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ENERGY INFRASTRUCTURE CREDIT | Q3 2026

A generational opportunity in infrastructure debt:

A defensive, diversifying allocation into a growing addressable market

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Infrastructure debt represents a diversification strategy for private credit allocators — combining exposure to a rapidly growing addressable market with defensive credit characteristics that differentiate it from corporate direct lending strategies that most private credit portfolios leverage today.

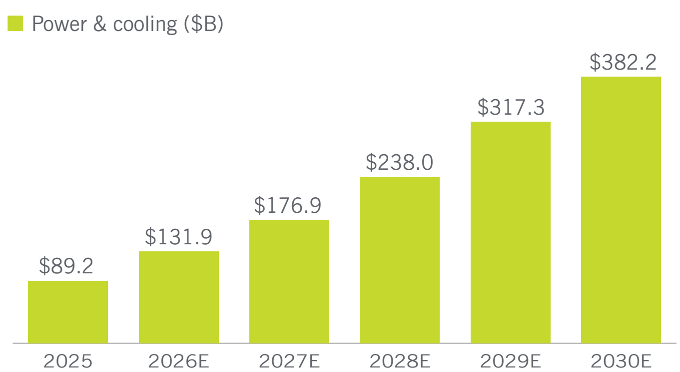
At a moment when investors are re-examining concentration risk in direct lending — particularly exposure to software and other sectors facing AI-driven disruption — infrastructure debt offers a structurally different return profile: backed by physical, essential assets, with contracted cash flows and inflation protection, lower historical default rates, and reduced correlation to broader macro and credit indices.

A rapidly growing addressable market[1,2]

Energy and AI-related digital infrastructure have expanded dramatically and at a pace unlike any prior infrastructure cycle. Global hyperscaler capital expenditures are projected to reach $6.4 trillion in cumulative spending over the next five years, representing what PitchBook describes as "the single largest deployment of investment capital in human history". Within this, $4.7 trillion is expected to flow into data center infrastructure and $1.2 trillion into power and cooling infrastructure through 2030, driven by hyperscaler buildouts supporting AI training and inference workloads.

Power and cooling investment alone is expected to grow at a ~34% CAGR through 2030, with its share of total datacenter build-out costs rising from 17% today to 22% by 2030. This reflects a fundamental shift: data center energization has replaced silicon as the primary constraint on AI scaling, with U.S. and European grids facing three-to-five-year interconnection queues.

Figure 1: Global data center power & cooling capex ($B)



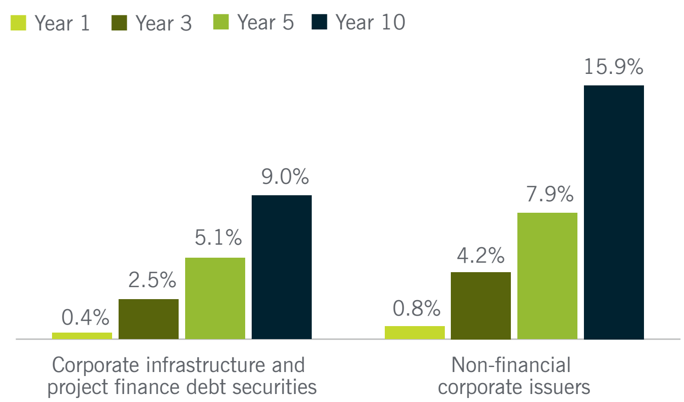
Source: Pitchbook (Q3 2025): Industry Research, Launch Report: Advanced Computing

Critically, hyperscaler capital expenditures are already running at ~77% of operating cash flow, an unprecedented level that illustrates both the scale of commitment and the need for alternative financing sources. Public markets and bank balance sheets cannot absorb this financing need on their own, creating a durable, multi-decade opportunity for private infrastructure credit — this is a generational opportunity.

