

AES in Play: BlackRock and EQT's Bid in the Context of Power Sector Transformation

Introduction

The shifting sands in the energy sector, particularly in electricity, are driven by a number of structural factors. Most notably, the rapid expansion of AI-driven data centres is accelerating electricity demand at a pace the system was not designed to accommodate, while the energy transition requires unprecedented levels of upfront capital investment in renewables, storage, and grid infrastructure. Together, these forces are reshaping a sector that was historically characterised by stability and slow growth.

These dynamics are examined within this article through a case study on AES Corporation and its proposed acquisition by BlackRock's Global Infrastructure Partners and EQT, with this deal providing a unique snapshot of the causes behind private capital making a large entrance into the industry. 2025 was a record year for infrastructure fundraising, despite private markets seeing a downturn in activity in recent times, with approximately USD 200 billion raised, an increase of 39% year-on-year. The foray of private capital into electricity therefore raises a central question: is private capital better suited for utilities and electricity companies, and why is now the moment for infrastructure investors to make a decisive move into the sector?

Context overview: AI-driven demand and the energy transition

The Demand Shock: AI is not "just another driver"

The connection between artificial intelligence and the energy sector is rapidly intensifying, driven by the immense energy consumption of AI data centers, which has become a major focus of discussion. For years, the energy sector was characterized by stability and slow growth, a pattern dramatically broken by the revolution and rapid adoption of Large Language Models (LLMs).

A typical AI-focused data center consumes as much energy as 100,000 households. Globally, data centers' electricity consumption has increased by 12% annually since 2017, reaching 1.5% of total worldwide energy consumption in 2024. Data centers are now the main driver of global energy consumption growth, with a growth rate more than four times that of other sectors. This consumption also presents a critical geographical challenge: concentration. In the United States, data centres are clustered in just five regional areas, yet within those corridors, their combined energy demand has nearly reached that of traditionally power-intensive industries such as iron and aluminium smelting.

Tech firms recognize the massive energy requirement and are acting to ensure the grid and infrastructure are prepared when their data center projects are finished, as power delivery timelines frequently fall behind construction schedules. This foresight is leading them to negotiate long-term Power Purchasing Agreements (PPAs), aiming to guarantee 24/7 clean energy for their data centers.

The Supply Constraint: Energy transition is capital-heavy

AI's demand shock affects an energy sector already stressed by decarbonisation. Every new solar or wind project must be paired with battery storage and grid infrastructure upgrades to deliver comparable levels and reliability of electricity, and the costs are front-loaded: capital is deployed today, returns may be collected over the next few decades. Therefore, replacing fossil fuel capacity with renewable energy is not a like-for-like swap.

The scale of investment required is staggering, and grid infrastructure sits at its centre. The IEA estimates that global clean energy investment must scale from \$1.8 trillion in 2023 to approximately \$4.5 trillion annually by the early 2030s to remain on a net-zero trajectory. Within that envelope, transmission and distribution spending alone must more than triple, rising from \$260 billion per year in 2025 to \$820 billion by 2030, the single largest line item in the energy transition. This is not a financing gap that can be closed incrementally: it reflects a structural undersupply of long-lived, capital-intensive assets that take years to permit, build, and integrate. S&P Global projects that US utility capital expenditures will surpass

\$1 trillion between 2025 and 2029, driven by ageing infrastructure, renewable integration, and data centre interconnection. For AES specifically, this translates into a 46 GW development pipeline and an investment programme exceeding \$12 billion, a capital commitment of a scale and duration that fundamentally shapes how the company must be owned and financed.

These two forces, an AI-driven demand shock and a capital-intensive supply response, meet to expose a structural stress in how utilities like AES are owned and valued, and that public equity markets may not be equipped to resolve efficiently like private ownership.

Public vs private ownership debate

Long-duration, capital-intensive energy assets are a better fit for private infrastructure capital than for public equity markets. Public markets tend to focus heavily on near-term earnings and stable distributions, while utilities often need to commit large amounts of capital upfront and wait years for those investments to fully pay off. In practice, that creates a real problem, where large capex programs usually depress earnings and dividends in the short run, even when they are building substantial long-term value, and public investors often respond poorly to that trade-off.

