Data Center Environmental Impact

Analysis and engagement priorities

First Affirmative

01 Water Use

<1% of U.S.	230B gallons/yr	2-4x in 5 years
Of U.S. Water Consumption comes from Data Centers	Of direct + indirect U.S. water consumption	U.S. water consumption expected to quadruple from 2023 to 2028

Current Scale

U.S. data centers directly consumed an estimated 17 billion gallons of water for cooling in 2023, according to Lawrence Berkeley National Laboratory, with an estimated an additional 211 billion gallons consumed indirectly through the power grid. To put those numbers in context, the United States consumed approximately 115 Trillion gallons of water in 2015, meaning US data centers account for less than 1% of total US water consumption. Google's latest analysis showed that an average text-based AI query consumes only 5 drops of water (though this figure doesn't account for indirect water use associated with electricity generation).

Sources: United States Data Center Energy Usage Report (LBNL), Measuring the environmental impact of delivering AI at Google Scale

Regional Water Stress

While data centers account for less than 1% of total U.S. water use, national averages obscure the real problem: water impact is local. A data center doesn't draw evenly from the country's water supply — it draws from the specific river, aquifer, or municipal system where it's built. And those locations are increasingly places where water is already scarce. Roughly two-thirds of data centers built since 2022 have been sited in regions where existing demand already strains available supply. Individual facilities can consume over 25% of a local community's water.

The Ceres report "Drained by Data" (Sept. 2025) illustrates how quickly this compounds. In the Phoenix metropolitan area — already one of the most water-constrained regions in the country — water use tied to data center electricity consumption is projected to increase by 400%, with direct cooling water rising 870% as new facilities come online. Ceres found that this growth could increase total demand on already overdrawn water basins by up to 17% annually, meaning communities that are already rationing water or drawing down reserves faster than they're replenished would face meaningfully less water available for residents, agriculture, and ecosystems. During peak summer months, the strain would be even worse.

Source: Ceres, "Drained by Data"

2030 Projections

Lawrence Berkeley's 2024 report projects that direct on-site water consumption could double to quadruple by 2028 from 2023 levels. One study of Texas data centers projected water use could grow from 49 billion gallons in 2025 to 399 billion gallons by 2030. For scale, that volume would drop Lake Mead — the largest U.S. reservoir, which supplies water to 40 million people across seven states — by over 16 feet in a single year. Lake Mead has already lost 160 feet since 2000 and is currently at just 33% capacity, with mandatory water cuts already in effect for Arizona and Nevada.

Sources: United States Data Center Energy Usage Report (LBNL) HARC-University of Houston study

02 Emissions and Energy Use

2% and 5% of U.S.	2-3x by 2030	56% Fossil Fuels
Data centers account for ~2.4% of US GHG emissions and ~5% of electricity consumption.	Projected 2-3x increase in GHG emissions and electricity consumption by 2030	Fossil Fuels account for approximately 56% of US data center electricity consumption.

Current Scale and 2030 Projections

As of 2025, data centers account for 2.4% of United States GHG emissions, and between 4-5% of U.S. electricity consumption. Globally, data centers are responsible for 0.5% of GHG emissions and 1% of electricity consumption. By 2030, GHG emissions and electricity consumption are projected to increase by 2-3x.

Sources: Electric Power Research Institute, Rhodium Group, International Energy Agency

Renewable Energy Mix

As of 2024, the IEA reports that natural gas supplied over 40% of data center electricity, and coal roughly 15%. That's roughly 56% of data center power that came from fossil fuels. Renewables accounted for approximately 24% of electricity consumption, and nuclear the remaining 20%.

The renewable share is projected to grow significantly: the IEA expects renewables and nuclear combined to supply nearly 60% of data center electricity by 2030, up from roughly 40% today. However, because total data center electricity demand is projected to more than double over the same period, the absolute amount of fossil fuel generation also increases in the near term. In the U.S. specifically, the IEA projects natural gas will add over 130 TWh of new generation for data centers by 2030, while renewables add roughly 110 TWh.

Tech companies were responsible for 84% of tracked U.S. clean energy procurement from February–July 2025, and firms like Google, Microsoft, Meta, and Amazon have committed to 100% carbon-free electricity by 2030. However, most are acknowledging they are not on track, with a 2025 Google report stating its 2030 net-zero goal has become "very difficult".

Sources: International Energy Agency Google 2025 Environmental Report, S&P Global

Electricity Prices

Data center growth is driving up electricity costs, especially near data center clusters. Electricity prices are as much as 267% higher than five years ago in areas near significant data center activity. Nationally, residential electricity prices rose 11.5% in 2025 -- that’s 4x the inflation rate, with projected increases of up to 40% by 2030.

These costs compound existing inequities: a national study found that nearly half of all data centers are in census tracts with social vulnerability indicators above the national median. The NAACP has raised alarms that data centers are often sited in low-income neighborhoods and communities of color, where residents already face higher pollution exposure and are least equipped to absorb rising energy bills.

Sources: Bloomberg News, Environmental and Energy Study Institute, World Resources Institute, Tech Policy Press, NAACP

03 Our Shareholder Engagement Priorities

Resolutions, working groups, and coalition-based dialogue

The environmental dynamics outlined above directly inform our current shareholder advocacy strategy. We are pursuing engagement through shareholder resolutions and coalition-based dialogue to press for accountability on climate commitments, water stewardship, and AI governance. We are also expanding our capacity this year with an additional shareholder engagement staff member, which will allow us to lead-file resolutions with AI companies for the first time.

2025–2026 Engagement Summary

Channel	Companies	Detail
Shareholder Resolutions	Meta (filed); Tesla, Microsoft (planned); Meta (potential refile)	4 climate resolutions filed for 2025 proxy season. Meta resolution targets accountability for 223% rise in data center emissions since 2019 vs. 2030 net-zero commitment. Plans to lead-file resolutions with AI companies going forward.
Ceres Water & High-Tech Working Group	Microsoft	Direct engagement following the Ceres "Drained by Data" report playbook, focused on water stewardship, disclosure, and regional water stress accountability.
World Benchmarking Alliance Ethical AI Coalition	Apple, Adobe, Meta, Amazon, Tencent, Alibaba	Broad engagement on ethical AI governance and environmental impact. Tencent and Alibaba represent high-opportunity targets — historically under-engaged by shareholder advocates and receptive to initial outreach.

Strategic Rationale

Resolutions as Leverage: Our Meta resolution directly connects the data above — a 223% rise in data center emissions since 2019 — to the company's stated 2030 net-zero goal. The gap between commitment and trajectory creates a clear basis for shareholder accountability. We plan to extend this model to Tesla and Microsoft, and to refile with Meta if initial engagement falls short.

Water as an Emerging Front: Our participation in the Ceres Water & High-Tech Working Group positions us to push for improved water disclosure and site-level reporting — areas where the Ceres 'Drained by Data' report has established a clear evidence base and engagement playbook.

Global Reach via WBA Coalition: The Ethical AI Coalition broadens our engagement beyond U.S.-listed companies. Tencent and Alibaba represent particularly high-impact opportunities: they are under-engaged by other shareholder advocates, have shown early receptivity, and face material data center water and energy risks across water-stressed regions in Asia.

Building Capacity: The addition of a new shareholder engagement staff member this year positions us to lead-file resolutions with AI companies — expanding our influence from co-filing and coalition support to direct leadership on the issues outlined in this document.