Manulife Investment Management

Investment Note

4 Aug 2026

Christopher Walsh, CFA
Senior Portfolio Manager,
Multi-Asset Solutions

Paul Kalogirou
Head of Client Portfolio Management,
Asia & Global Multi-Asset Solutions

Artificial intelligence (AI) is often positioned as a story of models and applications, but its growth depends heavily on something far more tangible. Real assets such as data centres, power grids, and raw materials form the physical that supports AI development. As structural forces reshape the investment landscape, real assets are emerging as an enabler of the AI buildout.

Real assets and the infrastructure behind AI

Key points:

- The current macro backdrop of elevated inflation, AI-related infrastructure demand, and geopolitical tensions may be supportive of selected real assets.
- Infrastructure and energy are important elements supporting the development of AI.
- Some real assets have characteristics that may provide exposure to inflation-linked return potential.
- Structural forces such as deglobalisation, energy and materials security, electrification, and scarcity are contributing to renewed interest in real assets.
- Data centre growth could contribute to demand for electricity generation and selected key minerals.

Three major macro trends

We believe three major trends are influencing the current investment regime and may affect the outlook for selected real assets:

1. **Persistent, higher inflation**: Persistent inflation may be supportive of certain real assets, given their tangible nature and, in some cases, their ability to pass through higher costs.

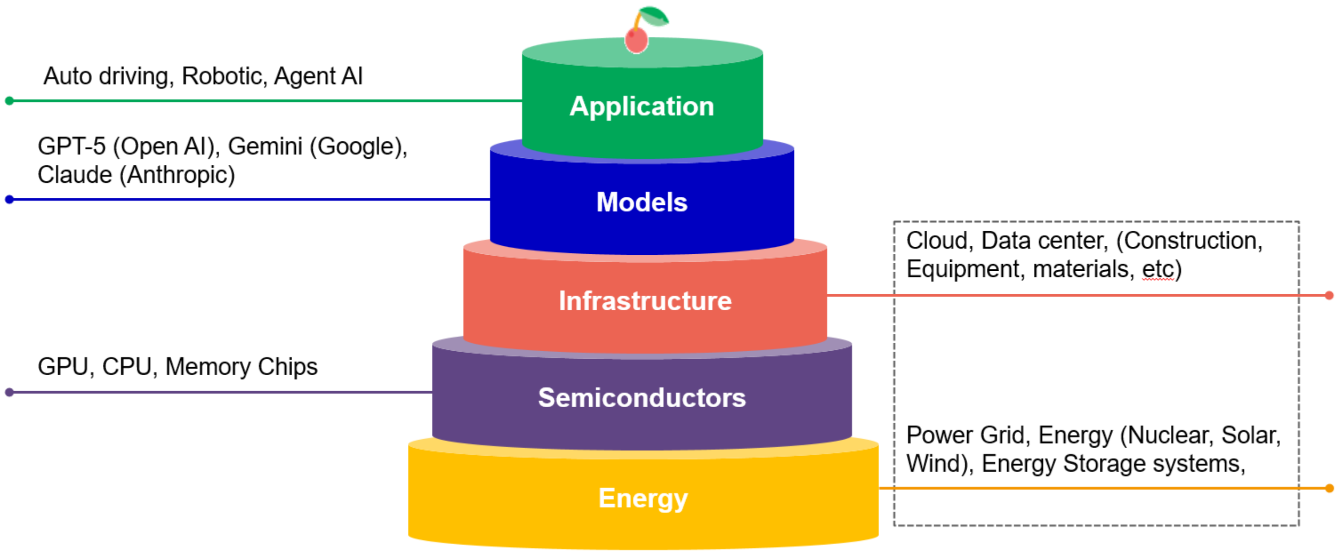
2. **Artificial intelligence**: The expansion of AI requires significant power and infrastructure, which could create long-term demand for selected real assets.

3. **Geopolitical risk**: Rising geopolitical uncertainty has affected supply chains and increased focus on physical assets and resource security.

Among these themes, AI-related infrastructure and energy demand provide an example of where real assets may play a role in the age of intelligence.

The intersection of real assets and AI

The AI stack is sometimes described as a five-layer cake: energy, semiconductors, infrastructure, models, and applications. Real assets intersect with two key layers: energy and infrastructure.



Source: NVIDIA Blog. For illustrative purposes only.

At its core, economic growth can be viewed through the lens of energy use – a principle that helps explain why AI's expansion is closely linked to the energy required to power it. Meanwhile, the infrastructure layer represents the physical buildout needed to support AI, including data centres, construction, and electrical systems.

Together, these layers form an important foundation supporting the AI ecosystem.

