ECONOMIST IMPACT

Country Profile

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United States

Country Profile

This country profile is part of Foundations at risk, a research programme by Economist Impact that examines the emerging threats affecting data centres globally and evaluates country-level exposure and resilience.

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Key insights

The US dominates the global data centre market **(with over 5,000 facilities)**, accounting for almost half of global capacity.[1]

Primary hubs like Northern Virginia and Dallas offer excellent infrastructure, connectivity and incentives, yet vacancy rates are low—highlighting **clear opportunities for expansion into secondary cities.**

Sustainability mandates are largely absent at the federal level, pushing states and businesses to fill the gap in **renewable energy and water conservation.**

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Market overview

The US leads global digital infrastructure, with the data centre sector expected to grow at an average of 12% each year between 2024 and 2034, to reach US$ 211.1bn.[4] Top cloud providers AWS, Microsoft and Google are headquartered here. High demand is driving rental prices up to over US$200/kW in Silicon Valley, Phoenix and Northern Virginia. Rental prices are likely to move even higher in Northern Virginia moving forward, where vacancy rates are under 0.5%, underscoring a pressing need for geographic diversification beyond primary centres (see Figure 1).[5, 6, 7]

Figure 1: Data centre inventory, vacancy rates and rental prices by US market

Geographic location	Inventory (MW)	Vacancy rate (%)	Rental Rates (kW/mo) US$
Northern Virginia	2930	0.5	175-225
Atlanta	1000	2.6	160-180
Chicago	641	3.2	175-200
Phoenix	603	1.9	170-210
Dallas-Ft. Worth	591	3.5	140-175
Hillsboro	499	0.2	150-200
Silicon Valley	468	5.5	155-250
New York Tri-state	190	6.4	180-200

Source: CBRE. North America Data Center Trends H2 2024. February 2025. Available at: https://www.cbre.com/insights/reports/north-america-data-center-trends-h2-2024

[1] Data Centre Solutions. The United States counts 5,388 data centres. October 2024. Available at: https://datacentre.solutions/news/68654/the-united-states-counts-5388-data-centres
[2] Virginia State Legislative Information System. HB2101 Electric utilities; data center cost allocation. 2025. Available at: https://lis.virginia.gov/bill-details/20251/HB2101
[3] Virginia State Legislative Information System. SB960 Electric utilities; data center cost allocation. 2025. Available at: https://lis.virginia.gov/bill-details/20251/SB960
[4] Precedence Research. Data Center Market Size Expected to Reach USD 775.73 Billion by 2034. September 18 2024. Available at: https://www.globenewswire.com/news-release/2024/09/18/2948393/0/en/Data-Center-Market-Size-Expected-to-Reach-USD-775-73-Billion-by-2034.html
[5] Monthly pricing for 250-500kW capacity
[6] CBRE. North America Data Center Trends H2 2024. Available at: https://www.cbre.com/insights/reports/north-america-data-center-trends-h2-2024
[7] Vacancy rates—the percentage of total space that is currently unoccupied—are a key metric used to measure demand and space availability. A higher percentage suggests low demand, as more space is unoccupied; a smaller percentage suggests high demand, as less space is unoccupied.

Key data and legislation

Scale

5,000+ data centres

Capacity

45% of global capacity

Growth

12% year on year between 2023 and 2024

Geographic hubs

Silicon Valley, Phoenix and Northern Virginia

Relevant legislation

1

CHIPS and Science Act: authorises new funding to increase research and manufacturing of semi-conductors in the US

2

Secure and Trusted Communications Network Act: aims to prevent communications equipment or services that pose a national security risk from entering US networks

3

State-specific legislation: Virginia House Bill 2101 and Senate Bill 960 direct the State Corporation Commission (SCC) to investigate if non-data centre customers are subsidising data centre costs. If they are, the SCC will establish rules to address the imbalance by the start of 2026.[2,3]

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Investment landscape

The US has a strong investment landscape. Current hubs offer reliable infrastructure—abundant fibre (Northern Virginia), low real-estate costs (Dallas), and innovation ecosystems (Silicon Valley).[8,9] **The National Science Foundation and Department of Energy fund national strategies to drive innovation in quantum computing, artificial intelligence (AI) and clean tech.**[10,11] And, recognising the growing importance of data centres for infrastructure and job creation potential, state incentives, including property-tax abatements and income-tax credits, are increasingly common.[12,13]

[8] Neil Ford. Reuters. Rush: Data centers create US solar hotspots. February 22 2024. Available at: https://www.reuters.com/business/energy/rush-data-centers-creates-us-solar-hotspots-2024-02-22
[9] CoreSite. Top 10 U.S. Data Center Markets and Why They Are Hot. Available at: https://www.coresite.com/blog/top-10-u-s-data-center-markets-and-why-they-are-hot
[10] White House (archive). National Cybersecurity Strategy. Available at: https://bidenwhitehouse.archives.gov/oncd/national-cybersecurity-strategy/
[11] White House. Fact Sheet: President Donald J. Trump Reprioritizes Cybersecurity Efforts to Protect America. June 6 2025. Available at: https://www.whitehouse.gov/fact-sheets/2025/06/fact-sheet-president-donald-j-trump-reprioritizes-cybersecurity-efforts-to-protect-america/
[12] Jack Vaughan. Data Center Knowledge. U.S. Data Center Tax Incentives: A Special Report. May 21 2025. Available at: https://www.datacenterknowledge.com/regulations/u-s-data-center-tax-incentives-a-special-report
[13] SDIA. US tax incentives for data centers by state. Available at: https://knowledge.sdialliance.org/8d367baa340046029912b1e04cc89ec2

