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Data Center Briefing

January 21, 2026

Global

Key themes:
Moody's: $3T global data centre capex outlook; power constraints flagged; Google backs CO2 batteries for long-duration clean backup power; India: AM Group MoU for 1 GW AI compute hub (~$25bn) with 2028/2030 milestones; Capital flows: SOFAZ may commit up to $1.5bn to GIP/BlackRock-linked infrastructure funds; Connectivity scale: Verizon closes $20bn Frontier deal adding ~9m fiber passings; AI supply-chain bottleneck: DRAM shortage and multi-quarter price inflation into 2027; AI cluster networking: 800G Ethernet validation for Intel Gaudi 3; NVLink Fusion adoption; Execution risk: construction labor shortages driving postponements/cancellations; Policy/reg: US storage policy focus (FEOC, PJM/FERC); Malaysia RMiT compliance shaping cloud localization

Global data centres, power & digital infrastructure briefing (UTC 2026-01-21)

Top news (what matters most today)

- **Scale of the build-out is getting clearer:** Moody's projects $3 trillion investment in global data centers over the next five years and expects global data centre electricity use to reach **~600 TWh in 2026**. It flags power constraints, hyperscaler concentration risk, rising costs, and a potential AI investment bubble.
- **New approach to clean backup power for major campuses:** Google commissions CO2 batteries for data center backup power with Energy Dome (and made an equity investment). The reference plant in Ottana, Sardinia stores **2,000 tons of CO2** and can deliver **200 MWh (20 MW over 10 hours)**.
- **Very large AI compute project announced in India:** AM Group Announces 1 GW AI Compute Hub in India via an MoU with Invest UP (Uttar Pradesh) for a phased **1 GW** High Performance Compute Hub in **Greater**

Noida, targeting **~USD 25bn** investment; first capacity **by 2028**, full build **by 2030**.

Key deals & capital moves

Middle East / Caucasus

- **Potential new LP capital into infra funds + joint investments:**Azerbaijan signs Memorandum with BlackRock and GIP in Davos. Under the MoI, **SOFAZ may commit up to $1.5bn** over **3–4 years** into **GIP-managed infrastructure funds and joint investments**, with a stated project set that includes **data centres, regional cloud and AI infrastructure**, and airports.

North America

- **Fiber scale-up (network edge for data centres):**Verizon says software caused outage, closes Frontier acquisition. Verizon completed its **$20bn** acquisition of Frontier, adding **~9m fiber passings** to reach **~30m fiber locations**.

Corporate/market backdrop (M&A)

- **M&A climate and DC build-out as a driver (time-limited):**M&A Predictions and Guidance for 2026 Dealmakers and Lawyers highlights changing antitrust/regulatory scrutiny and frames the **data center build-out** as a major (but not permanent) M&A catalyst.

Major data centre / compute projects and demand signals

South Asia (India)

- **Hyperscale AI compute hub announcement:**AM Group Announces 1 GW AI Compute Hub in India
  - Location: **Greater Noida (Uttar Pradesh)**
  - Scale/timing: **1 GW** total; **first capacity by 2028**, **full by 2030**
  - Energy claim: **24/7 carbon-free energy**
  - Tech: **~500,000 high-performance chipsets** (as stated)
- **Government-to-government demand enablers (energy + AI cooperation):**India, UAE set $200 billion annual trade target by 2032 includes a long-term **0.5 million metric tonnes/year LNG** supply agreement and stated cooperation on **AI/supercomputing** and **UAE investment in data centre capacity**.

Global (AI demand and operator implications)

- **Compute + financial scale signal from a key AI buyer:**OpenAI reports $20B annualised revenue, targets 2027 IPO

  - Reported **>$20bn annualised revenue (2025)**
  - Compute capacity rising to **1.9 GW**
  - Mentions an October 2025 recapitalisation and a definitive agreement with Microsoft (**~27% ownership**, exclusive IP rights through **2032**)
- **Design/retrofit pressure from AI densities:**AI-driven surge reshapes data center design and operations cites **high-density racks up to 130 kW**, and notes **one-third of US facilities** are **over a decade old**, pushing modular/adaptive designs and more advanced cooling and energy management.

