

# Three Themes Affecting Alternatives

## CONTENTS

2	3	5	6	7	8
Overview	Infrastructure: How the Growth of AI Is Driving Demand for Electricity Production	Real Estate: A Compelling Landscape for Opportunistic Investing	Credit: Payment-in-Kind Explained	Alts Market Dashboard	Introducing the Alts Investing Glossary

## Overview

At the beginning of the first quarter of 2024, equity markets and other risk assets continued to rally as they had done in 2023. Investors shrugged off any sense of uncertainty they may have felt about the state of the economy, global conflicts and turmoil, or political uncertainty in the U.S. Data indicated a relatively strong economy and the Federal Reserve has held interest rates steady for the time being.

Against that backdrop, in this issue of the Alts Quarterly we focus on key themes that are impacting three alternative asset classes—infrastructure, real estate and private credit—both in the short and long term. Specifically, we explore:

- **Infrastructure:** We discuss the growing adoption of artificial intelligence (AI) and how it is creating increased demand for electricity as more data centers are built, which is driving infrastructure opportunities. Owners and developers of renewable power assets seem especially poised to benefit.
- **Real estate:** We explore opportunistic real estate investing, which targets properties with unique challenges and risks that offer outsized opportunities. While opportunistic real estate investing can potentially generate strong returns throughout the economic cycle, current macroeconomic conditions and technical factors suggest the environment may be particularly well suited to such an approach.
- **Private credit:** A growing number of borrowers are turning to payment-in-kind (PIK) for added interest payment flexibility, a trend that is likely to accelerate if the U.S. Federal Reserve (the Fed) starts to cut interest rates later than previously expected, leaving borrowing costs higher for longer. We discuss PIK, what it is, and the potential impact on private credit markets.

Our quarterly **Alts Market Dashboard** shares some data, market and investing insights that we find interesting from across the alternative investing universe. Notable numbers include:

- Public alternatives posted strong 2023 full year performance—outperforming their private counterparts in most asset classes. We believe incorporating both public and private alternative assets into portfolio construction provides diversification benefits and return enhancement.
- Private equity sponsors are injecting more equity into deals to compensate for tighter lending conditions with average deal LTVs falling to 45.7%.<sup>1</sup>
- Average secondaries pricing across private asset classes improved to 88.8% as market rebalances and discounts lessened.<sup>2</sup>

Finally, we are pleased to present a new online glossary of terminology used in the alternative investing industry for investors who may be unfamiliar with some of the jargon.

Investors who want to explore any of the investment themes in this publication in more detail should consult with their financial advisor.

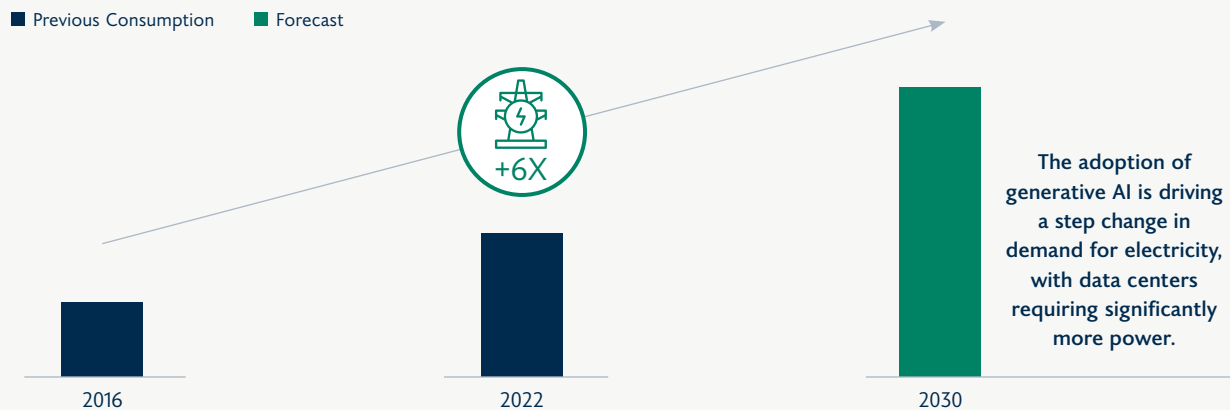
# Infrastructure: How the Growth of AI Is Driving Demand for Electricity Production