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Key Risks

Physical

Heavy reliance on fossil fuels (almost 60% nationally) exposes data centres to climate risks, notably heatwaves.[14] The US is one of nine countries that are most vulnerable to heatwaves, underscoring the **urgent need for robust climate adaptation strategies and resilient infrastructure design in the data centre industry.**[15]

Cybersecurity

Data centres operate in a high cyber threat environment (over 3,000 breaches reported in 2023), yet excellent preparedness (the US ranks top-tier globally).[17,18,19,20] C-suite executives must continuously **valuate and bolster cyber-resilience measures.**

Policy

Although there are no national mandates for renewable energy use, water reuse or heat recovery, **state and local governments—including California and Virginia, major data centre hubs—are pushing for legislation on renewable energy use and water reuse at data centres, as well as environmental reporting.**[16] Some states are integrating environmental permitting into zoning and construction approvals for data centres.

Geopolitical

Heavy dependence on Asian semiconductor suppliers (Taiwan, Korea) could cut up to 1% from global GDP annually if disrupted.[21] With 72% of rare-earth imports from China, risk mitigation is crucial.[22] The CHIPS and Science Act (a US$53bn investment) and Secure and Trusted Communications Network Act aim to mitigate supply-chain risks. C-suites must align strategies to these policies swiftly.[23]

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[15] Germanwatch. Climate Risk Index 2025. Available at: https://www.germanwatch.org/sites/default/files/2025-02/Climate%20Risk%20Index%202025.pdf
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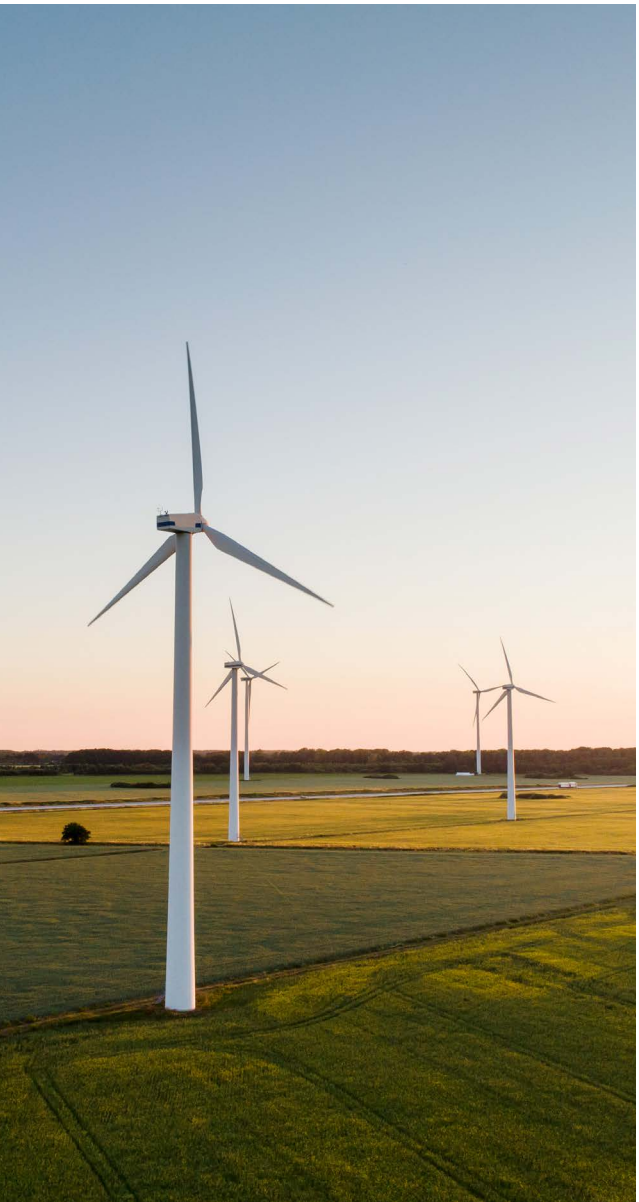
Action Points for Leadership

Diversify geographically

Exploit incentives in under-utilised regions to meet growing demand and mitigate risks from overcrowded markets.

Accelerate sustainability

Implement robust, company-wide standards to boost renewable energy adoption, water reuse and heat-recovery technologies, anticipating tightening state-level regulations.



Fortify cyber defences

Maintain proactive cybersecurity management, leveraging federal frameworks and continuous real-time threat monitoring.

Secure semiconductor supply

Actively diversify sourcing and ramp up domestic production in line with federal initiatives. Consider strategic partnerships or direct investments to safeguard supply chains.

Reduce downtime

Retrofit or design facilities to withstand extreme weather events and build future-proofing into siting and investment choices.