

# Data Center Briefing

January 29, 2026

Global

## Key themes:

Indonesia hyperscale: \$4.5bn 500MW (to 1GW) campus; UK AI strategy: supercomputer and £1bn AI resource expansion; Networking supply chain tightness: Meta \$6bn Corning fiber deal; HVDC adoption: STT GDC live testbed at  $\geq 325$ kW loads; Firm power pipeline: geothermal financing + SMR roadmap; Sustainability credentials: LEED Gold AI-ready Montreal facility; Solar-powered DC development: Dubai Green Data Centre phase 2; Permitting/social risk for on-site generation: Ridgeline plant opposition; Electrical equipment capital markets: Forgent \$1.6bn IPO filing

## Global data centres briefing (UTC 2026-01-29)

### Top news (3)

- **Indonesia hyperscale buildout:** [Digital Edge to build \\$4.5bn 500MW AI-ready CGK Campus](#) in Bekasi, Indonesia (scalable to **1GW**). Phase 1: **three buildings**, first delivery **Q4 2026**, then **Q1/Q2 2027**. Targets **PUE 1.25**, **direct-to-chip liquid cooling**, and **renewable integration**.
- **UK public AI infrastructure funding:** [UK Government unveils expanded AI strategy and investment commitments](#) including **up to £750m** for a national supercomputer, a **£1bn-backed** expansion of the AI Research Resource, and a **£500m** Sovereign AI Unit (plus workforce upskilling and new AI Growth Zone funding).
- **Supply chain lock-in for AI networking:** [Meta signs \\$6B fiber deal with Corning over AI networking](#), a **\$6bn** multi-year agreement for optical fiber/cable/connectivity solutions to support US AI data centre buildouts—highlighting fiber capacity and network architecture as constraints alongside power and GPUs.

## Key deals & projects (clustered by region)

### Asia-Pacific

- **Indonesia (hyperscale campus):**[Digital Edge \\$4.5bn 500MW \(to 1GW\) CGK Campus](#) in Bekasi.
  - Scale: **500MW**, expandable to **1GW**.
  - Delivery: first building **Q4 2026**; next in **Q1/Q2 2027**.
  - Design: **direct-to-chip liquid cooling**; **PUE 1.25** target.
- **Thailand (cloud region + capex):**[Google Cloud opens Bangkok region with \\$1 billion Thailand investment](#).
  - New Bangkok region with **three zones** to support **data residency** and access to Google AI services.
  - Google-cited economic research: **THB 1.4tn (USD \$41bn)** value over five years; **~130,000 jobs/year** supported.
  - Training: ChaiyoGCP targeting **125,000 labs by H1 2026**.
- **Singapore (power architecture testbed):**[STT GDC launches FutureGrid HVDC AI infrastructure testbed](#) at **NTU Singapore's EPGC** with **LITEON**, supported by **ERI@N** and **Amperesand**.
  - Live HVDC-powered AI infrastructure testbed validating HVDC performance at **≥325kW** power loads.
  - STT GDC plans to deploy/scale HVDC and **Amperesand SST** technology across future Singapore and global data centers.
- **India (large-scale tech real estate/infra intent):**[Tata Group to invest \\$11 billion in Innovation City near Navi Mumbai](#), focused on **AI, data centres, semiconductors**, and emerging mobility, near the upcoming airport.
- **APAC (edge-to-cloud inference partnership):**[Blaize and Nokia sign MOU for hybrid AI inference solutions](#) (non-binding) to integrate Blaize's hybrid AI inference platform with Nokia networking/automation for edge-to-cloud deployments.

## North America

- **Canada (sustainability-certified capacity):**[Cologix's MTL8 Montreal Data Center Achieves LEED Gold](#).
  - Facility: **206,000 sq ft** at Technoparc Montréal; "AI-ready, high-density Scalelogix".
  - Power: **>99% renewable** Hydro-Québec hydropower.
  - Efficiency: annualized **PUE below 1.3**.
  - Site measures: preserved **80+ trees**, planted **500+** indigenous trees, maintained **>97%** vegetated green space; closed-loop refrigerant, greywater reuse, rainwater recovery.
- **US (interconnection economics):**[Omaha IX enables enterprise peering to lower egress costs](#) (1623 Farnam).

- Positioning: regional IX for enterprises to peer directly to content/cloud-adjacent networks.
- Connectivity: physical or virtual cross-connects with **BGP peering**, leveraging access to **60+ carriers**.

## Europe / Middle East

- **UAE (solar-powered data centre build):**[DEWA approves second phase of Dubai Green Data Centre](#) in Warsan (Moro Hub / Digital DEWA).
  - Facility: ~**66,000 sq metres**; planned capacity **exceeding 100MW**.
  - Power: planned to operate on **solar power**.
  - Timeline: phase one commissioning planned **H2 2026**.
- **France (market signal):**[BrightHeart AI boosts prenatal ultrasound detection to 90%](#) also reports **\$69B of foreign investment into French data centres in 2025** (newsletter claim).

## Africa

- **Pan-Africa fibre backbone virtualisation:**[Cassava and AXON launch Africa Operator-as-a-Service AI platform](#).
  - Scope: co-develop/deploy/manage an end-to-end **Operator-as-a-Service** platform across Cassava's **110,000+ km** fibre backbone.
  - Tech: AXON **AI-ready digital twin** to enable near real-time network provisioning and "AI-ready data centre integration".