The growth of AI and cloud technology has enormous implications for a range of industries, from health care to cybersecurity to financial services and many others. Less obvious, perhaps, is the impact it will have on infrastructure, a result of the increased demand for electricity needed to power data centers.

Artificial intelligence is the term used to describe technology that enables computers to essentially learn and adapt as they attempt to accomplish a range of tasks. AI encompasses a variety of usages, but one thing they all have in common is they use vast amounts of data. Indeed, for a standard AI model/algorithm, it takes more computations to run the model and produce an output than there are grains of sand on earth. The result is a need for large data centers requiring tremendous amounts of power. That's why the adoption of generative AI is driving a step change in demand for electricity: data center power consumption is expected to grow significantly over the next several years (**Figure 1**).

**Figure 1: Data Centers' Power Consumption Is Expected to Grow 6x by 2030**

U.S. Data Center Power Consumption (Gigawatts)



There is no assurance that such events or projections will occur, and actual outcomes may be significantly different than those shown here.

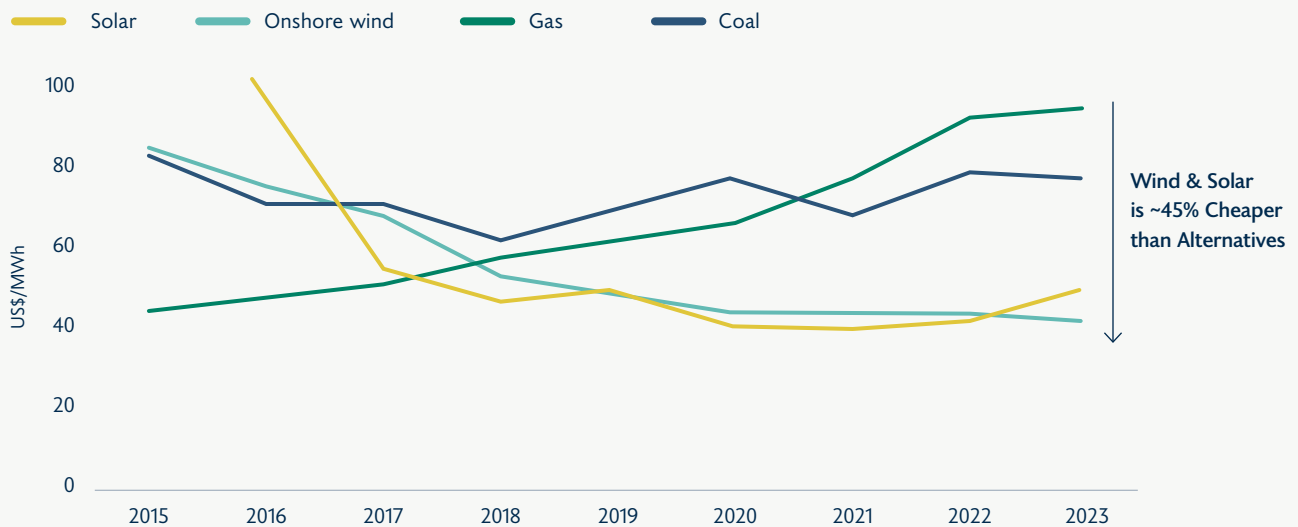
Source: McKinsey, "Investing in the rising data center economy". As of January 31, 2023.

However, these data centers consume so much power that just one of them drawing power from today's electrical grid can have a destabilizing effect. As a result, to get a permit to build these data centers, you need to have a power solution in place. In short, the ability to procure power is essential to the large tech companies' ability to grow their operations.

