TD Asset Management

Investor Knowledge 10 Minutes



Fuel Metal Jacket:

The Commodities Within the Data Centre Power Boom

Adam Grinbergs
Associate, Portfolio Research,
Global Multi-Asset & Derivatives Team,
TD Asset Management Inc.

Yiwen Yang
Associate,
Client Portfolio Management,
TD Asset Management Inc.

At a Glance

Artificial intelligence (AI) may be a digital revolution, but it depends on the physical world. As data centres expand, growing demand for electricity, infrastructure and materials could create opportunities for commodities such as copper and natural gas. For investors, commodities can provide a way to participate in the infrastructure behind AI while also bringing potential diversification benefits to a broader portfolio.

AI may live in the digital world, but building it requires a remarkable amount of physical infrastructure. Behind every AI model sits a data centre filled with servers that need electricity, cooling and connections to the power grid. Building and operating those facilities requires everything from copper and steel to concrete, electrical equipment and energy.

That means the AI investment story may be broader than many investors realize. As spending on AI infrastructure grows, some of the opportunity could extend beyond technology companies and into the commodities helping build and power the digital economy.

AI's very real appetite for power

For much of the past two decades, electricity demand in North America grew relatively slowly as efficiency improvements offset some of the effects of economic and population growth. That picture is beginning to change.

U.S. electricity demand grew by only about 0.1% annually between 2005 and 2019 but accelerated to approximately 1.7% annually between 2020 and 2025, with data centres identified as an important contributor[1]. AI adds another wrinkle because training and operating increasingly sophisticated models requires substantial amounts of reliable electricity. And today's data centres could be just the beginning.

The U.S. currently has approximately 50 gigawatts of operating data-centre capacity, with several estimates suggesting capacity could double by 2030[2]. Forecasts vary considerably, however, highlighting just how uncertain the eventual size of the buildout remains.

For investors, the important point may not be whether one particular forecast proves correct. It is that accommodating more data centres requires investment far beyond the buildings themselves. More power demand can mean additional generation, transmission infrastructure, transformers, cooling systems and other equipment. And that is where commodities enter the picture.

Copper: wiring the AI revolution

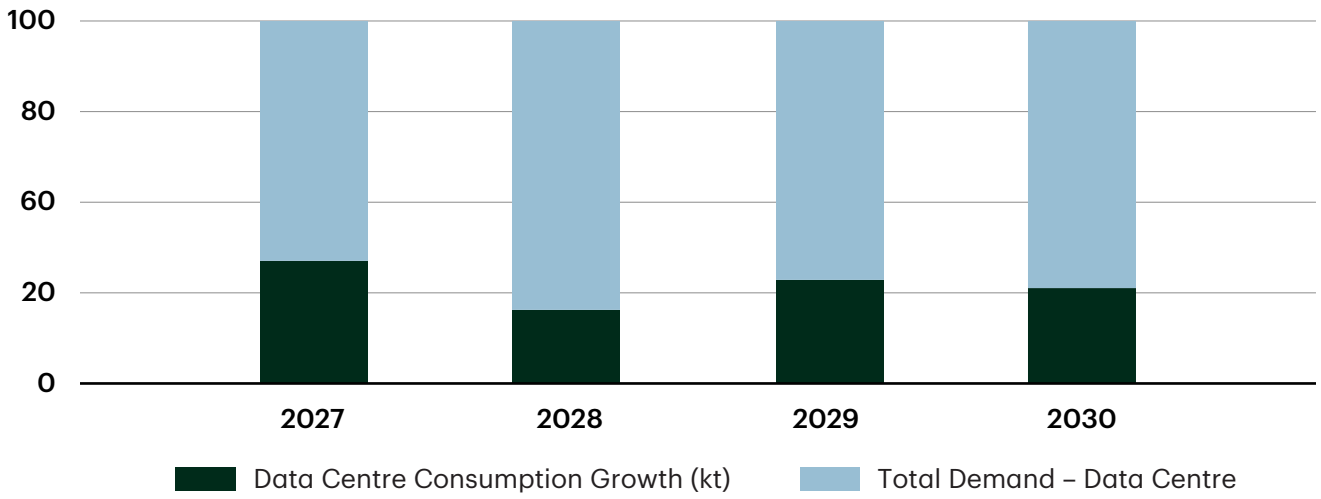
Think of a modern data centre as an enormous electrical system. Electricity needs to move from the grid into the facility, through transformers and switchgear, and eventually to thousands of servers. Copper is used throughout that journey. It can be found in power connections, transformers, cabling, grounding systems and backup-power infrastructure. And as AI servers become more powerful, they also produce more heat, creating another use for copper in cooling equipment such as heat exchangers and tubing. **The interesting part for investors is that AI is not creating this demand in isolation**.

Data centres are joining other structural sources of copper demand, including electricity grids, electric vehicles and renewable power. The original research estimates that data-centre construction could add roughly 150 to 500 kilotonnes of copper consumption annually between 2026 and 2030. That is a little more than 1% of annual global refined copper demand, meaningful enough to add to the demand picture without becoming the dominant force in the copper market[3]. In other words, **AI could add another layer of demand to an electrification trend that was already underway**.



