



# BEYOND THE GRID

Expanding the Investment Universe in Global Infrastructure

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# KEY POINTS

**1** The growth in artificial intelligence (AI) is compounding existing global trends that are supporting infrastructure spending.

**2** The widening gap between required and actual investment in infrastructure is expected to further expand infrastructure investment opportunities.

**3** We see a broad spectrum of beneficiaries, including in less conventional sectors, such as remote monitoring and facility contractors, that are becoming increasingly linked with traditional infrastructure.

Several enduring global trends, including deglobalization and the imperative to modernize power grids for increased electrification, are presenting notable opportunities for infrastructure investors.

Most recently, decades of insufficient investment in critical infrastructure have been highlighted by the rapid expansion of AI, which is leading to an unprecedented need for data center facilities. This development is resulting in considerable capital requirements to upgrade systems in power generation, grid modernization, cooling systems, and networking infrastructure.

Rising capital expenditure is providing significant support for companies in infrastructure sectors such as electric utilities, power generation, support services, and digital connectivity, as well as those industrial firms already benefiting from global electrification and deglobalization trends.

In 2025, four large tech companies invested over \$400 billion in capital spending, much of which went towards expanding data center capacity to facilitate AI. Results through mid-2026 show the pace accelerating further: the four companies have now guided to roughly \$725–\$760 billion of capital spending for 2026, the majority directed at AI data center infrastructure, with analysts projecting \$1 trillion-plus in 2027.<sup>1</sup> Globally, demand for data center capacity could more than triple by 2030.<sup>2</sup>

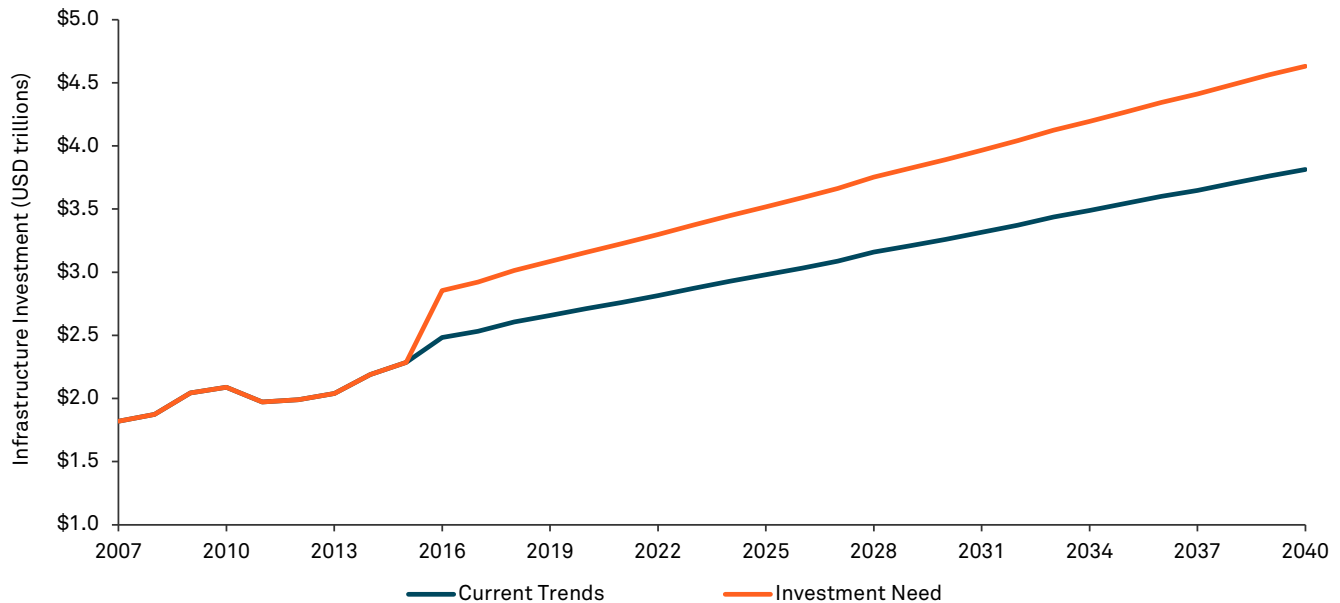
## The Widening Infrastructure Investment Gap

Before the surge in investment driven by AI data centers, projected global infrastructure needs by 2040 were estimated at a cumulative \$94 trillion, revealing a \$15 trillion infrastructure gap compared to existing investment levels based solely on digitization and energy transition trends.<sup>3</sup>



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## Infrastructure Investment at Current Trends and Need



Source: Global Infrastructure Outlook, data owned by the Global Infrastructure Hub (URL: <https://outlook.gihub.org/>, accessed October 23, 2025). Baseline forecasts of infrastructure investment under the assumption that countries continue to invest in line with current trends, with growth occurring only in response to changes in each country's economic and demographic fundamentals. The period of forecasts is from 2016-2040.

