

Prepaid Energy Bonds: Too Big to Ignore; Too Attractive to Avoid

July 2026

A Transforming Energy Landscape

After more than a decade of essentially flat power consumption, the United States is entering a sustained period of rising electricity demand. The buildout of AI and cloud computing infrastructure is the standout driver, compounded by the electrification of vehicles and heating and a resurgence in domestic manufacturing. Estimates of the scale and pace of this shift vary, but the direction couldn't be more clear: demand is set to climb meaningfully over the next several years, and in some regions, faster than new generation and grid infrastructure can comfortably absorb.

Utilities and power developers are responding with one of the largest power generation buildouts in decades. Solar, battery storage, and wind currently account for the bulk of new capacity additions, while natural gas continues to anchor dispatchable supply and remains the preferred fuel that utilities lean on to meet incremental and peak load. Over the longer term, the resource mix is expected to keep shifting toward a blend of natural gas and renewables, as coal continues to retire and the share of nuclear production remains flat.

The significant increase in energy demand, paired with a supply mix still in transition, is creating a real budgeting challenge for municipal utilities, which typically lack the tools large corporates use to hedge multi-decade commodity exposure.

How Big is the Demand Wave?

Fast Fact 01

4% → 12%

Data centers consumed roughly 4% of total U.S. electricity in 2023. The Department of Energy projects that share climbs to as much as 12% by 2028 as the AI buildout accelerates.

Source: DOE / Lawrence Berkeley National Laboratory

Fast Fact 02

+133%

U.S. data centers used 183 terawatt-hours of electricity in 2024. By 2030, consumption is projected to grow 133% to 426 TWh — more than most entire states use in a year.

Source: International Energy Agency

Fast Fact 03

1 in 3

Roughly one-third of gas-fired power plants under construction are dedicated to powering data centers directly — a new class of behind-the-meter industrial demand that barely existed five years ago.

Source: Payden & Rygel sector research

Enter Prepaid Energy Bonds to Help Fill the Gap

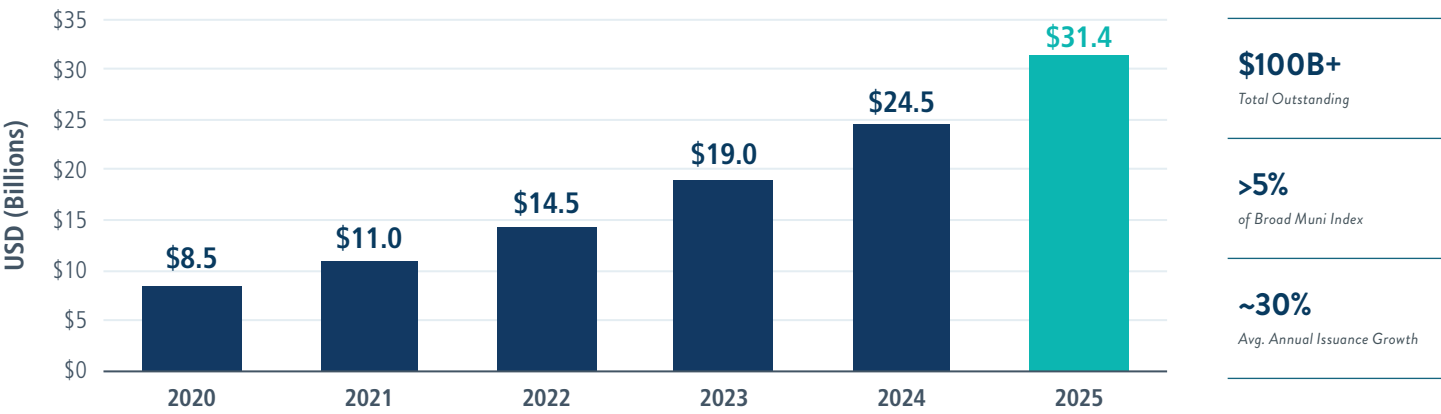
Faced with a rising and less predictable cost of energy, municipal utilities and public energy authorities have increasingly turned to prepaid energy bonds as a financing tool that allows them to lock in long-term energy supply while leveraging the tax-exempt market to do so at a discount to prevailing market prices. What began as a niche corner of the municipal market has quickly become a structurally important sector, now exceeding 5% of the broad municipal bond index and surpassing \$100 billion outstanding, with average annual issuance growth of roughly 30%–40% over the past several years.

