Report Overview

The rapid expansion of artificial intelligence has intensified the focus on the energy consumption of the data centers that power it. This report provides a comprehensive assessment of energy usage within the webscale and AI compute industry, analyzing the key operators at the heart of this transformation. Our analysis is an extension of MTN Consulting's established research into network operator energy and sustainability, built upon our proprietary webscale financial tracker which covers market data through June 2025.

Defining the Webscale Sector

The "webscale" sector comprises Internet, Software & Services companies that own and operate large (hyperscale) data centers and submarine cable networks. When we began coverage in 2017, these operators built hyperscale data centers for three primary purposes: supporting massive customer bases (e.g., Tencent's WeChat), delivering cloud services to end users (e.g., Amazon's AWS), and running internal operations and research. Over the past three years, webscale operators have increasingly built larger, more sophisticated data centers specifically for AI training and inference, what we term "AI Compute."

Scope and Limitations

This report does not cover the entire AI compute industry. Our focus is on publicly held companies with audited financial statements and transparent business models. The recent AI investment boom has produced a surge of new entrants: some renting GPU capacity (“neocloud” providers), others chasing low-cost energy or niche segments. Many of these firms lack proven business models and may not survive long. One example, CoreWeave, evolved from crypto mining into GPU rentals as AI demand exploded. NVIDIA has backed several AI data center ventures, creating a circular investment dynamic reminiscent of the dot-com era. Government-backed AI initiatives further complicate the landscape. A few significant private players, such as Elon Musk’s xAI, also fall outside this report’s scope.

Likewise, this study does not capture every data center worldwide. Important private and carrier-neutral providers supply colocation and capacity services to webscale, telecom, and enterprise clients, and many smaller facilities continue to serve specific government and corporate needs. Still, the public webscalers analyzed here account for the vast majority of global hyperscale capacity, and they are the players most likely to shape the market’s future direction.

Data and Methodology

For 20 leading webscalers, the report presents financial metrics (revenues, capex, and net PP&E) alongside energy-related indicators: total energy and electricity consumption, renewable energy share, and greenhouse gas emissions (Scopes 1, 2—both location- and market-based—and 3). Data cover 2019-2024, supplemented by derived metrics that illuminate energy use and sustainability trends across the webscale and AI compute sectors.

Compiling a consistent dataset was a challenge. Financial reporting follows clear standards; energy and environmental disclosures do not. Companies vary widely in what they report, and ESG data are not always audited. MTN Consulting reviewed dozens of sustainability reports, relying on verified data whenever possible and estimating where necessary to create comparable, credible time series. We believe this is the most objective and comprehensive review of energy and sustainability practices in the webscale and hyperscale markets available today.

A Note on Public vs. Private Companies

One caveat: our focus on publicly traded companies introduces a reporting bias. Public companies face greater public pressure and are more likely to use renewable energy and commit to aggressive GHG emissions reduction programs. The "go green" push is not universal; private companies often take shortcuts and avoid disclosure. The companies we don't track likely have weaker environmental records than these public webscalers. Private equity's recent surge into AI data centers is particularly concerning, as these firms typically avoid public disclosure and prioritize returns over environmental stewardship.