Defensive credit characteristics in a late-cycle environment[3,4]

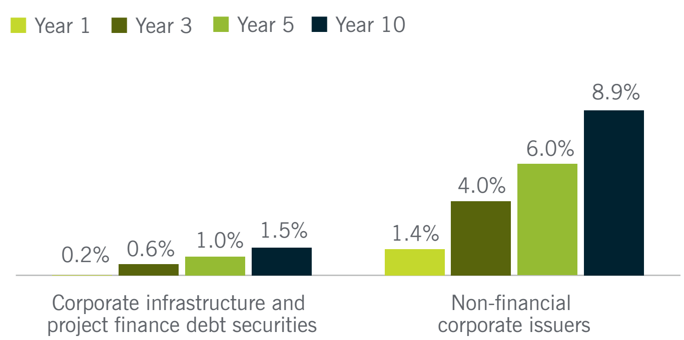
With the economic cycle in its late stages and macro uncertainty elevated, infrastructure credit's long proven defensive profile is particularly valuable. Reflecting contracted, essential-service cash flows from regulated utilities, long-duration offtake contracts, and essential physical infrastructure, infrastructure debt has historically exhibited lower default rates, lower loss given default, and reduced correlation to broader macro and credit indices relative to corporate credit and direct lending strategies. These characteristics are structural, not cyclical — they stem from the fundamental nature of the underlying assets, which continue to generate cash flows across economic cycles. For allocators and investors seeking to de-risk portfolios without sacrificing yield, infrastructure debt offers an attractive risk-return profile at precisely the moment these attributes are most valuable.

Figure 2: Cumulative default rate (Ba/BB Rated)



Source: Moody's Ratings

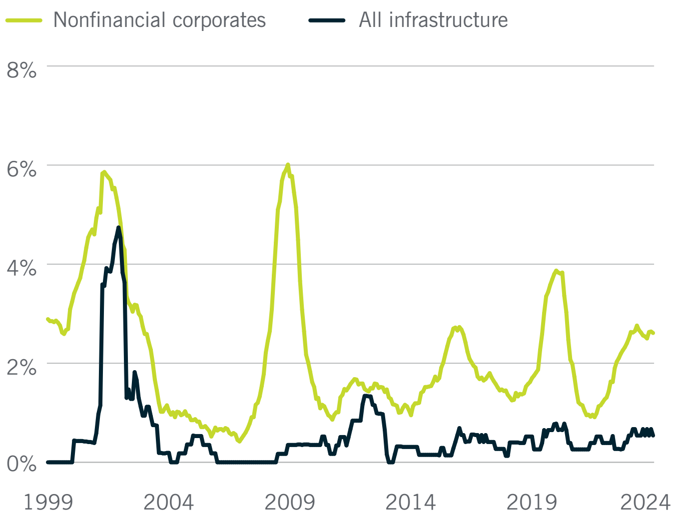
Figure 3: Cumulative credit loss rate (All Ratings)



Source: Moody's Ratings

The recent Iran Conflict has further reinforced the strategic imperative for secure, domestically resilient energy supply, driving sustained capital investment in generation, storage, LNG, and grid modernization. Data centers themselves are increasingly seeking some degree of independence from the electricity grid, requiring specialized financing for large-scale on-site collocated power generation solutions — capital needs that sit squarely in the private infrastructure credit opportunity set.