We believe owners, developers and operators of renewable power assets are set to benefit from this increased demand for electricity. These large tech companies were already some of the biggest purchasers of renewable power; now, they are likely to increase their demand. These companies are choosing renewable power for two key reasons:

- **Net-zero goals:** Tech companies often have a 100% target for green power, given their net-zero ambitions. The need for more data centers to meet the demand for more electricity is expected to lead tech companies to pursue renewable energy options.
- **Price:** While the commitment to green power is important, so is price, which has made renewable energy attractive simply from an economic standpoint. The price of renewable power has significantly declined in recent years, and it is now often the cheapest form of electricity in most major markets around the world (**Figure 2**).

**Figure 2: Global Levelized Cost of Electricity (LCOE)**



Source: Bloomberg New Energy Finance, “LCOE Global Benchmarks.” As of December 31, 2023. LCOE assesses the cost of generating electricity from different sources over the lifetime of a power plant.

As a result, tech companies are becoming more agreeable on price and other terms in their purchase agreements to secure power. Given their significant presence in the marketplace, this is shifting the dynamics of the industry to the benefit of renewable power producers.

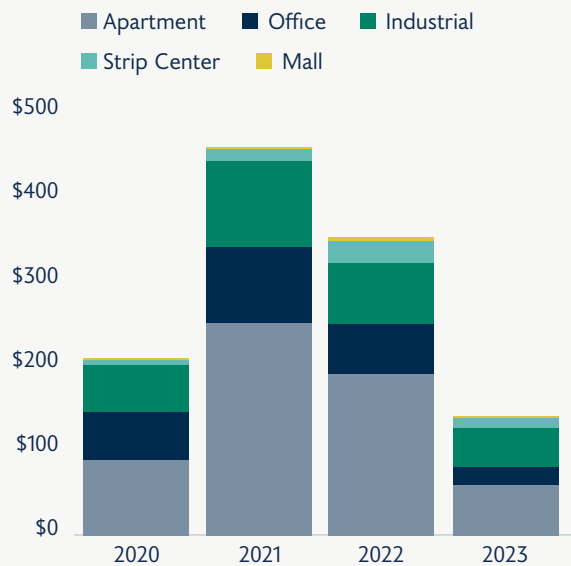
The corporate demand for renewable power is outpacing available supply—creating significant opportunities for owners and operators of renewable power assets that can bring additional capacity online in the near term. We believe that the operators who have access to capital and possess the technical expertise—as well as those that have already been investing in these projects (given the immediate need)—will be the ones that reap the benefits.

# Real Estate: A Compelling Landscape for Opportunistic Investing

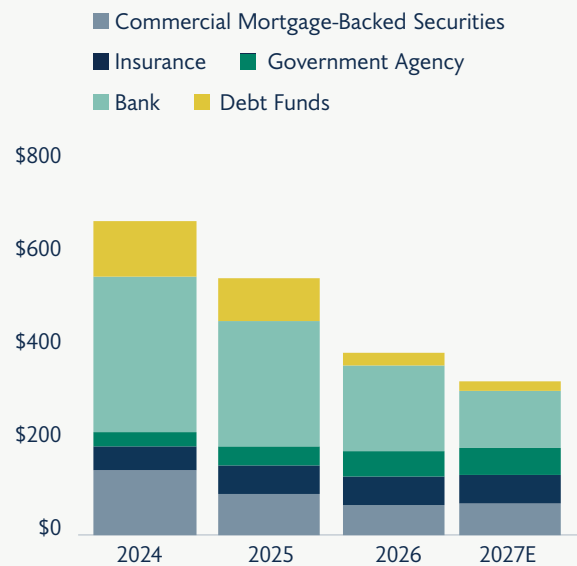
Opportunistic real estate investing targets buildings and properties that come with unique challenges or complexities that, when expertly managed, have the potential to generate outsized returns. While opportunistic real estate can be an effective strategy throughout all phases of the market cycle, opportunities to acquire stressed real estate tend to be most abundant during periods of market volatility and macroeconomic instability.

