



Sustainable Solutions for Data Centers

March 2026

The rapid buildout of data centers to meet anticipated demand for artificial intelligence puts local water resources and electricity capacity in the U.S. at a crossroad.

Electricity demand and prices are surging at a time when much of the national grid needs upgrades, and data center developers are facing long delays in procuring power. Roughly one third of data center construction is concentrated in regions already experiencing water availability issues. Against the backdrop of energy and water concerns, local opposition to building facilities is growing in communities across America.

As data centers proliferate in the U.S., it is crucial to assure that new facilities are built in ways that are fast, fair, affordable, efficient, and clean, while protecting local watersheds, community interests, residents, and local businesses. For data centers that are already built, operators should continually explore renewable energy options, load management, water and energy efficiency, and transparency.

Fortunately, strategies exist to meet these goals. If we make the right choices, society can avoid the fallout from massive, risky investments in costly, unnecessary, polluting infrastructure. Our nation's data center buildout can contribute to improvements to our energy grid, water resources, and communities, providing shared benefits for all and propelling long-term global competitiveness.

Working with our network of companies, investors, and community organizations, Ceres developed a set of proposed solutions that lays out common sense solutions designed to help data center companies, utilities, investors, and policy makers advance their shared goals for data center development.

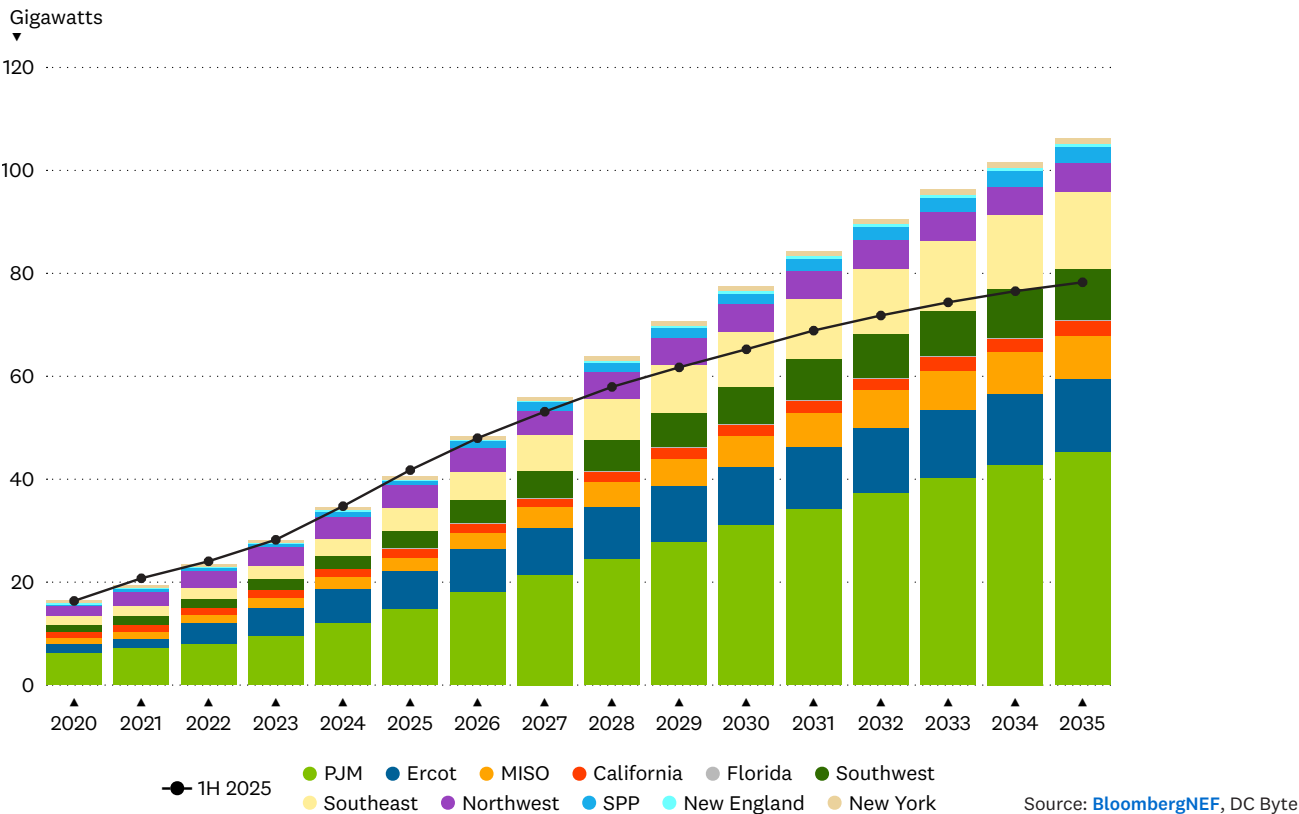
Given the economic stakes at play and growing community opposition, these proposed solutions outline how data centers can meet their operational and sustainability goals without driving up retail electricity prices, undermining grid reliability, straining water supplies, or increasing pollution. They also call for clear goals on energy sourcing, water stewardship, and community benefits, paired with full transparency.