More recent analysis suggests that the total investment required by 2040 may have risen to \$106 trillion to accommodate the demand for both new and upgraded infrastructure.<sup>4</sup> As AI technologies continue to progress, infrastructure investment opportunities are expected to expand further in response to the widening gap between required and actual investment.

Of the anticipated \$106 trillion in global infrastructure investment needed by 2040, it is estimated that \$19 trillion will be required by the digital and communications sectors. Although this figure is lower than the projected investments for transportation and logistics (\$36 trillion) and energy and power (\$23 trillion), digital infrastructure is expected to experience the most significant growth relative to its current scale.



**The rapid advancement of AI has positioned data centers as some of the most power-intensive infrastructure globally.”**

## Meeting the AI Power Challenge

Data continues to reinforce the view that AI growth is robust, driving the need for increased infrastructure investment in sectors related to energy, power, and digital technology. The rapid advancement of AI has positioned data centers as some of the most power-intensive infrastructure globally. According to the US Department of Energy, data centers could consume up to 12% of total US electricity by 2028, almost tripling from 4.4% in 2023.<sup>5</sup> Further research suggests that power demand from AI data centers in the US could grow more than thirtyfold by 2035, reaching 123 gigawatts, up from 4 gigawatts in 2024.<sup>6</sup>

In this context, a new report from the International Energy Agency recommends that countries that want to benefit from the potential of AI need quickly to accelerate new investments in electricity generation and grids.<sup>7</sup>

## A Broadening Infrastructure Opportunity Set

Against this backdrop, our outlook remains constructive as infrastructure development accelerates in multiple areas, resulting in a broad and diversified landscape for investors.

The requirement for more power is fueling investment into both existing and new energy sources, including natural gas, renewables, nuclear, and geothermal energy, augmenting and optimizing existing energy infrastructure. In turn, this forces adjacent upgrades across the energy supply chain into utilities, industrial businesses specializing in construction and grid infrastructure, and network solutions.

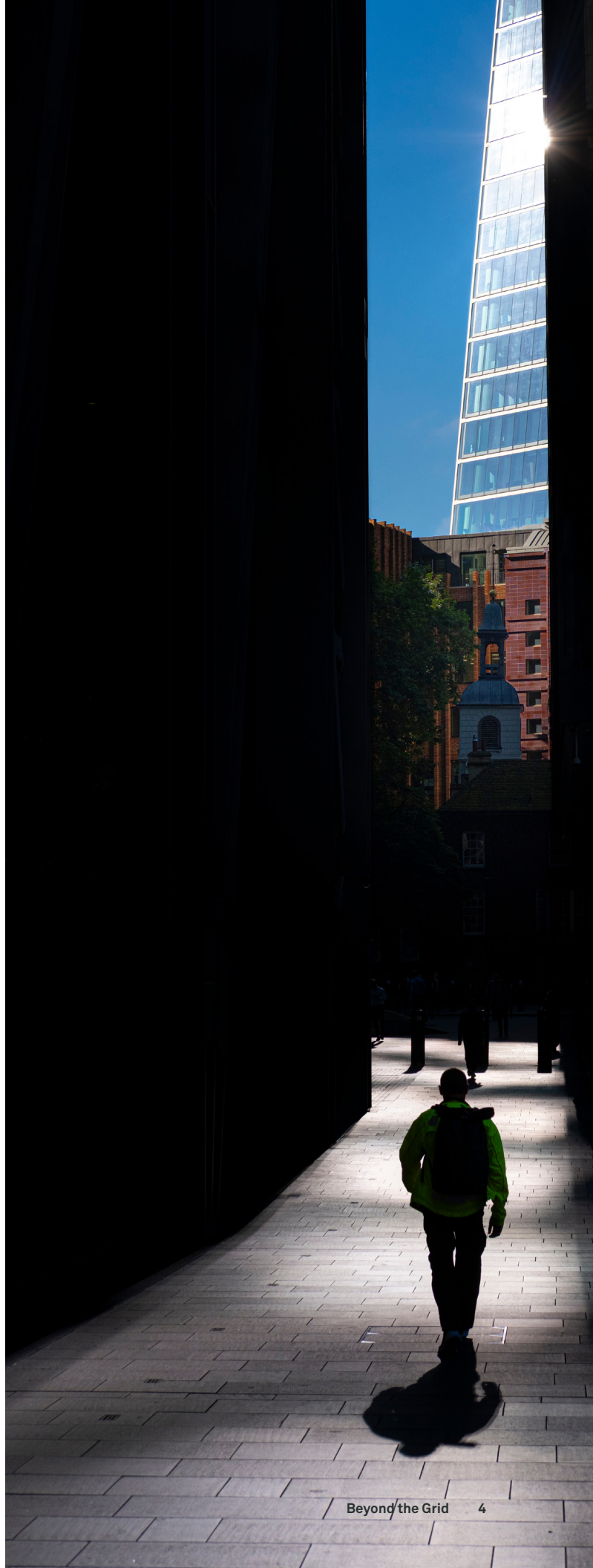
In addition, we see the opportunity set expanding to cover not only specialized services, maintenance, inspection and compliance, but also remote monitoring and facility contractors. These contractors are experiencing increasing backlogs due to construction projects for data centers and high-tech manufacturing.