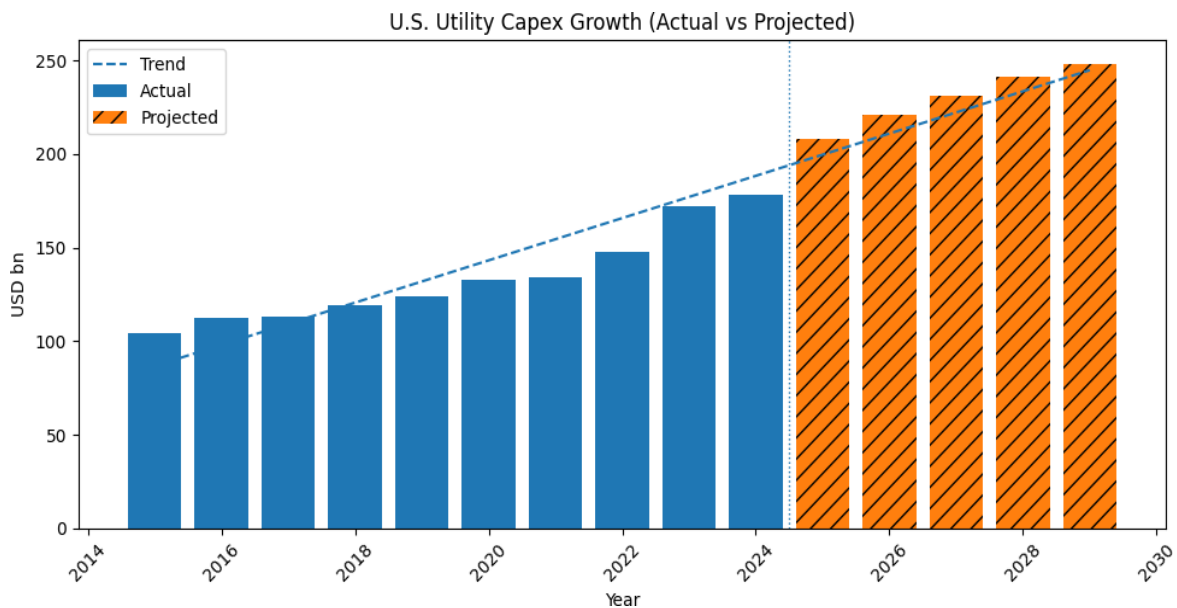


Figure 2. U.S. utilities are entering a record investment cycle, reinforcing the mismatch between long-duration capital needs and short-term public market expectations.

(S&P Global estimates roughly \$1.3tn of aggregate U.S. energy utility capex from 2026 to 2030)

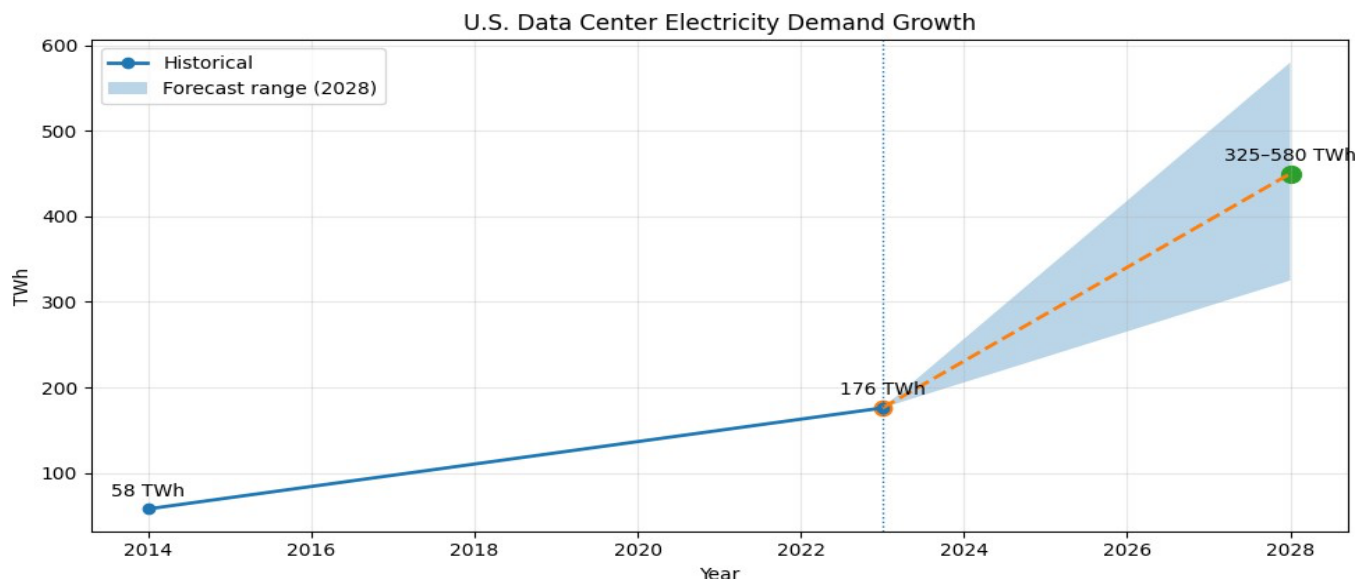


Figure 3. Data center electricity demand is rising rapidly and remains uncertain, forcing utilities into continuous reinvestment rather than stable cash flow generation.