Key traits and types of real assets

Certain real assets may share traits such as relatively inelastic demand, long lead times for new supply, high barriers to entry, and essential-service characteristics. They can be grouped into four broad categories, which may provide exposure to real-return potential and income generation.

- **Natural resources**: Raw materials that support economic activity, including companies involved in the extraction, production, refinement, and distribution of energy and other raw materials.

- **Infrastructure**: Essential services with high barriers to entry, such as utilities, which may become increasingly important as AI-related demand grows.

- **Real Estate Investment Trusts (REITs)**: Real estate across various sectors, such as residential, office, healthcare, and industrial, that may offer exposure to rental income, and in some cases, inflation-linked cash flows.

- **Inflation-resilient fixed income**: Certain fixed income may offer inflation protection features through principal adjustment.

Structural forces supporting real assets

Beyond inflation, we believe several broader themes could provide support for selected real assets:

1. **Deglobalisation and supply chain resilience**: Events such as the COVID-19 pandemic have prompted many countries to strengthen regional resilience through reshoring, nearshoring, and friendshoring, reshaping global supply chains.

2. **Securing power, materials, and energy**: Recent geopolitical shocks have highlighted the importance of strategic reserves and inventories in helping manage supply disruptions.

3. **AI, electrification, and industrial rebuild**: The global development of AI and increased electrification require significant power consumption and capital investment across infrastructure.

4. **Supply scarcity and underinvestment**: Periods of underinvestment by some energy and materials producers may have contributed to supply constraints in certain areas, which may provide support for selected real assets.

The data centre boom and its potential beneficiaries

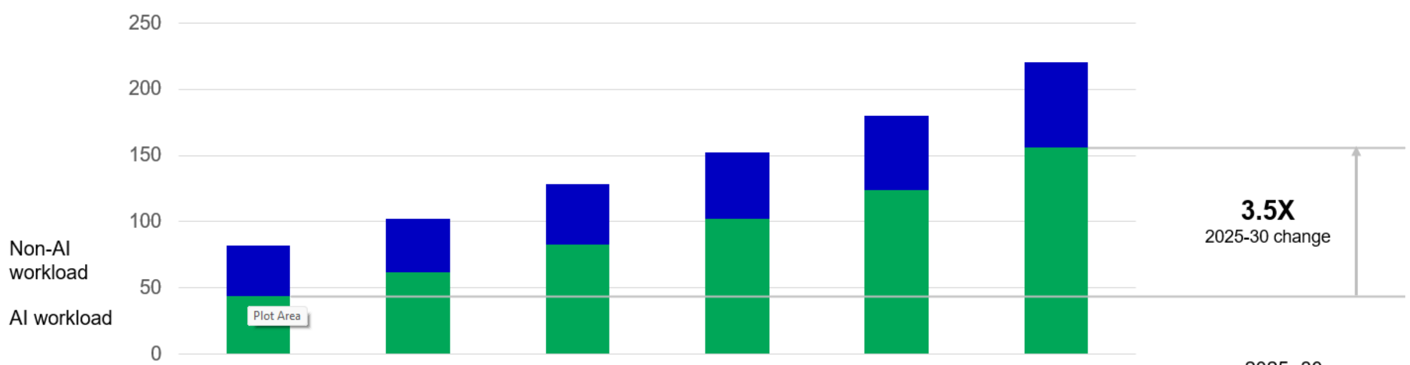
Demand for data and compute capacity is increasing alongside the growth of AI. McKinsey estimates that global demand for data centre capacity could rise at an annual rate of 19% to 22% from 2023 to 2030, reaching annual demand of 171GW to 219GW by 2030.

Companies involved in the infrastructure layer supporting this growth, including engineering and construction firms, may benefit from increased demand, although the timing and scale of opportunities will vary.

In addition, the International Energy Agency (IEA) expects global electricity demand from data centres to more than double by 2030, with AI an important driver of this increase. It also notes that a range of energy sources will likely be needed, with renewables and natural gas expected to play leading roles in key markets. Similarly, data centres could contribute to copper demand over the coming years.

While volatility is likely to accompany the AI infrastructure buildout, we view the theme as a multi-year opportunity that should be assessed alongside valuation, execution, policy, and commodity-cycle risks. Real assets may offer exposure to inflation-sensitive income streams and participation in selected areas of long-term structural growth.

Estimated global data center capacity demand (Gw)



	2025	2026	2027	2028	2029	2030	2025 -30 total
Incremental AI capacity added per year, gigawatts	13	18	21	19	22	31	124

Source: McKinsey & Company, as of Dec 2025.

Important Information

Investing involves risks, including the potential loss of principal. Financial markets are volatile and can fluctuate significantly in response to company, industry, political, regulatory, market, or economic developments. These risks are magnified for investments made in emerging markets. Currency risk is the risk that fluctuations in exchange rates may adversely affect the value of a portfolio's investments.