Current market conditions make a compelling case for opportunistic real estate investment. The capital markets volatility that ensued after the 2022-2023 rapid rise in interest rates placed stress on borrowers and depressed traditional bank lending. In 2023, the higher cost of capital drove transaction volumes 60% lower than in the prior year, putting downward pressure on valuations (**Figure 3**).

**Figure 3: Transaction Volume for Properties Greater than \$25 Million (\$ in Billions)**



**Figure 4: Commercial Real Estate Debt Maturity Profile (\$ in Billions)**



There is no assurance that such events or projections will occur, and actual outcomes may be significantly different than those shown here. Source: Green Street Research, data as of February 2024 (LHS); Mortgage Bankers Association, data as of July 2023; and Newmark, data as of August 2023 (RHS).

At the same time, a large quantity of debt issued when interest rates were low is due to mature over the next few years (**Figure 4**). We believe these headwinds for borrowers create compelling conditions for opportunistic real estate investors, as undercapitalized borrowers become motivated sellers, seeking to offload assets they can no longer manage or finance. In addition, limited liquidity may lead to less competition for investments, and more favorable pricing.

## Credit: Payment-in-Kind Explained

A growing number of borrowers are turning to payment-in-kind (PIK) for added interest payment flexibility amid the elevated interest rate environment. Using PIK allows a borrower to make interest payments in a form other than cash (**Figure 5**). Most commonly this is achieved by accruing—or adding to—payments owed to the total debt. Signs that more borrowers are using PIK to meet their loan obligations are often interpreted as an indication of market stress and therefore increased risk for lenders. However, the story is more nuanced. It is critical to understand not just whether a borrower has turned to PIK but why they have done so, and whether the underlying business is still sound. For example, some borrowers use PIK from the point of loan origination when they are first pursuing financing for their operations and the underlying business model is nonetheless healthy. Others turn to it as an amendment to the agreement during the life of the loan in times of stress or when they can't afford interest payments anymore. Even in the latter instance, they may be able to resume payments in the future, and in many cases it can be worth taking the risk that they will do so.

**Figure 5: Three Common Types of Payment-in-Kind Provisions**



At the core of all investing is balancing risk and opportunity, and this is certainly the case with PIK. For example, in some cases, instead of accrued interest, PIK can also take the form of equity or preferred shares instead of cash. PIK helps a business facing liquidity issues to preserve cash, but it leads to higher interest assessments added to the principal. When PIK takes the form of equity, it can dilute shareholder equity. The risk for lenders is that the accrued interest is never received. On the other hand, the upside for lenders is that PIK increases the yield on a loan, potentially boosting returns. While some PIK is generally not considered to be a major concern, it can add to the potential riskiness of the loan by increasing the debt load. As such, it remains a trend worth monitoring because it can be one indicator of potential portfolio issues ahead.

S&P Global Rating predicts that the use of PIK will rise this year and into 2025 as companies struggle to keep their debt obligations current amid high rates. Driving the increasing use of PIK is the large amount of debt, both public and private, that will need to be refinanced in the next few years. However, some borrowers may struggle to find financing via syndicated bank loans. That is because bank loans are mostly sold into collateralized loan obligations (CLOs). Generally, CLOs can only buy 5% or less of their assets in PIK facilities and cannot buy any assets that are currently paying PIK interest. As borrowing has become more expensive and bank lending has slowed, CLO issuance has declined, too.

All of this is expected to contribute to a growing number of borrowers looking to private credit solutions for financing. For investors, the increasing incidence of PIK is perhaps more than anything a reminder of the importance of working with a private credit manager with a proven track record of navigating economic cycles and being prudent about how and when to use a feature such as PIK in a portfolio.