What Is a Prepaid Energy Bond?

A prepaid energy bond is a tax-exempt municipal bond whose proceeds are used to make a large upfront (“prepaid”) payment to an energy supplier in exchange for a long-term, typically 25-to-30-plus-year, commitment to deliver natural gas or electricity to a public utility at a fixed, discounted price. In a traditional municipal bond transaction, investors lend money to a governmental entity that finances a public project and uses its taxing power or project revenues to repay investors. Prepaid energy bonds

A Market Compounding at 30%+

Prepaid energy bond new issuance by year, \$ billions (2020–2024 approximate; 2025 record)



2025 issuance reached a record ~\$31.4 billion; earlier years shown are approximations consistent with the sector’s ~30% compound growth since 2020. Only ~3% of total U.S. natural gas demand has been prepaid – the market is far from saturated.

work differently: rather than financing a physical capital project, the bond proceeds finance this long-term energy supply contract. While payment coupon and bond principal is designed to be funded by the economics of that contract, the ultimate credit exposure of the bonds lies with the funding recipient as outlined in the Funding Agreement section below. Funding recipients tend to be investment grade rated, large financial institutions such as banks and insurance companies. Putting it all together, prepaid energy bonds are a bit of a hybrid between municipal and corporate markets as they provide tax-exempt income, support long-term energy supply for municipal utilities, but are ultimately backed by a corporate guarantor.

03 Funding Agreement	The supplier transfers the proceeds to a funding recipient, typically a large bank or insurance company, which invests the tax-exempt proceeds at taxable rates, capturing an arbitrage spread that funds the discount passed to the utility.
04 Commodity Swap	The issuer (or an intermediary) enters into a commodity swap, exchanging a fixed price for an index-linked price so both sides are economically hedged.
05 Delivery Chain	Physical gas or power flows from an upstream supplier through the energy supplier and issuer to the municipal utility at the discounted contract price.

How the Transaction Works

Five moving parts, one economic engine.

01 Bonds	Investors provide upfront capital by purchasing tax-exempt municipal bonds issued by a public energy authority (the bond issuer). These deals tend to be large, typically ranging from \$500 million to more than \$1 billion.
02 Prepaid Contract	The issuing authority uses the bond proceeds to prepay an energy supplier for future deliveries, typically for terms exceeding 30 years, at a discounted price.

The Investment Opportunity

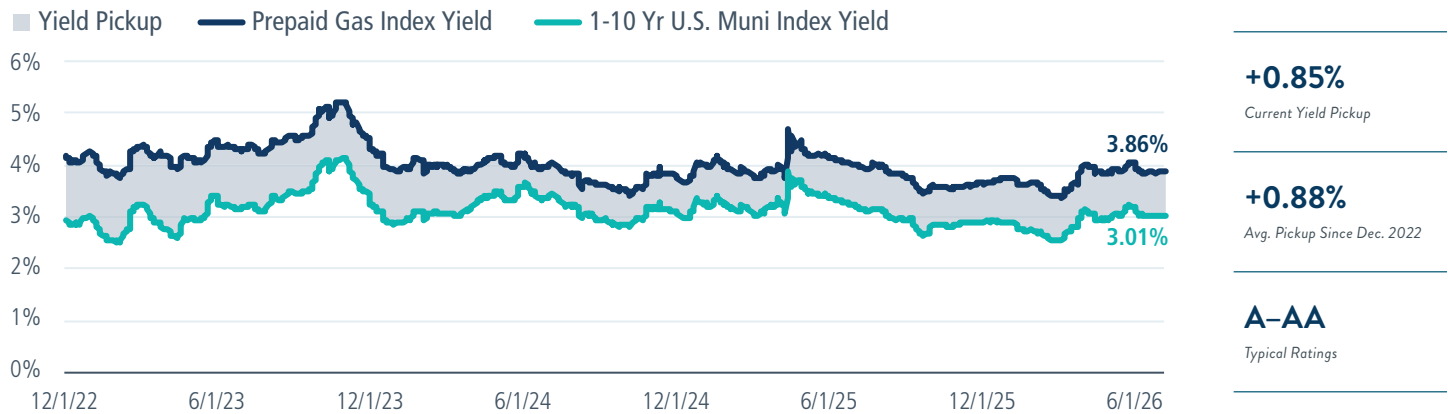
What we like about prepaid energy bonds:

