

Data Center Briefing

December 18, 2025

Global

Key themes:

Hyperscalers disclose \$500bn forward lease commitments tied to AI demand; Policy and regulatory pushback rising in US states (Michigan tax breaks, contract transparency); Power and grid constraints remain binding; congestion cited as macro investment drag; Large hyperscale expansion continues in Japan (AirTrunk OSK2 up to 100MW); Renewables procurement accelerates for data centres (Google-linked deals in Malaysia and India); Emerging alternatives and pilots for low/zero-emission power (hydrogen fuel cell lease trial); Connectivity and resilience upgrades via subsea cable investment and stricter protection laws

Market overview (Global | 18 Dec 2025)

AI-driven compute demand continues to pull capital into both capacity and contracts, with cloud majors disclosing very large forward lease pipelines and developers pursuing multi-100MW hyperscale builds where power can be secured. At the same time, policy scrutiny is rising around incentives, transparency of utility contracts, and local environmental impacts (water, noise), while grid congestion and interconnection bottlenecks remain a binding constraint in multiple markets.

Key signals today include: (i) scale of hyperscaler lease obligations ([Tech giants commit \\$500 billion to data center leases](#)); (ii) renewed focus on power sourcing and renewables matching (e.g., Google PPAs and supply agreements in Asia); and (iii) heightened regulatory and community pushback in US states and municipalities.

Risks and watchpoints

Downside risks / bottlenecks (near-term)

- **Grid connection and congestion risk:** Broader electricity system stress is increasingly framed as a macro drag on investment, with a cited ~12,000 businesses waiting for connections in the Netherlands and a warning that grid stress could reduce capital outlays by ~1.5-2% ([Grid stress threatens AI, industry and national economic growth](#)).
- **Policy whiplash on incentives:** A bipartisan package in Michigan aims to repeal sales and use tax exemptions that have supported at least 14 hyperscale proposals, explicitly including a proposed **\$7bn, 1.4GW** project ([Michigan lawmakers seek repeal of data center tax breaks](#)).
- **Utility contracting and permitting uncertainty:** Michigan regulators face imminent decisions around power contracting and permitting for the Saline Township site; developers reportedly can terminate if power isn't secured by **Dec. 19** ([Michigan lawmakers seek repeal of data center tax breaks](#)). Separately, the state AG is pressing for contested hearings and transparency for DTE contracts tied to Oracle/OpenAI ([Michigan AG demands review of DTE Saline data center contracts](#)).
- **Local opposition / entitlement risk:** Community concerns remain acute (noise, health, tax impacts). A 565,000 sq ft project advanced only after council members cited lawsuit risk as a factor ([Springdale council approves data center at former coal plant site](#)).
- **Valuation and lease-duration concerns:** A market participant cautioned that long-term AI-linked leases and valuations may place the sector on “shaky financial ground” ([Flexblue Acquires Holi Services; Billionaire Warns on Data Centers](#)).

Upside risks / positive catalysts

- **Renewables procurement underpinning new capacity:** Google-linked renewable supply contracts in Asia (Malaysia, India) support incremental clean power buildout and may de-risk siting for new compute ([TotalEnergies signs 21-year PPA with Google for Malaysia; ReNew and Google to develop 150 MW Rajasthan solar project](#)).
- **New hyperscale investment pipeline in Japan:** Additional large-scale projects with disclosed MW and platform investment targets continue to expand addressable deployment for debt/equity ([AirTrunk to build second hyperscale data centre in Osaka](#)).
- **Resilience and connectivity upgrades:** Subsea cable investment and cable-protection regulation reduce single-point-of-failure risk for data traffic (important for edge and AI distribution) ([Australia funds \\$120M PNG subsea cable led by Google; Taiwan tightens laws to protect critical undersea cables](#)).