Private capital looks at the same investment profile through a different lens because it is not exposed to daily share-price pressure in the same way, it can evaluate returns over decades rather than quarters, which makes these long-horizon assets easier to support. AES captures this dynamic quite well: even with a multi-gigawatt development pipeline and long-term contracted revenues through PPAs its heavy investment burden and complex capital structure have weakened near-term earnings visibility and contributed to persistent skepticism in the public market. The mismatch becomes even more pronounced once AI driven electricity demand is added to the picture, with data centers already accounting for roughly 1.5% of global electricity consumption and expanding at around 12% annually, which is forcing utilities to build out generation, storage, and grid infrastructure at the same time.

This is not a typical investment cycle where spending eventually gives way to a more stable cash flow phase because demand growth is pushing companies into continuous reinvestment, and for AES, that is visible in a \$12bn+ investment program and a 46 GW development pipeline, both of which extend the period during which cash flows are reinvested rather than distributed.

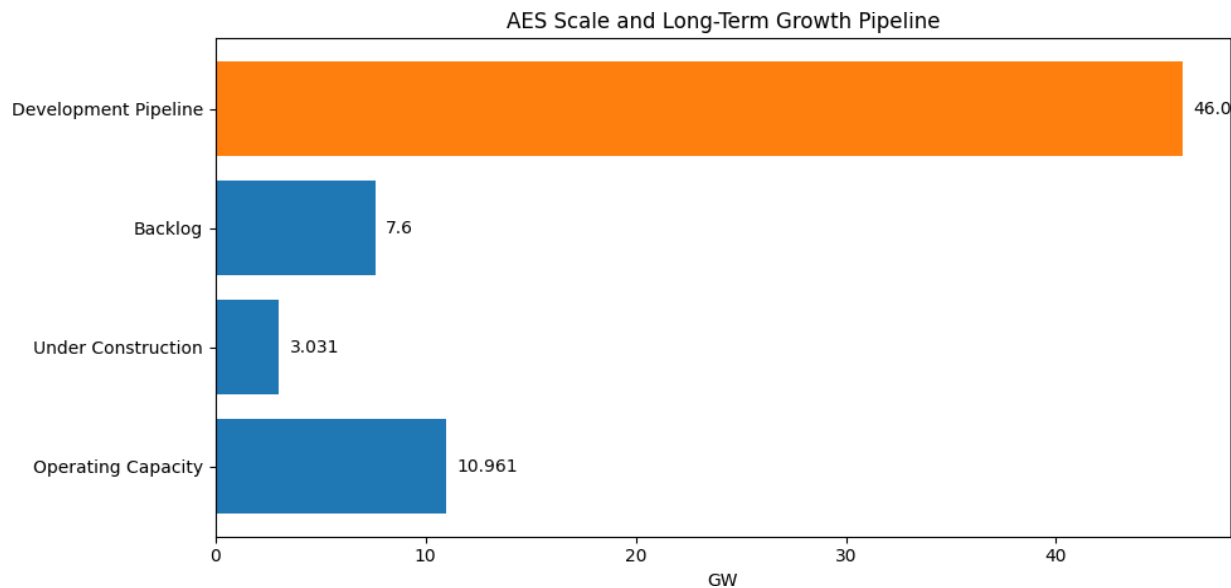


Figure 4. AES combines a relatively limited operating base with a large development pipeline, extending its reinvestment horizon and capital requirements.

Unsurprisingly, that sits awkwardly with public market valuation models, which still place a lot of weight on near-term earnings strength and dividend stability, and, in addition, capital within public markets has increasingly flowed toward high-growth and scalable sectors, especially technology. Utilities sit at the other end of that spectrum since they typically offer regulated returns, limited upside, and business models that are deeply capital-intensive making them less attractive to investors looking for growth. As investor demand shifts in that direction, utilities can end up facing lower valuations and a higher cost of equity, which in turn makes large-scale expansion harder to finance.

AES seems to reflect the pattern as its underperformance relative to both the broader market and the utilities index suggests that investors are discounting its complexity, leverage, and long-duration reinvestment profile more than the quality of the underlying assets themselves, so that funding future growth through public markets becomes structurally more difficult.