The information provided does not take into account the suitability, investment objectives, financial situation, or particular needs of any specific person. You should consider the suitability of any type of investment for your circumstances and, if necessary, seek professional advice.

This material is intended for the exclusive use of recipients in jurisdictions who are allowed to receive the material under their applicable law. The opinions expressed are those of the author(s) and are subject to change without notice. Our investment teams may hold different views and make different investment decisions. These opinions may not necessarily reflect the views of Manulife Investment Management or its affiliates. The information and/or analysis contained in this material has been compiled or arrived at from sources believed to be reliable, but Manulife Investment Management does not make any representation as to their accuracy, correctness, usefulness, or completeness and does not accept liability for any loss arising from the use of the information and/or analysis contained. The information in this material may contain projections or other forward-looking statements regarding future events, targets, management discipline, or other expectations, and is only current as of the date indicated. The information in this document, including statements concerning financial market trends, are based on current market conditions, which will fluctuate and may be superseded by subsequent market events or for other reasons. Manulife Investment Management disclaims any responsibility to update such information.

Neither Manulife Investment Management or its affiliates, nor any of their directors, officers or employees shall assume any liability or responsibility for any direct or indirect loss or damage or any other consequence of any person acting or not acting in reliance on the information contained here. All overviews and commentary are intended to be general in nature and for current interest. While helpful, these overviews are no substitute for professional tax, investment or legal advice. Clients should seek professional advice for their particular situation. Neither Manulife, Manulife Investment Management, nor any of their affiliates or representatives is providing tax, investment or legal advice. This material was prepared solely for informational purposes, does not constitute a recommendation, professional advice, an offer or an invitation by or on behalf of Manulife Investment Management to any person to buy or sell any security or adopt any investment strategy, and is no indication of trading intent in any fund or account managed by Manulife Investment Management. No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment. Diversification or asset allocation does not guarantee a profit or protect against the risk of loss in any market. Unless otherwise specified, all data is sourced from Manulife Investment Management. Past performance does not guarantee future results.

About Manulife Wealth & Asset Management

As part of Manulife Financial Corporation, Manulife Wealth & Asset Management provides global investment, financial advice, and retirement plan services to 19 million individuals, institutions, and retirement plan members worldwide. Our mission is to make decisions easier and lives better by empowering people today to invest for a better tomorrow. As a committed partner to our clients and as a responsible steward of investor capital, we offer a heritage of risk management, deep expertise across public and private markets, and comprehensive retirement plan services. We seek to provide better investment and impact outcomes and to help people confidently save and invest for a more secure financial future. Not all offerings are available in all jurisdictions. For additional information, please visit manulifeim.com.

This material has not been reviewed by, is not registered with any securities or other regulatory authority, and may, where appropriate, be distributed by the following Manulife entities in their respective jurisdictions. Additional information about Manulife Investment Management may be found at manulifeim.com/institutional

Australia: Manulife Investment Management Timberland and Agriculture (Australasia) Pty Ltd, Manulife Investment Management (Hong Kong) Limited. **Canada**: Manulife Investment Management Limited, Manulife Investment Management Distributors Inc., Manulife Investment Management (North America) Limited, Manulife Investment Management Private Markets (Canada) Corp. **Mainland China**: Manulife Overseas Investment Fund Management (Shanghai) Limited Company. **European Economic Area** Manulife Investment Management (Ireland) Ltd. which is authorised and regulated by the Central Bank of Ireland **Hong Kong**: Manulife Investment Management (Hong Kong) Limited. **Indonesia**: PT Manulife Aset Manajemen Indonesia. **Japan**: Manulife Investment Management (Japan) Limited. **Malaysia**: Manulife Investment Management (M) Berhad 200801033087 (834424-U)

Philippines: Manulife Investment Management and Trust Corporation. **Singapore**: Manulife Investment Management (Singapore) Pte. Ltd. (Company Registration No. 200709952G) **South Korea**: Manulife Investment Management (Hong Kong) Limited. **Switzerland**: Manulife IM (Switzerland) LLC. **Taiwan**: Manulife Investment Management (Taiwan) Co. Ltd. **United Kingdom**: Manulife Investment Management (Europe) Ltd. which is authorised and regulated by the Financial Conduct Authority **United States**: John Hancock Investment Management LLC, Manulife Investment Management (US) LLC, Manulife Investment Management Private Markets (US) LLC and Manulife Investment Management Timberland and Agriculture Inc. **Vietnam**: Manulife Investment Fund Management (Vietnam) Company Limited.

5793476 08/26