Our positive perspective on infrastructure investing is therefore informed by several factors: increased capital expenditure, accelerated expansion of data center capacity, growing power demand, and a broader spectrum of beneficiaries.

## Positioning the Portfolio for Growth

Since the widening infrastructure investment gap will take years – if not decades – to close, we see a long runway for companies to benefit. This sustained demand is expected to drive faster growth than historical norms, creating rerating opportunities for companies that are already trading at attractive valuations relative to their history.

Significantly, the BNY Mellon Global Infrastructure Income strategy is widening its investment universe to go beyond traditional infrastructure. It now also includes less conventional sectors like specialized services, maintenance and inspection, remote monitoring, telecommunications and connectivity, and facility contractors – many of which are becoming increasingly linked with traditional infrastructure. This broadening scope presents investors with potential opportunities from a diverse portfolio of infrastructure-related equities.



## Endnotes

1. "Big Tech's \$400 Billion AI Spending Spree Just Got Wall Street's Blessing", Wall Street Journal, 31 July 2025; Big Tech capex guidance compiled from Q1–Q2 2026 earnings reports of Amazon, Alphabet, Microsoft, and Meta (Statista, Platformonomics, Business Insider, 2026).
2. "The cost of compute: A \$7 trillion race to scale data centers", McKinsey & Company, April 28, 2025; "AI power: Expanding data center capacity to meet growing demand", McKinsey & Company, October 29, 2024.
3. Global Infrastructure Outlook, data owned by the Global Infrastructure Hub. Baseline forecasts of infrastructure investment under the assumption that countries continue to invest in line with current trends, with growth occurring only in response to changes in each country's economic and demographic fundamentals. The period of forecasts is from 2016–2040.
4. "The infrastructure moment", McKinsey & Company, 9 September 2025.
5. 2024 United States Data Center Energy Usage Report, Lawrence Berkeley National Laboratory, December 2024.
6. United States Data Center Energy Usage Report: 2025 Update, Lawrence Berkeley National Laboratory, June 2026; 2024 United States Data Center Energy Usage Report, Lawrence Berkeley National Laboratory, December 2024.
7. Energy and AI, World Energy Outlook Special Report, International Energy Agency, April 2025.

## Important information

**All investments involve risk including loss of principal. Certain investments involve greater or unique risks that should be considered along with the objectives, fees, and expenses before investing.**

**Past performance is not necessarily indicative of future results.**

## Risks

Companies that are engaged in the **infrastructure business** are more susceptible to adverse economic, regulatory, political, legal and other changes affecting such companies. Infrastructure companies are subject to a variety of factors that may adversely affect their business or operations, including high interest costs in connection with capital construction programs, costs associated with environmental and other regulations, difficulty in raising capital in adequate amounts on reasonable terms in periods of high inflation or unsettled capital markets, the effects of economic slowdown and surplus capacity, increased competition from other providers of services, uncertainties concerning the availability of fuel at reasonable prices, the effects of energy conservation policies, service interruption due to environmental, operational or other mishaps, and other factors.

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