# Alts Market Dashboard

Below are some metrics to help investors interpret market conditions within various alternative asset classes. Brookfield and Oaktree believe the addition of both public and private alternatives can play an important role in an investor's portfolio.

<p><b>Credit</b></p>	<p>■ Private Credit ■ High Yield</p> <p>Annualized return (%)</p> <table border="1"> <thead> <tr> <th>Term</th> <th>Private Credit (%)</th> <th>High Yield (%)</th> </tr> </thead> <tbody> <tr> <td>1-Year</td> <td>12.1%</td> <td>13.5%</td> </tr> <tr> <td>5-Year</td> <td>9.1%</td> <td>5.2%</td> </tr> <tr> <td>10-Year</td> <td>8.8%</td> <td>4.5%</td> </tr> </tbody> </table>	Term	Private Credit (%)	High Yield (%)	1-Year	12.1%	13.5%	5-Year	9.1%	5.2%	10-Year	8.8%	4.5%	<p><b>\$12.9B</b> Deal volume Q4 2023</p> <p><b>-76%</b> 1-year change</p>	<p><b>11.01%</b> Direct lending yield Q4 2023</p> <p><b>+73 bps</b> YTD change</p>	<p><b>7.69%</b> High-yield yield Q4 2023</p> <p><b>-48 bps</b> YTD change</p>	<p><b>\$449B</b> Dry powder Q4 2023</p> <p><b>+7.2%</b> YTD change</p>	<ul style="list-style-type: none"> <li>Public High Yield outperformed as rate cut expectations lifted bond valuations</li> <li>Spread between private/public yield continues widening</li> </ul>
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<p><b>Infrastructure</b></p>	<p>■ Private Infra. ■ Public Infra.</p> <p>Annualized return (%)</p> <table border="1"> <thead> <tr> <th>Term</th> <th>Private Infra. (%)</th> <th>Public Infra. (%)</th> </tr> </thead> <tbody> <tr> <td>1-Year</td> <td>10.6%</td> <td>3.1%</td> </tr> <tr> <td>5-Year</td> <td>12.2%</td> <td>6.9%</td> </tr> <tr> <td>10-Year</td> <td>11.1%</td> <td>6.8%</td> </tr> </tbody> </table>	Term	Private Infra. (%)	Public Infra. (%)	1-Year	10.6%	3.1%	5-Year	12.2%	6.9%	10-Year	11.1%	6.8%	<p><b>\$109.2B</b> Deal volume Q4 2023</p> <p><b>-8%</b> 1-year change</p>	<p><b>3.69%</b> Public infra. yield Q4 2023</p> <p><b>+18 bps</b> YTD change</p>	<p><b>9.66x</b> Public infra. average EV/EBITDA multiple Q4 2023</p> <p><b>-0.5x</b> YTD change</p>	<p><b>\$346B</b> Dry powder Q4 2023</p> <p><b>4.2%</b> YTD change</p>	<ul style="list-style-type: none"> <li>Recent performance suggests resilience relative to many other asset classes</li> <li>Public yields and valuations remained steady, despite higher interest rates</li> </ul>
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Term	Private Real Estate (%)	Public Real Estate (%)																
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**Past performance does not guarantee future results.** The indexes are unmanaged and cannot be purchased directly by investors. Index performance is shown for illustrative purposes only and does not predict or depict the performance of any investment. Private Credit reflects Cliffwater Direct Lending Index; High Yield reflects ICE BofA US High Yield Index; Private Infrastructure reflects Preqin Infrastructure Index; Public Infrastructure reflects FTSE Global Core Infrastructure 50/50 Index; Private Equity reflects Preqin Private Equity Index; Public Equity reflects MSCI World Index; Private Real Estate reflects Preqin Real Estate Index; Public Real Estate reflects FTSE EPRA Nareit Developed Index.

Performance except for Private Credit, Deal Volume and Dry Powder data from Preqin are preliminary as of December 31, 2023 and are subject to revision, reflecting the Preqin Private Credit, Infrastructure, Private Equity, and Real Estate indices, respectively.

