

Scaling Smart: An Infrastructure Investor's Playbook for AI-Driven Data Center Growth

The global data center market is surging, with investments projected to top \$1.8 trillion by 2030, fueled by AI and cloud computing.

According to McKinsey & Company, 70% of total demand for data center capacity will be driven by facilities that can host advanced AI workloads by 2030. Private equity firms, hyperscalers like AWS, Google Cloud, and Microsoft Azure, and real estate developers are all looking to capitalize on this explosive growth.

This shift requires a new playbook for infrastructure investors:

- **Move fast.** Demand for AI-ready data centers is growing at lightning speed.
- **Build collaborations.** Partner across the value/supply chain, especially amid current tariff and trade war uncertainty.
- **Expect higher costs.** Scaling to meet surging AI-ready infrastructure demand is capital intensive.
- **Prep for power.** Sustainable energy solutions such as green energy, solar and stand-alone sources will be critical to meet increasing power needs.
- **Partner with existing data center operators** who can retrofit or expand current facilities through:
 - Stakeholder alignment (regulators, utility providers, contractors)
 - Workforce development initiatives
 - Modular data center designs for adaptability

Data Center Deals on Deck

The momentum is building. Blackstone recently acquired Asia Pacific & Japan (APJ) hyperscale specialist AirTrunk for \$24 billion, and launched a \$7 billion venture with Digital Realty to develop hyperscale data centers to deliver 500 megawatts (MW) in Frankfurt, Paris, and Northern Virginia.

KKR has invested more than \$29 billion in digital infrastructure companies, as well as \$15 billion in power, utilities, and energy. Separately, its \$50 billion deal with Energy Capital Partners (ECP) will provide over 83 gigawatts (GW) of power generation across major U.S. power markets to support the rapid expansion of AI and cloud computing.

Hyperscalers require a great deal of capacity to operate large models such as Gemini (Google) or ChatGPT (OpenAI), and tech firms aren't sitting idly by. Microsoft is investing \$3 billion in new data centers in Mount Pleasant and Kenosha County, Wisconsin.



Power Pressure and Geographic Hot Spots

Large data center campus can consume more than 100 MW--enough to power 80,000 American households. Data center power demand is expected to grow 50% by 2027, and up to 165% by 2031, according to Goldman Sachs.

The global data center market currently utilizes roughly 55 GW, with AI accounting for 14%. By 2027, that figure is expected to rise to 83 GW, with AI utilizing 27%.

While few AI-dedicated data centers exist today, regions with the most data center power and square footage in place right now - Beijing and Shanghai in the Asia-Pacific area, and Northern Virginia and the San Francisco Bay area in North America - are poised to lead.

Underlying this growth is concern over utilities' ability to keep pace and electricity grid strain. To combat this, hyperscalers and energy providers are developing sustainable solutions. Companies investing in climate risk assessments, renewable energy strategies, and efficient cooling technologies will gain a competitive edge.



Tariffs and Trade Wars



Recent U.S. tariff announcements have rattled markets and raised concern over supply chain stability.

In 2024, the United States imported nearly \$486 billion worth of electronics, which includes data-center equipment, according to U.S. Census Bureau data.

New U.S. tariffs would impose steep duties on leading technology equipment suppliers from China (34%), Taiwan (32%) and South Korea (25%), with China announcing a 34% retaliatory tariff.

The full impact of the announced tariffs will depend on how equipment gets classified. But these shifts threaten delays and cost increases, especially for critical components like semiconductors, storage devices, cooling systems, and backup generators, among other essential data center infrastructure components.

Even before the tariff announcements, McKinsey had estimated capital spending on procurement and installation of mechanical and electrical systems for data centers could exceed \$250 billion by 2030.

To mitigate risks, companies must:

- Identify reliable partners for cross border transactions
- Diversify sourcing regions
- Develop strong supplier relationships
- Implement demand forecasting
- Establish approved vendor lists and e-procurement systems





VAT, Taxes and Freight Deployment

Trade and tariff volatility make it imperative for companies to prioritize planning.

- **VAT Structuring:** VAT is a key tax consideration in over 160 countries. Missteps can cause cash flow issues and unexpected tax liabilities, impacting ROI.
- **Freight and Logistics:** The movement of hyperscale infrastructure requires careful planning. Engaging an Importer of Record (IOR) reduces customs risk, deployment timelines, and compliance headaches.
- **Regional Tax Incentives:** Understanding VAT reductions or exemptions can improve cost efficiency.

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A Strategic Partner in Your Corner: How TecEx Can Help

Advance planning and proactive trade compliance is no longer optional—it’s critical for maintaining a competitive advantage.

In a recent survey by Descartes Systems Group, 32% of respondents agreed that trade compliance gives them a competitive edge. For companies prioritizing global growth, that figure jumps to 83%.

In today’s fast-moving trade environment, having a strategic partner like TecEX can make all the difference. With expertise in global trade compliance, risk mitigation, storage solutions, and data sovereignty laws, TecEX can help you stay ahead of regulatory shifts--and scale smarter.

We’re here to help you succeed.