1. Yield

Prepaid energy bonds have historically offered incrementally higher yields relative to comparably rated municipal bonds. Often carrying ratings of A to AA+, the additional yield for prepaid energy bonds has been approximately +0.80%.

The Prepaid Yield Advantage

Index yield (%), December 2022 – June 2026



Source: Bloomberg. Prepaid energy bond yields represented by the Bloomberg Gas Forward Index; municipal benchmark is the Bloomberg 1–10 Year U.S. Municipal Index. Daily index yields, December 1, 2022 through June 30, 2026. Past performance is not indicative of future results.

2. Credit Diversification

With repayment ultimately resting with that of the funding recipient, prepaid energy bonds are really municipal bonds wrapped with a corporate guarantor. Collaborating with our corporate credit analysts, we see this as an opportunity to diversify portfolio credit exposure to include highly rated corporate credits. Examples of common funding recipients include Morgan Stanley (A1), Goldman Sachs (A2), New York Life Insurance Company (Aa1), Pacific Life Insurance Company (Aa3), National Bank of Canada (Aa2), among others.

Key Risks to Monitor

Risk 01
Counterparty Risk

A counterparty downgrade or default could impair the structure's ability to deliver contracted volumes and service debt. Multiple layers of backstops — reserve funds, receivable purchase provisions — provide contractual certainty of cash flows, largely dependent on the credit quality of the funding recipient.

Risk 02
Termination / Remarketing Risk

If the initial energy buyer cannot purchase the predetermined volume, a failed remarketing and early termination (typically at par) may result. Municipal utilities have an ongoing public obligation to serve retail customers with persistent demand, so remarketing risk is low — but it is a critical component of credit analysis.

Risk 03

Complexity & Illiquidity

The natural buyer base remains limited relative to market size. This creates periods of spread dislocation — particularly around new issuance windows or market stress — that can temporarily impair liquidity.

Risk 04

Tax / Policy Risk

IRS compliance requirements are critical to maintaining tax-exempt status. Regulatory or legislative changes affecting tax-exempt bond structures could affect valuations broadly.

Risk 05

Basis Risk

If local gas resale pricing diverges from the pricing embedded in the prepaid contract, margin compression for off-takers could strain the underlying commercial relationships.

“A prepaid energy bond looks like a municipal bond — but its risk profile is closer to that of the corporate guarantor standing behind it.”

— Payden & Rygel Muni Research, July 2026

The Payden & Rygel Perspective

A Structural Story, Not a Cyclical One

As prepaid energy bonds grow as a share of the Bloomberg Municipal Bond Index, institutional platforms

are becoming more familiar with the sector, driving incremental demand from separately managed accounts and actively managed strategies.

Payden & Rygel actively monitors guarantor differentiation, off-taker concentration trends, and new issuance technicals to identify relative value opportunities. We view the sector's continued growth as a structural — not cyclical — phenomenon, driven by durable demand for long-term energy price certainty across utilities, industrial customers, and now the data center economy.

For investors equipped to underwrite corporate guarantor credit and structural risk alongside traditional municipal credit work, energy prepay bonds offer a differentiated way to capture incremental tax-exempt yield in an otherwise low-spread municipal market.

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