Context

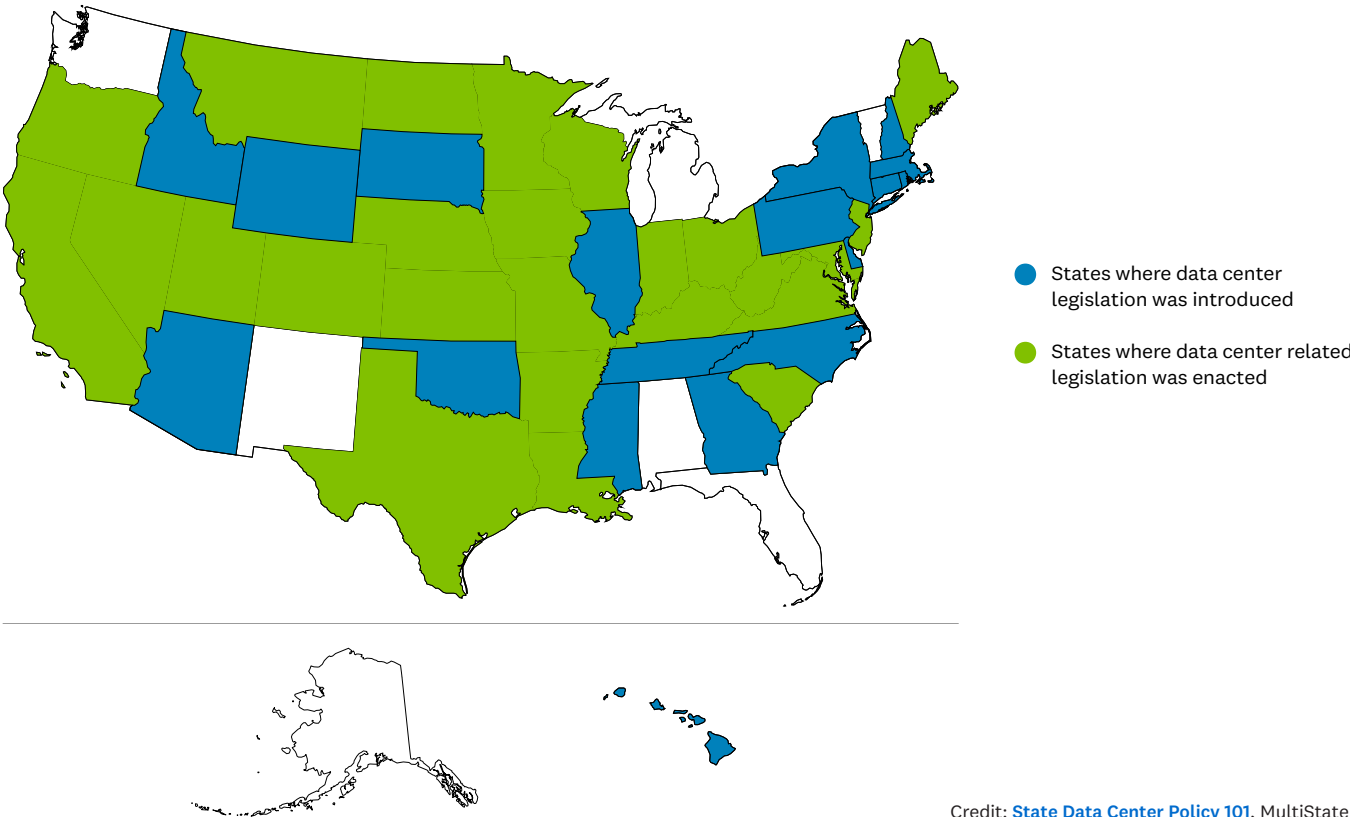
Electricity consumed by data centers is projected to grow rapidly. The U.S. Department of Energy (DOE) and Duke University both estimate that we are likely to need approximately 100 gigawatts of additional capacity on the U.S. grid by 2030. This is equivalent to 100 large nuclear plants or the peak electricity demand of the United Kingdom and France combined. However, securing this capacity does not necessarily require building large numbers of new power plants. Water use by data centers is also growing, including water used to generate electricity. But there are also cost-effective ways to dramatically reduce water use linked to data centers.

