Updates

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Trends in the Growth of Investment in US Data Centers Under the New Administration



The announcement of the Stargate joint venture demonstrates, international stakeholders have been increasing their engagement in the U.S. data center industry.

The growth in foreign investment in the data center industry, which is typically supported domestically, illustrates the growing alliance between U.S.-based hyperscalers maintaining dominance through large-scale build-outs and foreign investors in meeting the capital-intensive needs of the emerging artificial intelligence (AI) industry. This trend can help the industry meet its voracious appetite for growth as the new administration begins to lift regulatory burdens off AI and data center development.

Trends Shaping the Data Center Industry in 2025

The proliferation of AI-intensive applications and expanding cloud platforms has elevated data centers to critical infrastructure, necessitating fast-paced growth. Over the past five years, the number of leased data centers in the United States has grown seventeenfold. In 2024 alone, the country added 5,000 megawatts of new data center capacity—equivalent to 1% of the nation's total power consumption. Over the next five years, U.S. data center investments are projected to surpass \$1 trillion.

Several key trends are now defining that growth and the data center industry's evolution:

- 1. **AI-driven expansion.** The adoption of AI is driving demand for high-capacity, energy-intensive data centers, with projects designed for real-time data analysis and machine learning workloads.
- 2. **Energy consumption and sustainability.** Experts expect AI workloads to increase data center energy consumption tenfold compared to traditional services. Innovations in sustainable power sources, including modular nuclear reactors and renewable energy, are paramount to meeting this level of energy consumption.

- 3. **Advanced cooling technologies.** Data centers typically rely on PFAS-based solutions to cool the high-density servers efficiently. As PFAS chemicals become increasingly scrutinized and regulated, <u>new</u> direct liquid cooling and immersion cooling solutions that rely on environmentally sustainable liquids are required.
- 4. **Location diversification.** Although traditional data center hubs such as Virginia and Texas continue to see significant investment, new facilities are increasingly being built <u>near renewable</u> energy sources and away from congested urban hubs to mitigate power bottlenecks.
- 5. **Foreign investments.** Domestic investors have long dominated the U.S. data center market due to their established relationships with local infrastructure, regulatory familiarity, and agile supply chains. Foreign investors are making strategic entries, but the crowded, complex market requires such investors to collaborate with domestic partners.

The Trends in Action

Executive Actions

As the federal government shifts from the Biden to the new administration, AI and data center development has been a through line demonstrating the industry's critical role in technological competitiveness and national security. In one of his final acts, President Joe Biden issued an executive order designating federal sites for advanced data center development. His order requires clean energy integration to address energy consumption concerns and domestic semiconductor use to promote supply chain resiliency.

The order remains in effect for now, surviving President Trump's initial recission of Biden-era executive orders. President Trump also reaffirmed the federal commitment to AI in his own executive order directing his science advisor to remove any actions or regulations that may be barriers to AI development. Although this order does not directly address data centers, it signals that President Trump will leave solving energy consumption, sustainability, and cooling issues to the private sector.

This approach is underscored by <u>announcing</u> Stargate. Stargate is a joint venture between U.S. technology companies and foreign entities. The venture promises \$100 billion for AI infrastructure with a hope to invest up to \$500 billion over the next four years. The expected result is 20 advanced AI-enabled data centers (a first facility is already under construction in Texas) and over 100,000 jobs.

Industry Actions

The Stargate announcement underscores the collaboration between foreign investors and domestic stakeholders to build out U.S. data centers. Domestic stakeholders currently dominate the sector due to their familiarity with the U.S. market and regulatory regime, along with a shift from OPEX to CAPEX business models, which allows them to become the new hyperscalers and make large-scale investments. However, foreign entities like the Dubai-based DAMAC Properties, which has invested \$20 billion in U.S. data centers, provide significant resources as the industry grows.

This evolving convergence of domestic leadership and selective foreign engagement represents a pivotal period for technological innovation and global infrastructure development. Domestic hyperscalers, backed by private equity and investment funds, have established relationships with regional infrastructure, regulatory expertise, and agile supply chains. Foreign investors, meanwhile, may have difficultly navigating the complex U.S. regulatory environment—especially given the data center's position as critical infrastructure and the resulting data sovereignty and national security considerations.

This dynamic creates circumstances ripe for collaboration and joint ventures. Domestic stakeholders' advantages enable them to secure consistent access to power grids and renewable energy sources, streamline regulatory compliance, and navigate the procurement of critical components like servers and cooling systems with minimal delays. Foreign players, then, bring technological innovations, capital, and fresh perspectives crucial to addressing the energy consumption, sustainability, and cooling issues facing the industry.

Takeaways

- Data center development will require addressing energy consumption, sustainability, and cooling issues.
- The new administration has continued the Biden administration's promotion of AI and data centers, but recent executive orders suggest that new administration will seek to remove regulatory barriers more aggressively.
- Collaborative ventures between domestic and international entities will be key in making needed innovations while addressing local specifics and regulatory requirements.

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