DATA CENTERS: A SUPPLY CHAIN & OPERATIONAL RISK FOR MANUFACTURING LEADERS

FERNDON CONSULTING

The cloud depends on real-world resources.
Your operations depend on both.

WHY MANUFACTURERS SHOULD PAY ATTENTION

COMPETITION FOR CRITICAL RESOURCES
Data centers consume massive amounts of power, water, and land—the same resources your facilities need.

INFRASTRUCTURE CONSTRAINTS
Grid limits, water stress, and permitting delays can restrict your ability to expand, electrify, or maintain reliable operations.

SUPPLY CHAIN DISRUPTIONS
Construction booms, material demand, and logistics congestion can increase costs and extend lead times.

POLICY & INCENTIVE RISKS
Public incentives and resource commitments to data centers can crowd out support for manufacturing and industrial growth.

LONG-TERM EXPOSURE
Communities may be locked into concessions for 10–15 years or more—tying up costs and risks to business and taxpayers.

THE SCALE OF EXPOSURE

10+ STATES
lose more than **$100 MILLION** annually in data center subsidies.
(Tarczyńska, 2025)

OHIO: $1 BILLION+
in 2025 lost tax revenue from data center exemptions.
(Davis, 2026)

211 BILLION GALLONS
of water consumed by U.S. data centers in 2023 (cooling + power generation).
(Smith et al., 2026)

4.4% TODAY → 6.7–12% BY 2028
Data centers' share of U.S. electricity consumption. (Shehabi et al., 2024)

~175–225 PERMANENT JOBS
Typical promise for a large data center—— often used to justify long-term public concessions.

THE PREDATORY DEVELOPMENT LIFECYCLE

1. **THE PROMISE**
Developers promise jobs, investment, and tax revenue.
In exchange: abatements, zoning, water, power.

2. **THE COMMITMENT**
Ground is broken. Infrastructure is built.
At this point, your leverage flips—walking away becomes costly.

3. **THE RENEGOTIATION**
Developers seek changes—often more water, more power, lower environmental standards.
Can you still say no?

4. **THE RESIDUAL RISK**
If the project fails or investors exit, the community is left with stranded assets, lost revenue, and long-term obligations.

Once committed, communities carry the downside. Investors capture the upside.

RESOURCE COMPETITION IMPACTS YOUR OPERATIONS

POWER
- Rapid load growth strains generation,
- transmission, and distribution.
- Higher energy costs
- Reliability risks

WATER
- Cooling demand strains local supplies
- Restrictions affect manufacturing processes
- Drought risk increases

SUPPLY CHAIN
- Construction booms drive up material prices
- Logistics congestion delays deliveries
- Skilled labor shortages intensify

PERMITTING & LAND
- Longer permitting timelines
- Land use conflicts
- Environmental scrutiny increases

These constraints don't just affect data centers— they affect your ability to build, produce, and compete.

A BETTER WAY: THE REGISTERED CAPITAL BOND (RCB)

If developers use projected benefits to get public concessions, they should financially back those promises up front.

RCB = PROMISED PERMANENT FTEs × PROMISED AVERAGE SALARY × STABILITY PERIOD (e.g., 10 years)

HOW IT WORKS
- Developer funds bond into a third-party escrow before concessions take effect.
- Bond is tied to jobs, taxes, water, power, and environmental commitments.
- Annual independent audits verify performance.
- If commitments are met, bond is fully returned at end of term.

DEFAULT TRIGGERS (EXAMPLES)
- Project does not open or ceases operations.
- Employment falls below 80% of promised levels.
- Failure to meet tax obligations while receiving abatements.
- Environmental commitments or water-use limits are breached.

The bond stays with the community— not a lawsuit. It turns promises into performance.

WHAT MANUFACTURING LEADERS CAN DO

ENGAGE EARLY
Participate in local planning and resource discussions. Your input matters.

UNDERSTAND EXPOSURE
Assess how local resource commitments and grid limits affect your operations and growth plans.

BUILD COALITIONS
Work with other businesses and community leaders to advocate for balanced, transparent deals.

SUPPORT STRONG SAFEGUARDS
Back policies like the Registered Capital Bond that protect long-term economic health.

PLAN FOR CONTINGENCIES
Include resource constraints and infrastructure risks in your enterprise risk management.

Scan to learn more about protecting community assets and managing risk.
ferndon.com

RISK TODAY. RESILIENCE TOMORROW.

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SOURCES
Tarczyńska, 2025; Davis, 2026; Smith et al., 2026; Shehabi et al., 2024; Samadi, 2025; Oaktree Capital Management, 2025; Open Markets Institute, 2026; Sheehy et al., 1997; Wei & Pu, 2024; Kennedy & Pantelias, 2018; Jensen, 2017; Martínez, 2026; Mylton, 2021; Siddik, Shehabi, & Marston, 2021.