MFG CORE INFRASTRUCTURE STRATEGY

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Head of Investments
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The MFG Core Infrastructure strategy aims to provide investors with returns that are underpinned by our conservatively defined universe of listed infrastructure assets. This approach is intended to provide investment returns that have lower correlation to risks such as commodity prices, competition and the economic cycle. This provides investors with a more defensive exposure to the asset class. The MFG Core Infrastructure strategy portfolio typically holds between 80 and 100 stocks.

PERFORMANCE

The strategy recorded a gross return of 3.8% in US dollars for the 12 months. Companies that contributed the most included the investments in Sydney Airport (+0.7 percentage points of the total portfolio return), Consolidated Edison of the US (+0.5 ppts) and Enbridge of Canada (+0.3 ppts). Sydney Airport surged following a A$24 billion takeover offer from a consortium led by the infrastructure manager IFM. Investors marked up Consolidated Edison due to evidence of an improved regulatory outlook and better-than-expected company guidance for long-term earnings. Enbridge, the owner and operator of the world's largest crude oil and liquids transportation system across Canada and the US, gained on a healthy full-year earnings report and as the oil price rose, despite having limited direct exposure to the oil price.

The companies that detracted included the investments in Cellnex Telecom of Spain (-1.4 ppts), Aena of Spain (-0.7 ppts) and Royal Vopak of The Netherlands (-0.3 ppts). Cellnex Telecom fell as record eurozone inflation boosted benchmark bond yields and hurt the company's real earnings power. Aena tumbled as covid-19 variants disrupted travel and the world's largest airport operator reported disappointing earnings due to higher energy prices. Vopak's share price 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.

PORTFOLIO POSITIONING

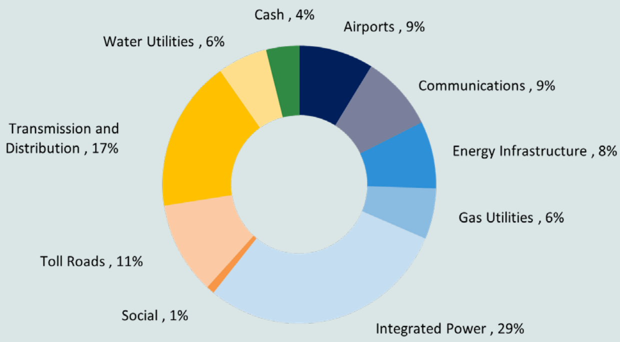
A strict definition of infrastructure, a systematic approach to portfolio construction and the targeted diversification settings applied in the Core Infrastructure strategy position the portfolio to deliver the reliable long-term investment returns, inflation protection and capital preservation that we regard as the quintessential characteristics of infrastructure.

We judge the prospects of the businesses in the strategy are favourable and that enduring tailwinds underpin growth in earnings and cash flow.

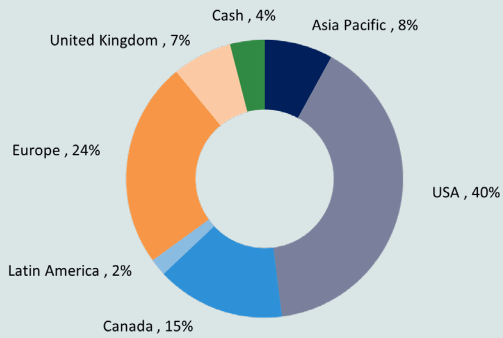
Top-10 holdings at 30 June 2022[1]

Security	Weight (%)
Transurban Group	3.0
Cellnex Telecom SA	3.0
Enbridge Inc	3.0
Vinci SA	2.9
National Grid PLC	2.9
Fortis Inc	2.9
TC Energy Corporation	2.9
Aena SME SA	2.6
Ferrovial SA	2.6
Snam SpA	2.4
Total	**28.2**

Sector Exposure[2]



Geographical Exposure[2]



The **regulated electricity utilities** that comprised 47.6% of the portfolio at June 30 (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 moderate the sensitivity of earnings to changes in consumption of electricity. Reflecting these supportive regulatory settings, almost all the electricity utilities in the portfolio reported full-year financial results that were in line with, or ahead of, guidance issued at the start of the year, notwithstanding the impact of a jump in wholesale energy prices and the pandemic.

