

Data Center Cumulative Impact Resources

1. [Drained by Data - The Cumulative Impact of Data Centers on Water Resources](#)
 - a. Discussions about data-center sustainability often underestimate the true water footprint because they focus on cooling water alone. The report contends that the combination of large electricity demand, indirect water use from power generation, and geographic clustering of facilities can create substantial cumulative pressure on regional water supplies, especially in arid regions.
2. [Data centre electricity use surged in 2025, even with tightening bottlenecks driving a scramble for solutions - News - IEA](#)
 - a. AI-driven data center growth is accelerating faster than energy infrastructure can keep up, creating shortages of power, equipment, and grid capacity. While AI is becoming more energy-efficient, explosive demand is overwhelming those gains, leading governments, utilities, and technology companies to race for new energy sources and grid solutions
3. [Analyzing air pollution health, economic risks from AI data centers | Harvard T.H. Chan School of Public Health](#)
 - a. AI data centers using fossil fuels power plants to support their energy needs are causing levels of air pollution which is a burden often borne by nearby communities. A potential off-set to this would be the use renewable energy sources such as solar or wind.
4. [Communities Are Raising Noise Pollution Concerns About Data Centers | Article | EESI](#)
 - a. Communities across the United States are reporting persistent noise from cooling systems, backup generators, and on-site power plants, leading to concerns about health, quality of life, and property values.
5. [New evidence on data center employment effects | Brookings](#)
 - a. The article concludes that data centers are neither the economic miracle claimed by some advocates nor the job-free infrastructure criticized by opponents. They create real employment and wage gains, particularly when multiple hyperscale facilities cluster together and attract supporting technology businesses. However, the benefits are generally more modest than industry-promoted estimates, and policymakers should carefully weigh them against environmental, energy, water, and community impacts when evaluating new projects.