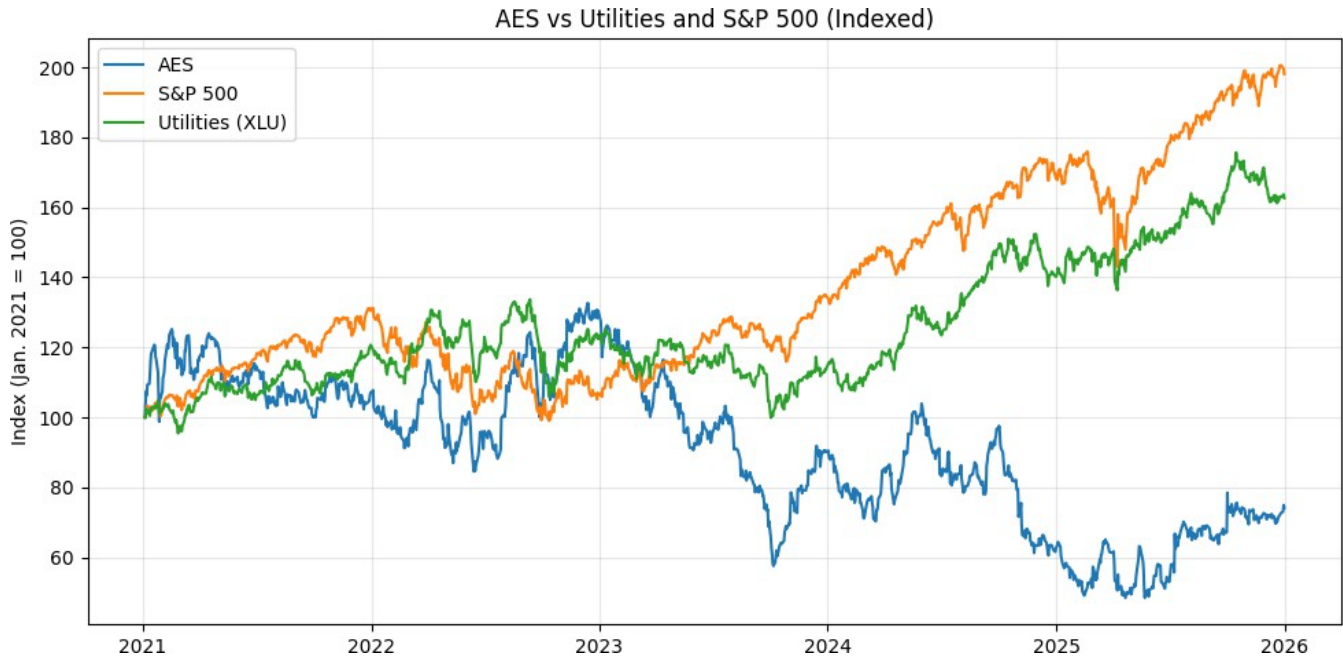


Figure 5. *AES has underperformed both the broader market and utilities, suggesting public investors discount its complexity and long-duration reinvestment profile.*

Private ownership addresses some of these issues because it allows capital to be deployed with a longer horizon and without constant pressure around short-term earnings visibility but still, such a solution involves an important trade-off, especially in electricity infrastructure, because shifting these assets into private hands concentrates control among a smaller group of institutional investors and reduces the degree of public scrutiny over investment decisions, pricing dynamics, and long-term planning, while public ownership brings transparency through disclosure requirements, analyst coverage, and broader shareholder oversight, and those mechanisms matter for assets that support economic activity and national security.

So, the issue is not just whether private capital is better equipped to fund these assets, but also whether lower transparency and weaker oversight are acceptable in a sector that is becoming increasingly central to the functioning of the AI-driven economy. AES, then, is not simply a mispriced utility. It is also a case in which public and private investors are applying fundamentally different valuation frameworks to the same business. The next section examines whether the \$15.00 offer reflects genuine undervaluation or, instead, a repricing under private ownership.

AES as a case study in the electricity transition

AES is a hybrid electricity platform combining renewable generation, energy storage, and regulated utilities, with its most significant revenue source coming from long-term corporate Power Purchase Agreements. Some companies like NextEra Energy have a business model similar to AES, where they combine renewable energy with regulated utilities, often trading at premium valuations. Other firms still haven't caught up and are very slowly transitioning to renewables, but their primary revenue drivers remain regulated electric utilities and infrastructure. This places AES in an intermediate position: structurally more growth-oriented than traditional utilities, but still exposed to the capital intensity and complexity that defines the sector.