We expect the transition to a net-zero economy to sustain high levels of value-accretive investment and attractive rates of earnings growth for our regulated electricity utilities for a generation. Electrification of consumption lies at the heart of policymaker plans to achieve net-zero emissions. The International Renewable Energy Agency projects that the contribution of electricity in final energy consumption will increase from 19% in 2019 to 50% in 2050.[3] 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 electrolysers, and 'power-to-x' facilities that use renewable electricity as an input to production. This will further accentuate the contribution of electricity infrastructure. Having regard to the critical role electricity utilities play in unlocking the path to a net-zero economy, investors can be confident that significant investment needed in networks will 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.[4] The IEA projects that investments in electricity grids will triple to 2030, remaining at elevated levels until 2050.[5] In the US, Princeton University estimates the transition to a net-zero emissions economy will require investments of US$3.4 to $6.2 trillion in new wind and solar capacity and investment of US$2.5 to $3.7 trillion in new transmission capacity.[6] 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, which presents investors with an opportunity to compound attractive risk-adjusted investment returns for a generation.

Water utilities, which represented 7.0% of the portfolio at June 30, are among the most defensive assets in the infrastructure investment universe. Stable underlying demand for water and wastewater services makes the earnings of these companies predictable. The replacement of ageing pipes and water treatment plants coupled with efforts to enhance the resilience of networks against the effects of climate change will support growth in earnings well into the future.

Gas utilities represented a 6.5% position in the portfolio at June 30. These businesses operate within regulatory constructs that protect their earnings against increases in natural gas prices. In many instances, these businesses benefit from weather-normalisation clauses and revenue-decoupling mechanisms that moderate the sensitivity of earnings to changes in consumption. As a consequence of this favourable treatment, the gas utilities in the strategy delivered robust financial results during 2021, notwithstanding the pandemic and sharp rises in gas prices.

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 residential space-heating loads that dominate demand for gas to prove resilient to electrification for some time in the regions where we invest.

The **communications infrastructure** assets that comprised 8.4% of the portfolio at June 30 generate highly defensive earnings streams. Leases over communications tower assets that 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 rising at a rate of about 3% p.a. in the US and at prevailing inflation rates in international markets.

As mobile data consumption is expected to grow in excess of 25% p.a. in key international markets over the next five years,[7] communications-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.

Toll roads represented 11.4% of the portfolio at June 30. The toll road companies in the strategy are among the most advantaged infrastructure assets in the world. Congestion on alternative routes imply 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. As the covid-19 health crisis has abated, restrictions on movement have eased, which supports a rapid recovery in traffic volumes. Traffic on many of the toll roads in the portfolio has returned to pre-pandemic levels, which shows the robust underlying demand for this method of transport.

Easing pandemic restrictions have boosted aviation activity in recent months, which helped the **airport** investments that represented 7.4% of the portfolio at June 30. For April (the most recently available data), the International Air Transportation Association (IATA) reported that global passenger demand remained about 37% below its 2019 level, while international demand was operating at about 57% of its pre-pandemic level.[8] Encouraged by the efficacy of vaccines, IATA's most recent projections expect world aviation activity to exceed 2019 levels in 2023. Major airports are forecasting a recovery to 2019 passenger volumes between 2023 and 2027.

The **energy infrastructure** companies in the strategy (7.9% of the portfolio at June 30) generate earnings by storing and transporting crude oil, natural gas and chemicals in their 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 insulate earnings against increases 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 meant 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 stop selling internal-combustion-engine passenger vehicles between 2030 and 2035, the existing fleet will support demand for crude oil well beyond this period. 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.[9] 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 to deliver attractive risk-adjusted investment returns over the long term and protect 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 past 12 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. 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. 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

Performance as at 30 June 2022 [10]

	1 year (%)	3 years (% p.a.)	5 years (% p.a.)	7 years (% p.a.)	10 years (% p.a.)	Since inception (% p.a.)
MFG Core Infrastructure Composite (Gross)	**3.8**	**5.6**	**6.7**	**8.8**	**9.5**	**9.8**
MFG Core Infrastructure Composite (Net)	**3.3**	**5.1**	**6.1**	**8.1**	**8.8**	**9.1**

Capital Preservation Measures [11]

Adverse Markets	Last 36 months	Last 60 months	Since inception 126 months
No. of observations	**13**	**19**	**39**
Outperformance consistency (Gross)	**77%**	**79%**	**72%**
Down Market Capture Ratio	**0.6**	**0.5**	**0.4**

