



AI Boom's 2025 Carbon Footprint Rivals That of a Major Global City

Summary

Recent research suggests that the rapid expansion of artificial intelligence in 2025 carried a significant environmental cost. Estimates indicate that AI-related activity produced emissions comparable to those of a large city, alongside heavy water usage for data center cooling. The figures focus specifically on AI workloads rather than all data center operations. As AI adoption accelerates, the environmental impact is becoming harder to ignore.

What It Means

AI systems may feel digital and lightweight, but training and running large models requires substantial computing power. Most of this power still depends on energy sources that generate emissions, while cooling large data centers places growing strain on water resources. As AI usage scales, these infrastructure demands are becoming a visible part of the technology's footprint.

For technology companies, the findings add pressure to improve efficiency and accelerate the shift toward cleaner energy sources. Environmental impact is increasingly part of public and regulatory scrutiny, especially as AI becomes more embedded in everyday products and services.

For policymakers and the wider industry, the data highlights a challenge rather than a verdict. AI growth is unlikely to slow, but its





long-term sustainability may depend on investments in greener infrastructure, more efficient models,

and transparent reporting of environmental costs.

Key Takeaways

- AI-related emissions in 2025 reached levels comparable to a large city
- Data center cooling drove significant water consumption
- The impact measured focused on AI workloads, not all computing
- Environmental concerns are becoming part of the AI conversation
- Efficiency and renewable energy are emerging priorities

Our Take (2026 outlook) * Speculative

Environmental scrutiny around AI is likely to increase in 2026, especially as usage expands further. Companies that invest early in efficiency and renewable energy may gain both regulatory and reputational advantages over time.

References

The Guardian, 2025
Patterns Journal, 2025

CryptxAI publishes simplified AI and crypto briefings.