Key deals and projects

Data centre developments and siting

- **Japan (Osaka):** AirTrunk will build **OSK2** in East Osaka with up to **100MW IT capacity**, alongside **OSK1 (20MW)**. AirTrunk states its Japan platform will reach **~530MW**, with planned investment across Japan and other markets of **~US\$8bn**, and a broader platform exceeding **2GW of secured-power capacity** ([AirTrunk to build second hyperscale data centre in Osaka](#)).
- **US (Arizona):** Pima County signed a binding MOA with Beale Infrastructure for the **Houghton Data Center** including enforceable commitments on **water, energy, 100% renewable matching**, and economics. Disclosed figures include **\$3.6bn capex**, **~\$21m** site payment, projected **\$58.8m** county tax revenue over 10 years, and **180+** permanent jobs plus **3,000+** construction jobs; the MOA includes an **Energy Supply Agreement** for phase 1 ([Pima County and Beale sign MOA for Houghton Data Center](#)).
- **US (Pennsylvania):** Springdale Borough Council approved (5-2) a conditional use permit for Allegheny DC Property Company to build a **565,000 sq ft** data center at the former **Cheswick Generating Station** coal plant site amid resident opposition and cited litigation risk ([Springdale council approves data center at former coal plant site](#)).
- **US (Louisiana):** Hut 8 announced a **multibillion-dollar partnership** with Anthropic and Fluidstack tied to its planned **River Bend** data center in West Feliciana Parish; exact value/timelines not disclosed in the source ([Hut 8 secures multibillion-dollar partnership for River Bend data center](#)).

Commercial demand, contracting, and platform positioning

- **Hyperscaler contracting scale:** Oracle, Microsoft, Meta and peers disclosed an aggregate **\$500bn** in future data center lease commitments tied to AI demand. Oracle reported **\$248bn** total lease commitments (including **\$150bn** added in one quarter); Meta disclosed **\$58bn** in uncommenced leases; Google reported **\$42.6bn** in future leases ([Tech giants commit \\$500 billion to data center leases](#)).
- **“Neocloud” GPU infrastructure:** A new wave of AI-focused GPU platforms is highlighted as offering lower-cost, higher-availability compute with flexible contracting; one example promotes an “NVIDIA-backed AI cloud” paired with “top-tier data centers” ([Neocloud platforms emerge to supply affordable AI GPU compute](#)).
- **Enterprise hybrid enablement:** Dell and Equinix are partnering to run Dell **PowerStore** and **PowerFlex** within Equinix Cloud-Connected Data Centers, targeting low-latency and compliant hybrid deployments (DR, sovereignty, edge, AI/analytics) and a path to Dell Private Cloud ([Dell and Equinix enable cloud-adjacent hybrid data infrastructure](#)).

Power, grid, and interconnection highlights

Renewables procurement and supply agreements (Google-linked)

- **Malaysia:** TotalEnergies signed a **21-year** agreement to deliver **1 TWh** of renewable energy to Google’s Malaysian data centres, sourced from the **Citra Energies** solar plant. Contract effective **Q1 2026**; plant construction to start **early 2026**. This is described as the second such deal following a November agreement for Google’s Ohio data centres ([TotalEnergies signs 21-year PPA with Google for Malaysia](#)).
- **India (Rajasthan):** ReNew signed a long-term agreement with Google to develop a **150MW** solar project in Rajasthan, due to commission in **2026**, expected to produce **~425,000 MWh/year**; ReNew’s C&I portfolio is cited at **2.7GW** ([ReNew and Google to develop 150 MW Rajasthan solar project](#)).