1 Holdings based on a representative portfolio for the strategy.
2 Sectors are internally defined, Geographical exposures are by domicile of listing. Exposures may not sum to 100% due to rounding.
3 International Renewable Energy Agency, Energy Transitions Outlook 20222: 1.5°C Pathway, March 2022.
4 International Energy Agency, Net Zero by 2050: A Roadmap for the Global Energy Sector, May 2021.
5 International Energy Agency, Net Zero by 2050: A Roadmap for the Global Energy Sector, May 2021.
6 Princeton University, Net-Zero America: Potential Pathways, Infrastructure, and Impacts, December 2020.
7 Ericsson Mobility Report, November 2020.
8 International Air Transportation Association, Air Passenger Market Analysis, April 2022.
9 BloombergNEF, Electric Vehicle Outlook 2021, June 2020.
10 Returns are for the Global Core Infrastructure Composite and denoted in USD. Performance would vary if returns were denominated in a currency other than USD. Inception date is 18 January 2012 (inclusive). Composite (Net) returns are net of fees charged to clients and have been reduced by the amount of the highest fee charged to any client employing that strategy during the period under consideration. Actual fees may vary depending on, among other things, the applicable fee schedule and portfolio size. Fees are available upon request. Refer to the GIPS Disclosure section below for further information.
11 Capital preservation measures are based on the Global Core Infrastructure Composite before fees in USD. An Adverse Market is defined as a negative monthly return for the MSCI World NTR Index (USD). Outperformance consistency indicates the percentage of positive excess returns. The Down Market Capture Ratio shows if a fund has outperformed a benchmark during periods of market weakness, and if so, by how much. Inception date is 18 January 12 (inclusive).
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The Global Infrastructure Benchmark is comprised of the following: from inception to 31 December 2014 the benchmark is UBS Developed Infrastructure & Utilities Index Net Total Return and from 1 January 2015 the benchmark is S&P Global Infrastructure Net Total Return Index. The benchmark changed because UBS discontinued their index series.

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The UBS Developed Infrastructure & Utilities Index Net Total Return is a market capitalisation weighted index that is designed to measure the equity performance of listed Infrastructure and Utility stocks. Index results assume the reinvestment of all distributions of capital gain and net investment income using a tax rate applicable to non-resident institutional investors who do not benefit from double taxation treaties.

The S&P Global Infrastructure Net Total Return Index is a market capitalisation weighted index that is designed to track 75 companies from around the world diversified across three infrastructure sectors energy, transportation and utilities. Index results assume the reinvestment of all distributions of capital gain and net investment income using a tax rate applicable to non-resident institutional investors who do not benefit from double taxation treaties.

GLOBAL INVESTMENT PERFORMANCE STANDARDS (GIPS®) DISCLOSURE

Magellan Asset Management Limited, doing business as MFG Asset Management in jurisdictions outside Australia and New Zealand, (MFG Asset Management) claims compliance with the Global Investment Performance Standards (GIPS ®).

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The Global Core Infrastructure composite is a global strategy investing in strictly defined or "pure" infrastructure companies (typically 80-120). The filtered investment universe is comprised of stocks that 1. generate reliable income streams, 2. benefit from inflation protection and have an appropriate capital structure. The investment objective of the strategy is to minimise the risk of permanent capital loss; and achieve superior risk adjusted investment returns over the medium to long-term. The composite was created in February 2012.

To achieve investment objectives, the composite may also use derivative financial instruments including, but not limited to, options, swaps, futures and forwards. Derivatives are subject to the risk of changes in the market price of the underlying securities instruments, and the risk of the loss due to changes in interest rates. The use of certain derivatives may have a leveraging effect, which may increase the volatility of the composite and may reduce its returns.

A copy of the composite's GIPS compliant presentation and/or the firm's list of composite descriptions are available upon request by emailing client.reporting@magellangroup.com.au

The representative portfolio is an account in the composite that closely reflects the portfolio management style of the strategy. Performance is not a consideration in the selection of the representative portfolio. The characteristics of the representative portfolio may differ from those of the composite and of the other accounts in the composite. Information regarding the representative portfolio and the other accounts in the composite is available upon request.

USD is the currency used to calculate performance.