Figure 4: 12-month rolling default rates



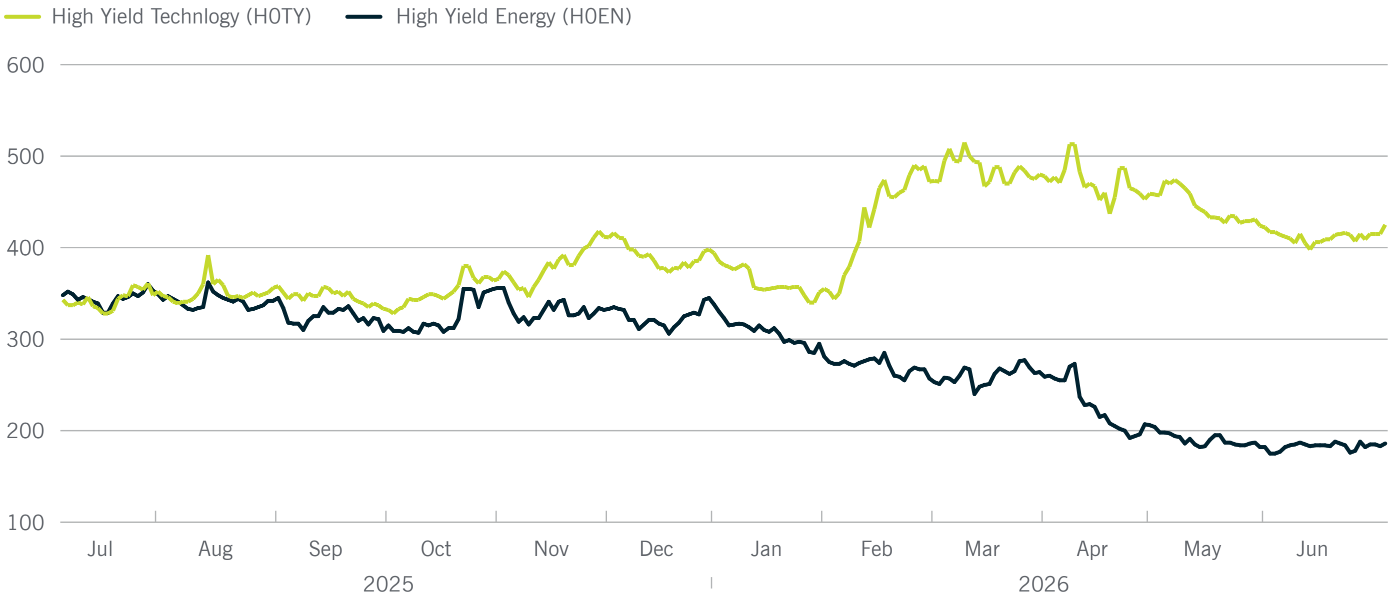
Source: S&P Global Ratings Credit Research & Insights.

A tailwind from software disruption risk[5]

The diversification case is further strengthened by the credit market dynamics now playing out in direct corporate lending. Investors are actively repricing the risk that AI-native substitutes disrupt enterprise software business models. In March 2026, JPMorgan halted a $5.3 billion Qualtrics debt offering after failing to attract sufficient demand, with its existing term loan trading near 86 cents. Semi-liquid private credit strategies with software exposure saw a $19.5 billion surge in redemption requests in Q1 2026, up 142% QoQ — the largest wave on record. The yield to maturity of Bank of America's high-yield technology and energy indices were near parity at the start of 2026— Options adjusted spreads of 355 and 315 bps, respectively — but have diverged to 410 and 184 bps as of May 25th. Equity markets reflect the same rotation — since the start of 2026, the S&P 500 software sub-index has shed approximately $412 billion in market cap (a decline of 24.7%), while energy has gained 30.5%, respectively. These same trends are a direct tailwind for infrastructure debt. AI's compute intensity requires sustained investment in physical assets that cannot be displaced by a software update and are backed by contracted cash flows independent of technology cycles.

And while liquid energy credit indices have compressed — which could suggest a crowded trade — we are not seeing the same dynamic in private, bespoke infrastructure credit. Bilateral, structured transactions continue to clear at attractive levels, reflecting the scarcity of sophisticated capital willing to underwrite complex, asset-backed financings at the scale and speed required. For Nuveen's Energy Infrastructure Credit team, they continue to fund at spreads in excess of 500–600 bps, with first-lien security and strong structural protections which reflects the meaningful illiquidity and complexity premium that disciplined underwriters in this segment continue to command.

Figure 5: A Comparison of High Yield Technology and Energy (Options Adjust Spreads)



Source: Bloomberg, Bank of America Credit Indices

For more information, please visit us at nuveen.com/EIC.

Endnotes

1 Torrijos, R., & Allaway, O. (2025). Q3 2025 launch report: Advanced computing. PitchBook Data, Inc. https://pitchbook.com/news/reports

2 Nicoll, Alex (2026, April 15). Private credit funds faced a $20 billion redemption rush. Here are 3 charts showing how much investors got.. Business Insider. https://www.businessinsider.com/private-credit-20-billion-redemption-data-blue-owl-blackstone-apollo-2026-4

3 Moody's Rating (3 Sep 2025): Infrastructure default and recovery rates, 1983-2024

4 S&P Capital IQ (13 Aug 2025): 2024 Annual Infrastructure Default And Rating Transition Study

5 Bank of America Credit Indices via Bloomberg (29 May 2026)

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