentals of the businesses we are invested in remain robust, their stock prices will ultimately resume their former trajectory of growth. As the famous investor Benjamin Graham noted, in the long run the stock market is a cash flow weighing machine and what matters is underlying business performance rather than short-run prospects.

Notwithstanding equity market volatility, we expect that underlying earnings of infrastructure and utilities companies in our defined investable universe should be robust and reflect solid growth. Ultimately the value of the companies in our investment portfolio reflects the future cash flows they are expected to generate and the risks associated with those cash flows.

OUTLOOK

We think that infrastructure assets, with requisite earnings reliability and a linkage of earnings to inflation, offer an attractive long-term investment proposition. Furthermore, given the predictable nature of earnings and the structural linkage of those earnings to inflation, the investment returns generated by infrastructure assets are different from standard asset classes and offer investors valuable diversification when included in an investment portfolio. In the current uncertain economic and investment climate, the reliable financial performance of infrastructure investments makes them particularly attractive. We believe, an investment in listed infrastructure can be expected to reward patient investors within a three- to five-year time frame.

Notwithstanding the resilient nature of the stocks held in the portfolio, we expect to see volatility in equity markets, particularly when interest rates change. We are, however, confident that any increase in interest rates will have minimal drag on the underlying financial performance of the companies in the portfolio.



Gerald Stack

Hedged Performance as at 30 June 2022¹

	1 year (%)	3 years (% p.a.)	5 years (% p.a.)	7 years (% p.a.)	10 years (% p.a.)	Since inception (% p.a.)
Magellan Infrastructure Fund	6.6	1.5	5.5	7.6	10.4	7.5
Magellan Infrastructure Fund (Currency Hedged) (Managed Fund) (ASX: MICH)	6.5	1.7	5.6	-	-	6.2

Capital Preservation Measures¹²

Adverse Markets	Last 36 months	Last 60 months	Since inception 180 months
No. of observations	14	19	63
Outperformance consistency	64%	68%	73%
Down Market Capture Ratio	0.6	0.5	0.4

Unhedged Performance as at 30 June 2022²

	1 year (%)	3 years (% p.a.)	5 years (% p.a.)	7 years (% p.a.)	10 years (% p.a.)	Since inception (% p.a.)
Magellan Infrastructure Fund (Unhedged)	10.7	2.0	6.9	8.1	-	10.8

Capital Preservation Measures¹³

Adverse Markets	Last 36 months	Last 60 months	Since inception 108 months
No of observations	15	23	41
Outperformance consistency	60%	61%	61%
Down Market Capture Ratio	0.8	0.5	0.5

- 1 Returns denoted in AUD. Unlisted fund calculations are based on exit price with distributions reinvested, after ongoing fees and expenses but excluding individual tax, member fees and entry fees (if applicable). Active ETF calculations are based on net asset values with distributions reinvested, after ongoing fees and expenses but excluding individual tax, member fees and entry fees (if applicable). Magellan Infrastructure Fund inception 1 July 2007 (inclusive), Magellan Infrastructure Fund (Currency Hedged) inception date is 19 July 2016 (inclusive).
- 2 Returns denoted in AUD. Calculations are based on exit price with distributions reinvested, after ongoing fees and expenses but excluding individual tax, member fees and entry fees (if applicable). Fund inception date is 1 July 2013 (inclusive).
- 3 Based on Magellan Infrastructure Fund. Weights may not sum to total due to rounding.
- 4 Based on Magellan Infrastructure Fund. Sectors are internally defined. Geographical exposures are by domicile of listing. Cash exposure includes profit/loss on currency hedging. Exposures may not sum to 100% due to rounding.
- 5 International Renewable Energy Agency, Energy Transitions Outlook 2022: 1.5°C Pathway, March 2022.
- 6 International Energy Agency, Net Zero by 2050: A Roadmap for the Global Energy Sector, May 2021.
- 7 International Energy Agency, Net Zero by 2050: A Roadmap for the Global Energy Sector, May 2021.
- 8 Princeton University, Net-Zero America: Potential Pathways, Infrastructure, and Impacts, December 2020.
- 9 Ericsson Mobility Report, November 2020.
- 10 International Air Transportation Association, Air Passenger Market Analysis, April 2022.
- 11 BloombergNEF, Electric Vehicle Outlook 2021, June 2020.
- 12 Based on Magellan Infrastructure Fund. Capital preservation measures are based on exit price with distributions reinvested, after ongoing fees and expenses but excluding individual tax, member fees and entry fees (if applicable). An Adverse Market is defined as a negative monthly return for the MSCI World NTR Index (AS Hedged). The Down Market Capture Ratio shows if a fund has outperformed a benchmark during periods of market weakness, and if so, by how much. Fund Inception date is 1 July 2007 (inclusive).
- 13 Capital preservation measures are based on exit price with distributions reinvested, after ongoing fees and expenses but excluding individual tax, member fees and entry fees (if applicable). An Adverse Market is defined as a negative 3-month return for the MSCI World NTR Index, rolled monthly. The Down Market Capture Ratio shows if a fund has outperformed a benchmark during periods of market weakness, and if so, by how much. Fund Inception date is 1 July 2013 (inclusive).

IMPORTANT INFORMATION

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