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## Power, generation, storage & grid constraints

### "Power is the bottleneck" narrative—now backed by financing and new supply concepts

- **Grid and equipment lead-times:**[AI's Rapid Growth Makes Power the Central Bottleneck](#) argues electricity (not chips) is the limiting factor; cites data centers at **3-4% of US electricity today**, projected **11-12% by 2030**, and multi-year lead times for grid hardware.
- **Next-generation geothermal financing step-up:**[Financing and growth accelerate for next-generation geothermal energy](#) (IEA).
  - 2025 financing: ~**USD 2.2bn** for next-gen geothermal.
  - Funding mix: public grants ~**9%** of next-gen funding.
  - Referenced data-centre-linked offtake: Google-NV Energy PPA for Fervo **115MW**; Meta commitment **150MW** from Sage starting **2027**.
- **Company financing (geothermal as DC baseload concept):**[Rodatherm advances closed-loop geothermal for data centers and communities](#).
  - Financing: **oversubscribed \$38m Series A**.
  - Pilot: closed-loop, refrigerant-based system in **Beaver and Millard counties, Utah**.

- Claim: “water-free” system delivering ~**50% more power** than water-based systems (company assertion).
- **US storage for resilience (Texas):**[ERCOT’s 15GW battery fleet vital for winter grid resilience](#) notes >**15GW** large-scale battery fleet in an energy-only market, but requires technical performance management to deliver during extreme events.
- **Potential permitting/social risk (on-site generation):**[Proposed Ridgeline power plant may cause \\$35M health damages](#).
  - Project: proposed gas- and diesel-fired plant plus data center complex (Fundamental Data, LLC).
  - Opposition analysis: estimates **\$19-\$35m annual** health-related damages; WVDEP granted an air permit in **Aug 2025** despite declining dispersion modeling (per article).

## Longer-dated “firm power” options

- **SMRs / advanced nuclear roadmap:**[EPRI roadmap champions SMRs for data center power](#).
  - Target: >**300GW** advanced nuclear by **2050**.
  - Expected timing: early **2030s** deployments tied to data centers if licensing, HALEU fuel scaling, modular fabrication, and offtake milestones are met.

## Policy & regulation

- **UK (public capex + skills):**[UK Government expanded AI strategy](#) includes: **£750m** supercomputer, **£1bn-backed** AI Research Resource expansion, **£500m** Sovereign AI Unit, plus a target to upskill **10 million workers by 2030**.
- **Southeast Asia (decarbonisation commitments implying grid reform needs):**[Southeast Asia’s Clean Energy Push for Economic Competitiveness](#) cites updated pledges (Thailand net-zero **2050**; Indonesia carbon neutrality **2060 or earlier**) and argues delivery requires grid upgrades, market reforms, renewables and storage buildout.
- **EU data compliance shaping industrial/edge architectures:**[Industrial data operations: moving IoT from connectivity to context](#) references compliance needs with the **EU Data Act** and **GDPR**, and promotes an “edge-cloud mesh” approach.

## Data centre hardware, cooling, and supply chain signals

- **High-density air cooling positioning (GPU racks):**[Motivair ChilledDoor enables air cooling for NVIDIA GPUs](#) markets air cooling for NVIDIA H100/H200 racks.

- Claims: stabilizes inlet temperatures; “removes **100%** of server heat” (vendor claim).
- Stated capacity: up to **75 kW per rack**; notes air-cooling sensitivity around **25-30 kW per rack**.
- **Thermal management supply-chain positioning (Europe):**[Boyd promotes thermal solutions for Europe’s AI infrastructure](#) emphasizes energy-efficient liquid-cooling, regional manufacturing, regulatory compliance, and supply chain resilience.
- **Electrical equipment capital markets:**[Forgent Power Solutions files \\$1.6B IPO for data center equipment](#).
  - Filing: NYSE IPO to raise **\$1.6bn** at **\$8.8bn** valuation; expected listing **4 Feb 2026**.
  - Business: engineered electrical distribution equipment via MGM Transformers, PwrQ, States Manufacturing, VanTran.
- **Hyperscaler silicon deployment:**[Microsoft unveils Maia 200 AI accelerator](#).
  - Chip: TSMC **3nm**, **>140B** transistors, **216GB HBM3e**, **750W** TDP, **>10 petaFLOPS FP4**.
  - Deployment: begun in **U.S. Central** data centre.
  - Scale: clusters up to **6,144 accelerators** with a two-tier Ethernet design.

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## Connectivity, interconnection & standards

- **Carrier Ethernet “for AI” certification:**[Mplify launches Carrier Ethernet for AI certification, rebrands MEF](#).
  - Launch: **Q2 2026**.
  - Requirements: business validation plus AI-specific performance testing using **MEF 91** test requirements.
  - Target: inference workloads across edge and data center interconnections; positioned to monetize Carrier Ethernet infrastructure in a **\$57bn annual** market.

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## Two-line close

Power availability and “non-GPU” constraints (fiber, grid hardware, cooling architecture) are increasingly shaping timelines and capex decisions. Public funding (UK) and large private commitments (Digital Edge, Meta) continue to anchor the next wave of AI-driven infrastructure buildout.

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