With the rise of AI and electricity demand needed by data centers, AES currently holds a unique position in the markets, which the consortium led by GIP and EQT fully recognizes and plans to utilize. AES is able to deliver immense renewable generation, in addition to energy storage. Moreover, its newer business model would allow a seamless transition to private ownership since AES is already exceedingly focused on PPAs, such as the one it recently signed with Meta for 650 MW intended to power Meta's Midwest data center needs.

At the same time, this business model creates a structural tension in public markets. The combination of a large development pipeline, long-duration contracted revenues, and significant upfront capital requirements means that value is realized over long time horizons, while earnings and cash flows remain suppressed in the near term. This makes AES particularly sensitive to the valuation framework applied by investors.

This divergence has been reflected in the company's share price that experienced a sharp increase in 2022, soon followed by an even sharper decline, resulting from investors' uncertainty about debt and execution risk of the clean energy scaling strategy.

Keeping this in mind, one could see why AES may be considered undervalued, and our valuation in the following section will establish whether that's the case. More importantly, however, AES serves as a case study of a broader mismatch: a company whose underlying assets are long-duration and capital-intensive, but whose public market valuation is anchored to shorter-term earnings visibility.

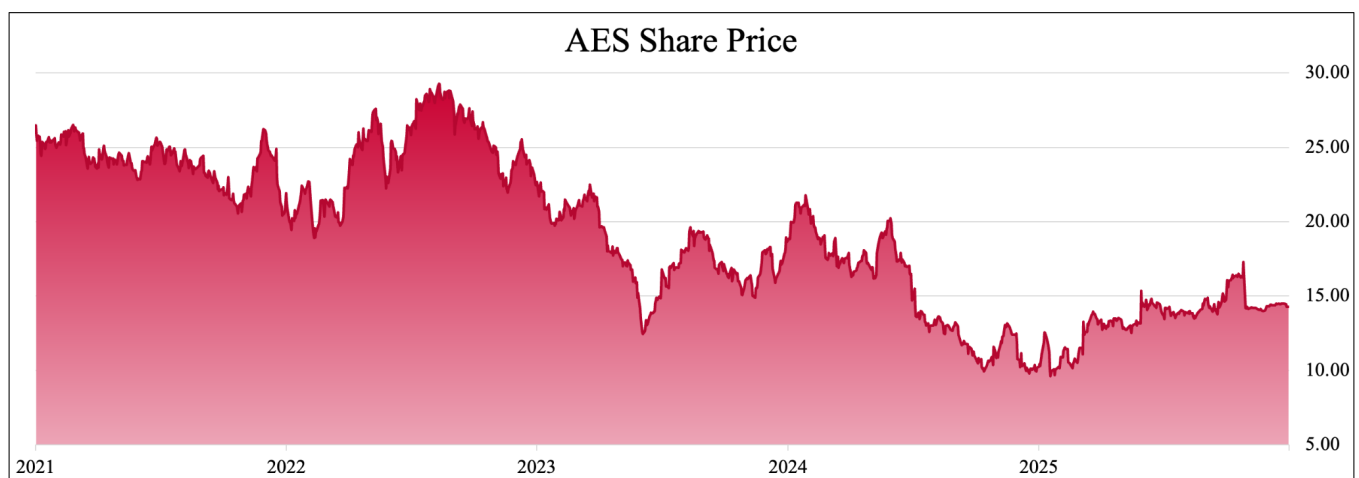


Figure 6. History of AES' share price in the past five years

Is AES Undervalued or Repriced?

Following the discussion on how public and private ownership differs wildly, especially when looking at past infrastructure deals, it is important to examine the reality of this transaction and whether those themes are also reflected here. The core question is whether the valuation analysis matches the argument that there is a disconnect between how public vs private owners value assets. In terms of metrics, EV/EBITDA gives a surface-level view on how it compares to others but realistically a more in-depth SOTP valuation is required in order to fully evaluate the question regarding pricing.

