

# AI Infrastructure and Energy Pressure Brief

A public-signal brief showing why AI infrastructure is becoming a continuity problem across compute, electricity, cooling, permitting, and local trust.

## Pressure signal

IEA projects global data center electricity consumption to roughly double to around 945 TWh by 2030 in its base case. Reuters has reported that AI data center growth is colliding with grid interconnection and storage constraints. The continuity issue is not simply power supply. It is synchronization between compute demand, grid readiness, local approval, capital planning, and physical delivery.

## Continuity map

Layer	Failure risk
Compute	Model demand grows faster than facility readiness
Power	Interconnection and generation timing lag build cycles
Cooling/water	Local infrastructure constraints become approval risk
Community trust	Local cost and reliability fears create opposition
Capital deployment	Money moves faster than permitting and physical infrastructure

## Source and usage note

**McKinsey, Superagency in the workplace (2025):** Reports that almost all companies invest in AI, while only 1 percent believe they are at maturity.

**PwC, 2026 Digital Trends in Operations Survey:** Reports 89 percent of operations leaders say technology investments have not fully delivered expected results and 87 percent say poor data quality has impacted digital value.

**IEA, Energy and AI (2025):** Projects global data center electricity consumption to roughly double to about 945 TWh by 2030 in its base case.

**Reuters, Battery storage firms eye AI demand (2026):** Reports grid interconnection delays and AI data center power growth as a major constraint for energy/storage deployment.

This document uses public-signal analysis and scenario-based continuity modeling. It does not claim private client access, confidential data, or inside information.