[1] U.S. Energy Information Administration (EIA), Fossil generation could rise with faster-than-expected growth in data center power demand, March 12, 2026.
[2] Utility Dive, 50 GW of data centers online at end of 2025, with MISO seeing strongest growth: FERC, March 26, 2026.
[3] Bloomberg Finance L.P., as at July 31, 2026; TD Asset Management Inc., as of August 10, 2026.

AI data centres could drive almost one-third of incremental copper demand



Sources: Bloomberg Finance L.P. Global Copper Outlook 2025. As at February 2026. TD Asset Management Inc. as of August 10, 2026.

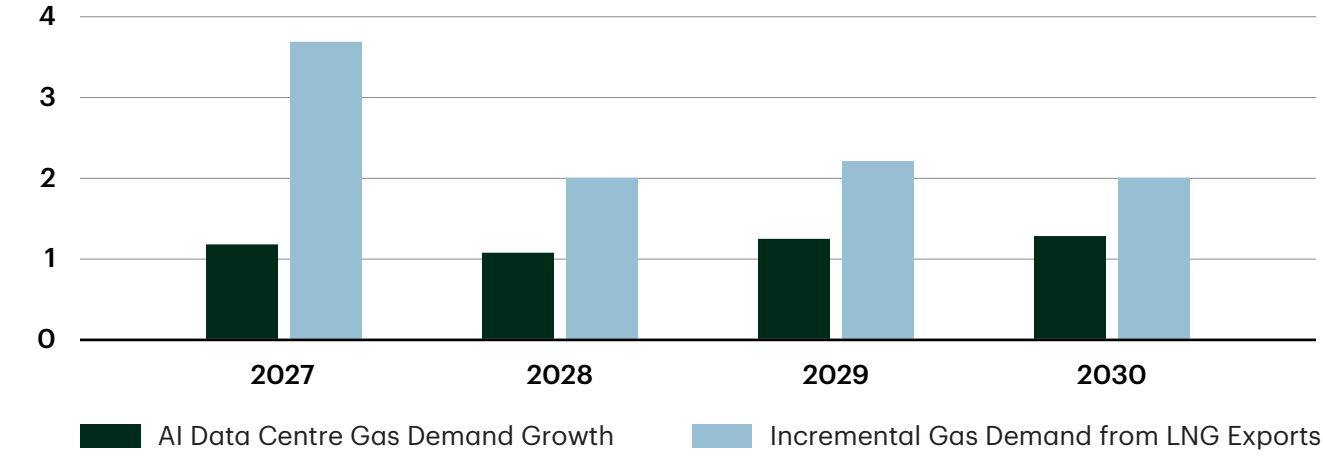
Note: The share of incremental copper demand attributable to AI data centres is calculated by dividing forecast data centre-related copper demand growth by total forecast copper demand growth in a given year. Data centre-related copper demand growth is estimated as projected data centre capacity growth multiplied by copper intensity per unit of capacity. The resulting measure indicates the percentage contribution of AI data centres to overall copper demand growth.

Natural gas: keeping the lights on

Copper helps move electricity. Something still has to generate it. Renewable energy is an important part of the evolving power system, but data centres need dependable electricity around the clock. Natural gas can provide dispatchable generation when renewable output is intermittent, or grid capacity is constrained. That makes natural gas another potential beneficiary of expanding data-centre power requirements.

The original analysis estimates that AI data-centre growth could add approximately 0.5 to 2 billion cubic feet per day of incremental natural-gas demand per year by 2030, depending on how much new data-centre power ultimately comes from gas[4]. For context, the U.S. natural-gas market is roughly 110 billion cubic feet per day.

U.S. gas demand growth from AI vs LNG (Billion cubic feet/day)



Source: EIA. Short-term Energy Outlook. As at August 11, 2026. Note: This is an estimate and can vary.

[4] U.S. Energy Information Administration (EIA), Short-Term Energy Outlook, as at August 11, 2026; TD Asset Management Inc., as at August 10, 2026.

Those estimates are far from certain. Projects can be delayed or cancelled, completed facilities can take years to reach full utilization, and electricity needs can vary significantly depending on server density, cooling requirements and efficiency[5,6]. That uncertainty is precisely why the investment story is bigger than simply predicting how many data centres will be built.

The bigger commodity story

AI infrastructure is unlikely to transform commodity markets by itself. But commodities are priced at the margin, and additional demand can matter when supply is constrained or new production takes time to develop. Copper and natural gas are particularly exposed to the theme, but the broader buildout also touches steel, cement, concrete, aluminum and other materials used to construct the infrastructure supporting AI.

More importantly, these forces are arriving alongside other long-term trends. Copper demand is also being influenced by electrification, grids and renewable energy, while natural gas demand is affected by factors such as liquefied natural gas exports and the evolving power-generation mix[7,8]. That makes AI another chapter in a much larger commodities story.

How can investors access the opportunity?

Investors do not need to choose between owning copper or trying to predict the price of natural gas directly.