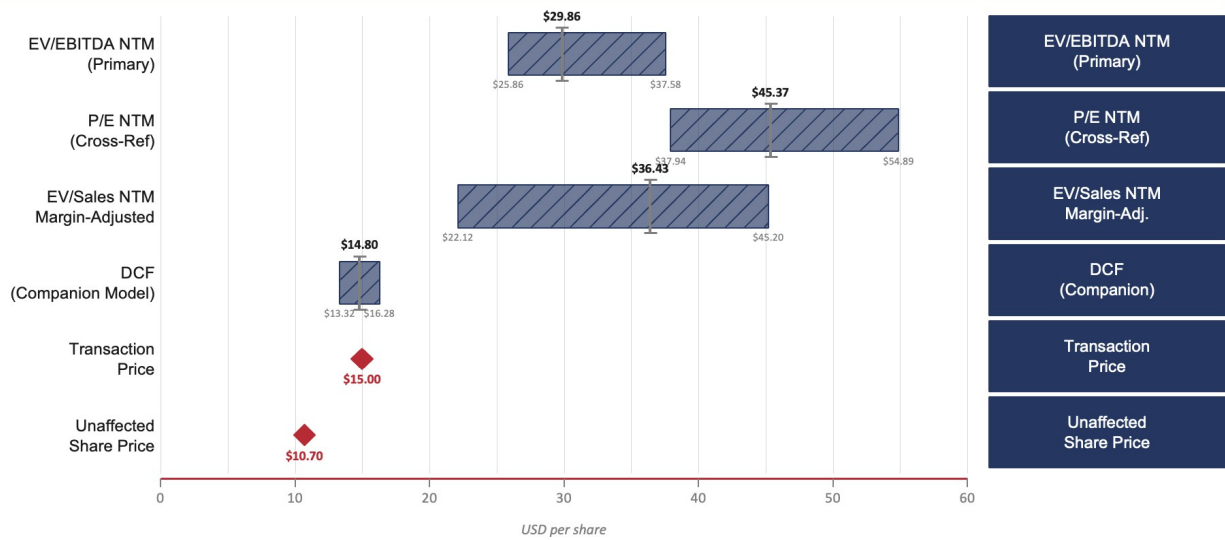
The assets are the same; the pricing perspective is different. AES looks to be repriced under new ownership rather than undervalued at USD 15.00 a share. This comes as infrastructure investors typically value companies at a lower WACC, the capital structure will drastically differ under private ownership, and the time horizon for the investment is 10 to 15 or more years. If we delve into the WACC mechanics as to why this is the case, there is significantly less pressure on early cash flows. In particular, private infrastructure investors are able to combine higher leverage with lower required equity returns, resulting in a lower effective cost of capital and a higher present value for the same long-duration cash flows.

Looking at the data in terms of valuation drivers, the deal has an implied value at around 12.1x EV/EBITDA. Renewables typically trade at a multiple closer to 15.1x according to a preliminary look at Mergermarkt across the wider market over the last ten years. This shows that the SOTP valuation already values the other business segments at a lower multiple.

The valuation is estimated at \$25.86 - \$37.58/share based on EV/EBITDA, with cross-references from P/E and EV/Sales (margin-adjusted) trading multiples. This range sits materially above the \$15.00 transaction price, indicating that on a standalone basis AES may appear undervalued when assessed using public market trading multiples. However, this does not necessarily imply mispricing, but rather reflects the application of different valuation frameworks across investor types.

The core arguments between whether AES is undervalued or repriced will most likely hinge on the following aspects. The case for undervaluation rests on whether the current multiple is lower than typical renewables comps even when the asset mix is taken into account, and whether the market is applying a conglomerate discount. The case for repricing rests on whether this fits into the typical take-private infrastructure pattern, whether the market is penalising the complexity of AES's business model, and whether infrastructure funds' lower required rate of return, longer-term valuation view, and greater comfort with leverage fully explain the observed gap. Currently the argument for a repricing is stronger unless, when the intrinsic valuation is completed, there is a clear valuation mismatch that determines AES is being undervalued.

Valuation overview



The sensitivity analysis further illustrates this mechanism. As shown in the share price sensitivity table, relatively small changes in the cost of capital result in meaningful changes in equity value, even when growth assumptions are held constant. A reduction in WACC consistent with private infrastructure ownership leads to a higher implied share price, reinforcing the idea that valuation differences are driven not only by fundamentals, but by the discount rates applied to those fundamentals.

Share Price Sensitivity Analysis (Energy Infr.)		g				
		0.75%	1.00%	1.25%	1.50%	1.75%
WACC	5.73%	15.55	15.82	16.13	16.46	16.84
	5.98%	14.94	15.17	15.43	15.72	16.04
	6.23%	14.38	14.58	14.80	15.05	15.32
	5.98%	14.94	15.17	15.43	15.72	16.04
	5.73%	15.55	15.82	16.13	16.46	16.84