Grid capacity constraints and system resilience

- **Europe (Netherlands):** Grid congestion is presented as a limiting factor for industrial expansion (example: ASML’s Eindhoven campus contingent on securing a connection), and the article frames AI data centres among key demand drivers alongside EVs/electrification ([Grid stress threatens AI, industry and national economic growth](#)).
- **Fuel cells for data center power validation:** PowerCell will **lease two PS190** hydrogen fuel cell systems to a US-based data center provider for **6-12 months** starting **Q1 2026**, integrated with a Distributed Master Controller, to validate performance in a “zero-emission” data-center power application ([PowerCell to lease fuel cell systems to US data center](#)).
- **UK generation build:** The UK granted development consent for the **Five Estuaries Offshore Wind Farm** to generate **300+MW** with related offshore/onshore grid infrastructure into the National Grid ([UK approves Five Estuaries offshore wind farm project](#)).

Policy, regulation, and public funding

US: incentives, contracting scrutiny, and local governance

- **Michigan:**
 - Legislation introduced to repeal data center sales and use tax exemptions; the debate is tied to at least **14** hyperscale proposals including a proposed **\$7bn, 1.4GW** project and an imminent regulator decision on a **19-year** power contract (developers may terminate if power not secured by **Dec. 19**) ([Michigan lawmakers seek repeal of data center tax breaks](#)).
 - The Michigan AG publicly demanded a contested hearing and transparency for DTE contracts associated with Oracle/OpenAI; regulators (MPSC and EGLE) scheduled to consider filings and a wetland permit on **Dec. 18, 2025** ([Michigan AG demands review of DTE Saline data center contracts](#)).
- **Minnesota:** An advocacy group highlighted **6,080MW** of new renewables and storage secured and referenced a “strong data center law,” alongside

broader policy wins and 2026 priorities targeting **100% clean electricity by 2040** ([Fresh Energy highlights 2025 Minnesota clean energy progress](#)).

Connectivity and critical infrastructure protection

- **Taiwan:** Legislative amendments across four laws strengthen protection of undersea cables with stricter vessel identification/logbooks, higher penalties, and confiscation powers; fines range from **NT\$30,000 to NT\$10m**, with potential imprisonment and vessel confiscation for non-compliance or damage ([Taiwan tightens laws to protect critical undersea cables](#)).
- **Australia / PNG:** Australia will fund a **\$120m** subsea cable project to Papua New Guinea, with Google leading rollout under the **Pukpuk Treaty**; build includes two cables (north and south PNG) and a third to **Bougainville** for resilience and underserved connectivity ([Australia funds \\$120M PNG subsea cable led by Google](#)).

Public R&D/innovation funding adjacent to data centres

- **New York (Long Island):** NY State and Stony Brook are investing **\$300m** to convert telecom fiber into a quantum internet testbed, including a new **14,000 m²** Quantum Research and Innovation Hub and the “first data centre for entangled-photon management” ([New York funds Stony Brook quantum internet testbed](#)).

What to watch (next 1-4 weeks)

- Michigan regulator decisions and process outcomes around DTE contracting/permitting and the proposed **\$7bn** Saline Township project timeline risk ([Michigan lawmakers seek repeal of data center tax breaks; Michigan AG demands review of DTE Saline data center contracts](#)).
- Follow-through on disclosed hyperscaler lease commitments and whether capacity delivery keeps pace with the **\$500bn** forward pipeline ([Tech giants commit \\$500 billion to data center leases](#)).
- Execution milestones on Google-linked renewables supply (Malaysia contract start **Q1 2026**, construction **early 2026**; Rajasthan commissioning **2026**) ([TotalEnergies signs 21-year PPA with Google for Malaysia; ReNew and Google to develop 150 MW Rajasthan solar project](#)).
- AirTrunk OSK2 build progress and implications for Japan’s secured-power hyperscale pipeline ([AirTrunk to build second hyperscale data centre in Osaka](#)).
- Pace of community/political pushback at municipal level, particularly where approvals hinge on litigation risk (Springdale/Cheswick site) ([Springdale council approves data center at former coal plant site](#)).
- Subsea cable implementation and enforcement: Australia/PNG rollout and Taiwan’s new compliance regime for cable protection ([Australia funds \\$120M PNG subsea cable led by Google; Taiwan tightens laws to protect critical undersea cables](#)).

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