Net operating income (NOI) is a calculation used to analyze the profitability of income-generating real estate investments. NOI equals all revenue from the property, minus all reasonably necessary operating expenses.

Source: Bloomberg, Cliffwater, PEFox Research, Preqin data (unless otherwise noted) as of December 31, 2023, the latest available for private market indices shown.



# Introducing the Alts Investing Glossary

Although alternative investing can help build stronger portfolios and improve outcomes, it also often includes its own unique vocabulary. To help investors better understand alts investing, we are pleased to present a new online glossary that defines commonly used alts terms – everything from 721 Exchanges to Write-Offs. Below are a few examples of some of the terms we clarify in the glossary – and why they matter.





## ENDNOTE

<sup>1</sup>Source: Pitchbook. As of March 31, 2024.

<sup>2</sup>Source: PEFOX. As of March 31, 2024.

## A WORD ABOUT RISK

Investments in real estate-related instruments may be affected by economic, legal or environmental factors that affect property values, rents or occupancies of real estate. Infrastructure companies may be subject to a variety of factors that may adversely affect their business, including high interest costs, high leverage, regulation costs, economic slowdown, surplus capacity, increased competition, lack of fuel availability and energy conservation policies.

Alternative investments often are speculative and include a high degree of risk. Investors could lose all or a substantial amount of their investment. High-yield bonds are subject to interest rate risk. When interest rates rise, bond prices fall; generally, the longer a bond's maturity, the more sensitive it is to this risk. Yields are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision.

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## INDEX DEFINITIONS

The Preqin Infrastructure Index captures in an index the return earned by investors on average in their private infrastructure portfolios, based on the actual amount of money invested in private capital partnerships. Each data point is individually calculated from the pool of closed-end funds for which comprehensive performance data is held, as of both the start and end of the quarter.

The Preqin Real Estate Index captures in an index the return earned by investors on average in their private real estate portfolios, based on the actual amount of money invested in private capital partnerships. Each data point is individually calculated from the pool of closed-end funds for which comprehensive performance data is held, as of both the start and end of the quarter.

The Preqin Private Equity Index captures in an index the return earned by investors on average in their private equity portfolios, based on the actual amount of money invested in private capital partnerships. Each data point is individually calculated from the pool of closed-end funds for which comprehensive performance data is held, as of both the start and end of the quarter.

The Cliffwater Direct Lending Index (CDLI) seeks to measure the unlevered, gross of fee performance of U.S. middle market corporate loans, as represented by the asset-weighted performance of the underlying assets of Business Development Companies (BDCs), including both exchange-traded and unlisted BDCs, subject to certain eligibility requirements.




The FTSE EPRA Nareit Developed Real Estate Index is an unmanaged market-capitalization-weighted total-return index that consists of publicly traded equity REITs and listed property companies from developed markets.

The FTSE Global Core Infrastructure 50/50 Index gives participants an industry-defined interpretation of infrastructure and adjusts the exposure to certain infrastructure subsectors. The constituent weights are adjusted as part of the semi-annual review according to three broad industry sectors: 50% Utilities; 30% Transportation, including capping of 7.5% for railroads/railways; and a 20% mix of other sectors including pipelines, satellites and telecommunication towers. Company weights within each group are adjusted in proportion to their investable market capitalization.

The ICE BofA US High Yield Index tracks the performance of U.S.-dollar-denominated below-investment-grade corporate debt publicly issued in the U.S. domestic market. The ICE BofA Merrill Lynch Global High Yield European Issuers Non-Financial 3% Constrained Ex Russia Index is a sub-index that contains all securities in the broader index except those from financial issuers or with Russia as their country of risk but caps issuer exposure at 3%. The index is rebalanced monthly. The index is USD hedged.

The MSCI World Index is a free-float-adjusted market-capitalization-weighted index that is designed to measure the equity market performance of developed markets.

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