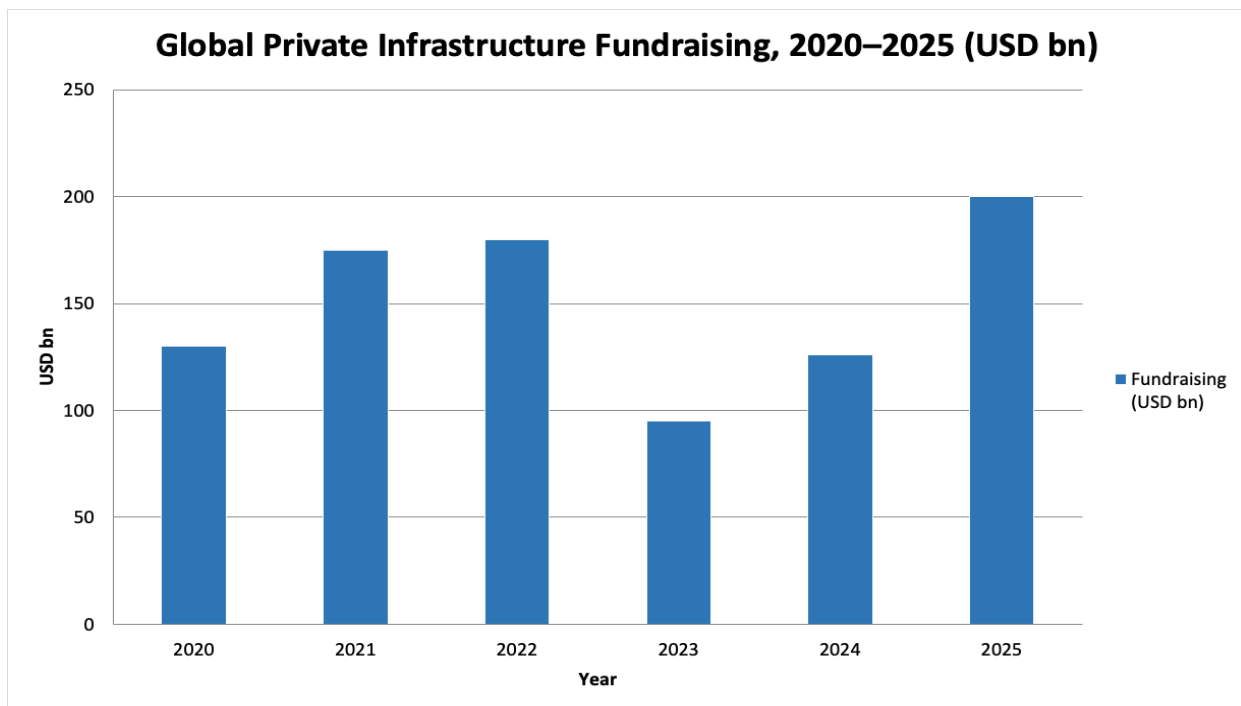
This suggests that the observed gap between public market pricing and intrinsic value is best understood as a combination of both effects: a modest degree of public market undervaluation, and a more structural repricing under a private infrastructure framework.

Implications of the deal for wider industry

The GIP and EQT acquisition of AES is not an isolated transaction. In many ways, it is a clear articulation of two simultaneous structural shifts: first, the deployment of private capital into infrastructure as an asset class, and second, the repricing of the electricity sector in response to a structural demand shock. Understanding these shifts, and how they intersect, reveals why this deal matters well beyond AES.

In the private capital sector, the AES deal is the result of a long-term re-evaluation of infrastructure as an asset class. In 2025, global closed-end infrastructure fundraising reached a record around \$200 billion, which was nearly a 60% increase on 2024. This comfortably surpassed the previous high of \$180 billion,

which was set in 2022. Capital is also becoming more concentrated. Just six funds accounted for over half of the total infrastructure fundraising in 2024. The largest closures in 2025 were overwhelmingly driven by AI-related themes, such as digital infrastructure and renewable energy. GIP and EQT are exactly the kind of platform that this trend has been building towards. They are large and operationally sophisticated. They are also comfortable with holding assets for 10–15 years, which public markets cannot structurally support. Put simply: AES is precisely the kind of asset that can only be acquired once the infrastructure fund model has reached this level of maturity and capitalisation. A decade ago, no infrastructure fund could have credibly executed a transaction of this magnitude.



The electricity-sector implications are arguably even more significant. AES is not the only utility to have moved into private or consolidating hands over the past twelve months. In May 2025, Blackstone Infrastructure agreed to take TXNM Energy private in an \$11.5 billion deal; and in January 2026, Constellation Energy announced the acquisition of Calpine in a \$26.6 billion transaction. This is a pattern, not a coincidence. The underlying driver is a demand-side shift of real structural significance.