U.S. data center power demand to triple in a decade

Showing a breakdown by regional transmission grids across the U.S.

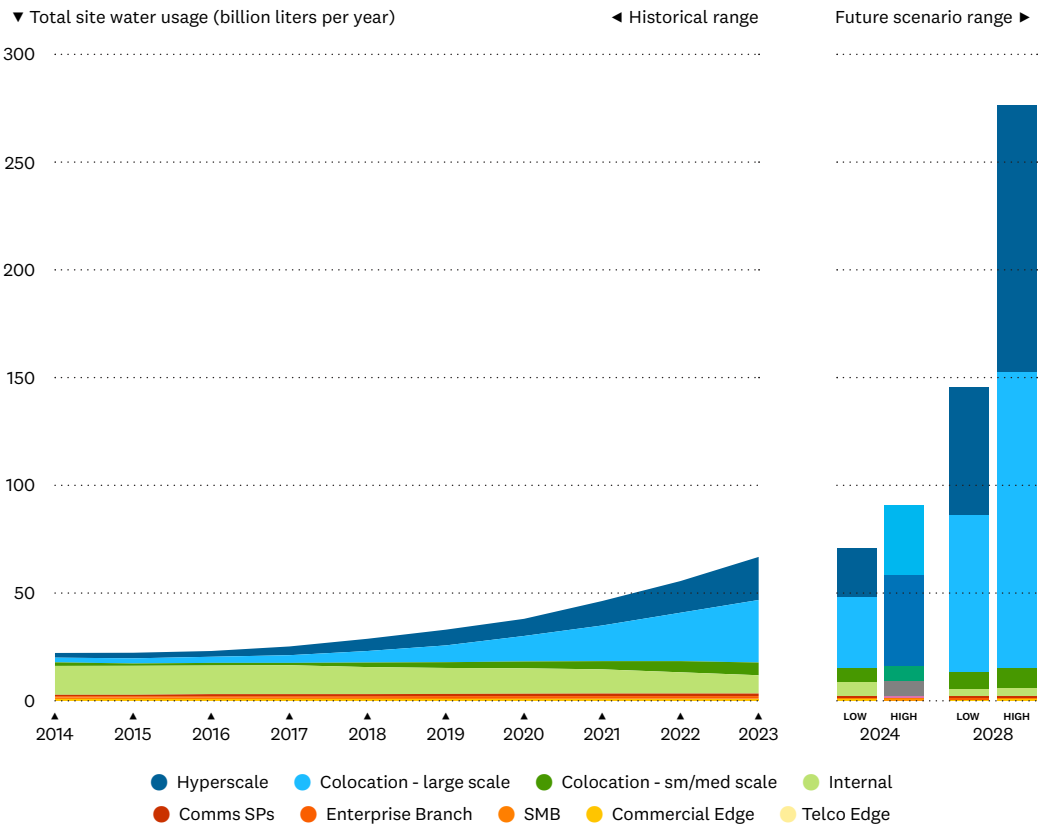
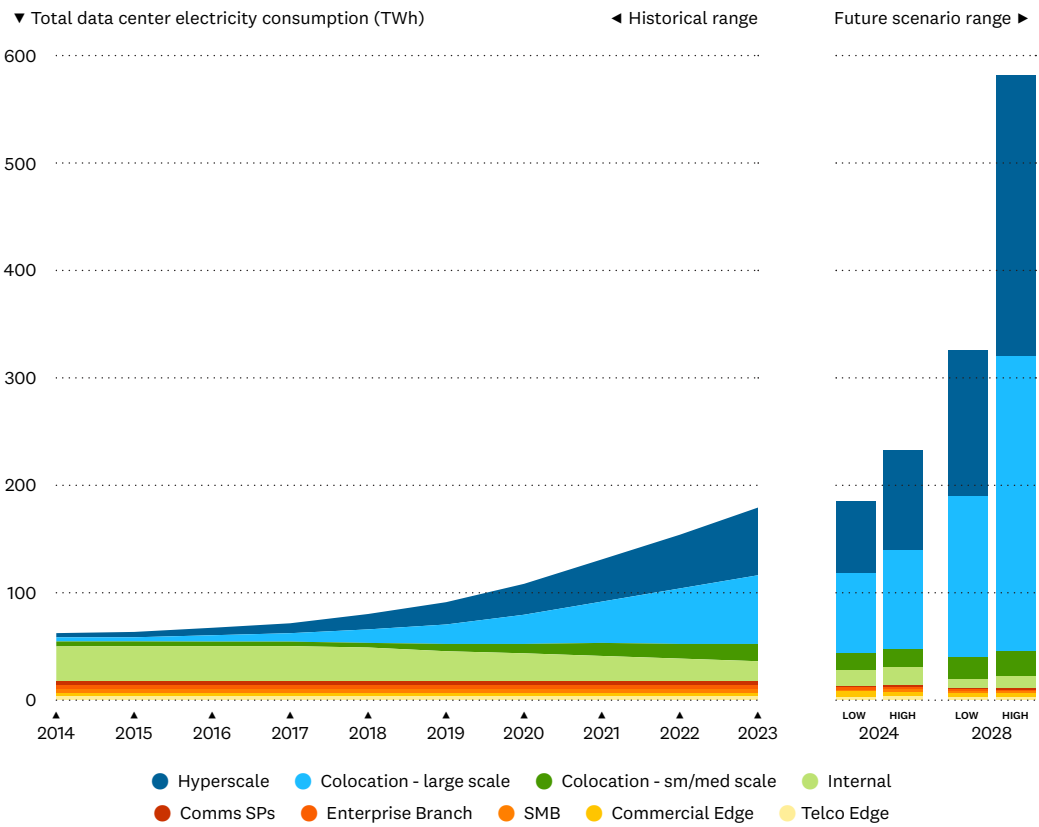


States that considered data center legislation in 2025



Credit: State Data Center Policy 101, MultiState

Electricity use and direct water consumption of the different types of data centers

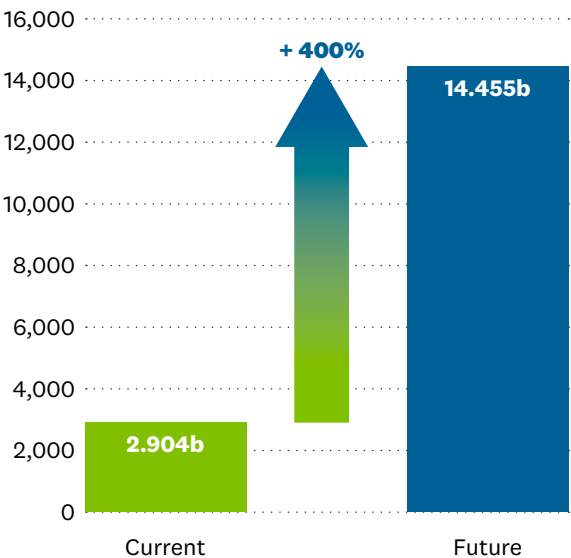


Credit: [2024 United States Data Center Energy Usage Report](#), Lawrence Berkeley National Laboratory