One way to gain exposure is through the **TD Alternative Commodities Pool >**, an actively managed solution offering broad, diversified exposure across commodity markets. Available in both **mutual fund >** and **ETF series >**, the strategy provides investors with a way to access a diversified basket of commodities through a single investment solution. The strategy seeks to generate long-term capital growth with low correlation to equity and fixed-income markets by capturing returns related to commodity markets.[9]

Commodities are also an important part of how we think about building diversified portfolios at TDAM, with commodity exposure incorporated across a number of our broader investment portfolios. For investors looking for more dedicated exposure, the TD Alternative Commodities Pool provides a direct way to access this asset class.

Energy

[5] Data Center Knowledge, What QTS' Canceled $30B Project Reveals About AI Data Center Development, July 2026.
[6] Data Center Dynamics, Nebius plans second U.S. gigawatt-scale data center campus in Pennsylvania, May 2026.
[7] Bloomberg Finance L.P., as at July 31, 2026; TD Asset Management Inc., as of August 10, 2026.
[8] U.S. Energy Information Administration (EIA), Short-Term Energy Outlook, as at August 11, 2026; TD Asset Management Inc., as at August 10, 2026.
[9] TD Asset Management Inc. TCOM Product Overview. The product material identifies TCOM as the TD Alternative Commodities Pool – ETF Series and describes its objective, active management approach, investment strategy and means of purchase.

The bottom line: AI needs the physical world

AI may feel like a technology story, but its continued growth depends on something much more tangible. Data centres must be built. Electricity must be generated and delivered. Servers must be cooled. And the infrastructure connecting all of it requires real materials. The exact scale and pace of the AI buildout will remain uncertain, but if data-centre capacity continues to expand, commodities such as copper and natural gas could increasingly participate in an investment theme normally associated with technology stocks.

For investors, that offers a different way of looking at AI: sometimes the opportunity is not only in the technology itself, but in what it takes to keep that technology running. A broadly diversified approach to commodities can provide one way to participate in that evolving opportunity. ■

Connect with TD Asset Management

The information contained herein has been provided by TD Asset Management Inc. and is for information purposes only. The information has been drawn from sources believed to be reliable. Graphs and charts are used for illustrative purposes only and do not reflect future values or future performance of any investment. The information does not provide financial, legal, tax or investment advice. Particular investment, tax, or trading strategies should be evaluated relative to each individual's objectives and risk tolerance.

No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment. Any characteristics, guidelines, constraints or other information provided for this material is representative of the investment strategy and is provided for illustrative purposes only. Any information about the holdings, asset allocation, or sector diversification is historical and is not an indication of future performance or any future portfolio composition, which will vary. Portfolio holdings are representative of the strategy, are subject to change at any time and are not a recommendation to buy or sell a security. The securities identified and described do not represent all of the securities purchased, sold or recommended for the portfolio. It should not be assumed that an investment in these securities or sectors was or will be profitable.

Commissions, management fees and expenses all may be associated with mutual fund and/or exchange- traded fund ("ETF") investments (collectively, "the Funds"). Trailing commissions may be associated with mutual fund investments. ETF units are bought and sold at market price on a stock exchange and brokerage commissions will reduce returns. Please read the fund facts or ETF Facts and the prospectus, which contain detailed investment information, before investing in the Funds. The Funds are not covered by the Canada Deposit Insurance Corporation or by any other government deposit insurer and are not guaranteed or insured. Their values change frequently. There can be no assurances that a money market fund will be able to maintain its net asset value per unit at a constant amount or that the full amount of your investment will be returned to you. Past performance may not be repeated.

Certain statements in this document may contain forward-looking statements ("FLS") that are predictive in nature and may include words such as "expects", "anticipates", "intends", "believes", "estimates" and similar forward-looking expressions or negative versions thereof. FLS are based on current expectations and projections about future general economic, political and relevant market factors, such as interest and foreign exchange rates, equity and capital markets, the general business environment, assuming no changes to tax or other laws or government regulation or catastrophic events. Expectations and projections about future events are inherently subject to risks and uncertainties, which may be unforeseeable. Such expectations and projections may be incorrect in the future. FLS are not guarantees of future performance. Actual events could differ materially from those expressed or implied in any FLS. A number of important factors including those factors set out above can contribute to these digressions. You should avoid placing any reliance on FLS.

Bloomberg and Bloomberg.com are trademarks and service marks of Bloomberg Finance L.P., a Delaware limited partnership, or its subsidiaries. All rights reserved.

TD Mutual Funds and the TD Managed Assets Program portfolios are managed by TD Asset Management Inc., a wholly-owned subsidiary of The Toronto-Dominion Bank and are available through authorized dealers.

TD ETFs are managed by TD Asset Management Inc., a wholly-owned subsidiary of The Toronto-Dominion Bank.

TD Asset Management Inc. is a wholly-owned subsidiary of The Toronto-Dominion Bank.

® The TD logo and other TD trademarks are the property of The Toronto-Dominion Bank or its subsidiaries.

(1026)