Power, storage and grid/interconnection highlights

Long-duration storage for resiliency / backup

- **CO2 "battery" as an alternative to Li-ion at campus scale:**Google commissions CO2 batteries for data center backup power
  - Energy Dome's Ottana facility: **200 MWh** (20 MW x 10 hours), **2,000 tons CO2**
  - Energy Dome expectation: **~30% cheaper than lithium-ion** (as stated)
  - Also notes: Alliant Energy approval to build a CO2 battery serving **18,000 homes** in Wisconsin

Policy-linked grid/storage issues (US)

- **Storage policy priorities that matter for DC load growth:**Vaughn Morrison outlines 2026 priorities for energy storage policy points to 2026 focus areas including **onshoring, cybersecurity, fire safety**, expected **FEOC guidance** from US Treasury, and potential **PJM queue reform** and **FERC directives**.

India power adequacy narrative (RE-RTC)

- **Round-the-clock renewables positioning for fast capacity build:**States must pursue RE-RTC to power India's growth argues RE-plus-storage can be built in **2–3 years** vs **6–7 years** for coal, citing competitive bids with storage tariffs of **₹2.1–₹2.8/unit** and noting **>80% BESS cost** declines.
- **Renewables developer view tied to AI-driven load growth:**ReNew CEO sees massive India renewables demand from AI outlines "smart and measured" expansion across storage/manufacturing/green hydrogen and data centres, citing India targets (**1,000 GW by 2040**, **1,800 GW by 2047**), current **150 GW**, and **~50 GW** added last year.

Networks, hardware and supply chain (capacity constraints and performance)

Memory supply crunch risk (AI build-out bottleneck)

- **Shortage and pricing pressure:**AI data centers drive historic memory shortage into 2027 describes what analysts call the worst DRAM shortage in history, expecting price increases to persist into **2027**; TrendForce forecasts DRAM prices **+50% to +55% this quarter vs Q4 2025**.
- **Downstream knock-on effects:**Data centre AI boom sparks DRAM shortage threatening auto production cites UBS noting DRAM price increases of **>100%**, with risk to global vehicle production starting **Q2** as memory makers prioritize data centre customers.

Data centre networking for AI clusters

- **800G Ethernet fabric validation for Gaudi:**Cisco integrates Nexus 9000 switches with Intel Gaudi 3
    - Certified for Intel Gaudi 3 servers (each server: **8 Gaudi 3 accelerators**)
    - Uses **800 GbE RoCEv2** back-end networks; Nexus 9364E-SG2 supports up to **64 x 800GbE**
- **CPU-to-GPU interconnect ecosystem shift:**SiFive adopts Nvidia NVLink Fusion for AI data centers to connect **RISC-V CPUs** to **Nvidia GPUs** over a high-bandwidth interconnect.

Operations productivity / managed infrastructure

- **Network automation and incident reduction:**Intel scales network with authoritative source-of-truth automation model reports 13 engineers managed **5,500 devices** in 2025 (vs 20 engineers/~3,000 devices in 2019) and reduced major incidents to **zero** in the chip design DC and **one** in the enterprise DC over four years.
- **Managed IaaS migration with cost claim:**Spence Software moves S2Web to 11:11 Systems, halves IT costs reports **50% IT cost reduction** and improved performance/support; notes Canadian data sovereignty needs.
- **Third-party support model replacing OEM timelines:**Park Place expands Day 1 support for retailer’s infrastructure claims OEM resolution times reduced from **10–30 days** to **3–5 days**, eliminating **$2–3m** in annual downtime costs and enabling onboarding of **5,000–10,000** new systems annually.

Policy / regulation and public procurement

Europe

- **Public-sector ICT procurement mechanism (Slovakia):**Slovakia buyer opens dynamic procurement for IT equipment. The Slovak Office for Public Procurement established a Dynamic Purchasing System (DNS) for ICT/computing equipment (estimated **€796,489.54** ex VAT). A contract under LOT-0001 was awarded to **Invidia Solutions, a.s.** with value **€3,355.00** (concluded **19/12/2025**).

Southeast Asia

- **Compliance-driven localized cloud deployment (Malaysia):**Alibaba Cloud partners with Instapay to boost Malaysia fintech explicitly references ensuring compliance with Malaysia's **RMiT** regulation while using localized cloud infrastructure/services.

Construction and delivery risk

- **Labor constraints affecting delivery schedules:**Construction firms face labor shortages despite data center boom reports **82%** of firms struggle to fill hourly craft roles and **80%** struggle on salaried roles; **~60%** report postponed/canceled projects, with immigration enforcement and tariffs cited as disruptive.

2-line wrap:

Material risks are concentrating around power availability, delivery capacity (labor), and hardware supply chains as AI demand scales. At the same time, capital formation and new backup-power technologies are broadening the set of investable pathways beyond traditional UPS/genset assumptions.

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