According to the IEA, global electricity consumption grew by 4.3% in 2024, which is nearly double the 2.2% annual average recorded over the preceding decade. Data centres alone currently account for approximately 1.5% of global electricity consumption, growing at around 12% per year over the past five years. This is a staggering four times the growth rate of all other sectors combined. With AI adoption still accelerating, the IEA projects that data centre electricity demand will nearly double again to roughly 945 TWh by 2030. The consequence is a structural repricing of utilities. Assets that were historically valued as slow-moving and regulated businesses with limited growth are increasingly being recognised as the physical backbone of the AI economy. Private capital has moved faster than public markets to reflect this, for reasons already discussed: infrastructure funds operate with longer return horizons and can credibly price in decade-long demand growth in a way that public equity investors, anchored to near-term earnings, structurally cannot.

It is important to be precise about the scope of this argument. Not all utilities are equivalent, and this dynamic will not play out uniformly across the sector. For capital-intensive, contracted-renewables platforms with long reinvestment profiles, AES assets being a prime example, private ownership is

increasingly sensible from a structural perspective, as explained in this article. For simpler, more traditionally regulated utilities, however, the situation is different: the public-private valuation gap is smaller, the complexity discount is lower, and the case for a take-private is weaker. However, what the AES deal does establish is a benchmark. Private infrastructure capital will continue to flow towards assets with the widest valuation gap, and we can be confident that utility boards across the United States are taking note. The question for the sector is not whether further transactions will follow, but which types of utility are most exposed to the same structural repricing that the AES deal has now made clear.

Conclusion: is private capital ownership inevitable in electricity?

Private capital ownership is not inevitable in electricity as a whole, but it is becoming increasingly attractive for long-duration, capital-intensive, hybrid platforms like AES. AES is not a simple listed utility. It is structured around four Strategic Business Units (SBUs): Renewables, Utilities, Energy Infrastructure, and New Energy Technologies. Each unit must be treated as a standalone entity and therefore valued using its own discount rate.

AES attracts private capital mainly because of the scale of its growth platform: in 2025, it had a 12.0 GW backlog, including 7.6 GW in AES Clean Energy in the U.S., a 46 GW U.S. development pipeline, and over \$12 billion budgeted for projects under construction and under contract, while completing

3.2 GW of renewables and storage and signing long-term PPAs for an additional 4.0 GW. It also supplies technology giants like Microsoft, Google, and Alphabet. As electricity demand continues to rise, driven largely by further advances in AI, energy suppliers like AES are likely to benefit from materially higher future cash flows. In addition, a meaningful part of AES's value comes from Inflation Reduction Act (IRA) tax benefits, particularly Production Tax Credits (PTCs) and Investment Tax Credits (ITCs). At the same time, AES Indiana and AES Ohio, both part of the Utilities SBU, forecast \$4.2 billion and \$1.6 billion, respectively, in planned spending between 2026 and 2028. This comes on top of heavy capital required by the energy transition, as every new renewable project must be paired with storage and grid infrastructure upgrades, further underlining the capital-intensive nature of the platform and its stronger fit with patient private capital.

Public equity investors tend to penalize AES not only for its high leverage, but also for the complexity of a layered corporate structure that includes non-recourse and recourse debt, tax equity partnerships, preferred equity at subsidiaries, project-level financing, and minority stake sales in operating platforms and utilities. This pressure is compounded by rising dividends and high indebtedness, which leaves AES with less room to fund the capex it still needs. Last but not least, weaker earnings in AES's largest SBU, Energy Infrastructure, driven by declining revenues and margins since 2023, reinforce broader concerns over AES's near-term earnings visibility, with consolidated EBITDA and EBIT also remaining below their 2021 highs despite a partial exception in 2025.

Taken together, these features help explain why AES may look less attractive through a public-market equity lens. It may therefore be the case that AES is not simply undervalued, but valued differently by private investors, whose longer time horizons allow them to look past near-term weakness.

Even so, AES should be treated as evidence of a specific pattern rather than proof of a universal rule for the electricity sector. One transaction alone does not justify the conclusion that private ownership is the natural end state for electricity as a whole. AES itself underperformed not only the broader equity market but also the S&P Utilities Index, which suggests that the public market's scepticism was directed not simply at the electricity sector, but at AES's particular combination of financial complexity, capital intensity, and long-duration reinvestment needs. Indeed, compared with peers, AES stands out for the strain of its capital structure, with debt-to-EBITDA and debt-to-capital both materially higher than those of comparable companies. Its revenue base is also less tied to any geography than that of most peers, reducing concentration risk but making the company harder to price across jurisdictions. In that sense, AES looks less like a straightforward listed utility and more like the kind of platform that public markets struggle to value cleanly. The more convincing conclusion, then, is that the more an electricity company resembles AES, the less naturally it fits in public markets and the more naturally it tilts towards private infrastructure ownership.

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