Ceres research: Embedded water use in purchased electricity is the largest driver of data center water use in the Phoenix region

Indirect Water Use

Currently estimated to be **2.9 billion gallons** annually and expected to rise to **14.5 billion**

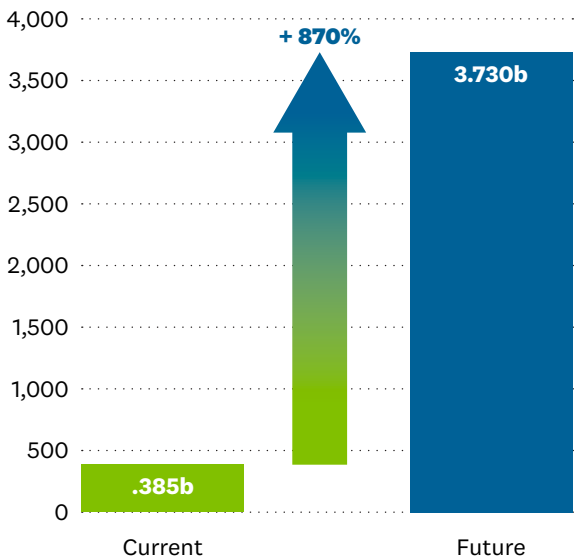


Current and future indirect data center water use in the Phoenix region (million gallons)



Direct Water Use

Currently estimated to be **385 million gallons** annually and expected to rise to **3.73 billion**



Current and future direct data center water use in the Phoenix region (million gallons)

This growing strain on energy and water resources, along with other community concerns, has resulted in an ongoing, nationwide wave of state legislative activity, as shown by map, page 3. But there remains enormous potential to enact public policies that can unlock solutions for building data centers more sustainably while distributing the costs and benefits fairly.

Solutions

The solutions we lay out are intended to be applied flexibly. For example, trading energy efficiency in favor of water efficiency may only make sense in water-stressed regions. At the same time, state laws and utility regulations may limit whether some of the solutions can be adopted. With this in mind, we include a solution on advocating for public policies that will unlock the strategies needed to meet our shared goals. Finally, data center technology is advancing so rapidly that all relevant actors need to strive for continual improvement in applying the solutions. We expect to update the best practice solutions, examples, and resources described here as appropriate.

Ceres Principles for Building and Operating Sustainable Data Centers

A. Build Right

1. Optimize site selection for clean energy, water, and community impacts
2. Use low-embodied carbon building materials and sustainable purchasing practices
3. Contribute to improved watershed health and resilience

B. Optimize Operations

4. Maximize water efficiency
5. Maximize on-site and community energy efficiency
6. Maximize the use of clean energy
7. Use demand flexibility and peak shaving
8. Deploy smart grid-enabled resources
9. Minimize the impact on local communities and ratepayers

C. Be Transparent

10. Publicly disclose key sustainability metrics and participate in public benchmarks
11. Advocate for public policies that support solutions that are fair, reliable, and clean

Solution 1

1

Optimize Site Selection for Clean Energy, Water, and Community Impacts

Best Practice

Siting considerations should include the following:

- Local air and water impacts
- Local weather minimizing cooling requirements
- Local electric supply and grid capacity
- Proximity to renewable energy
- The impact of the project on energy affordability and reliability
- [Community opposition](#), permitting issues, tax revenue, and employment
- Strong [community benefits agreements](#)

Data center companies should consider adopting a multi-criteria decision framework with board approval and community group engagement to strengthen governance of siting decisions. Binding decision constraints could include grid interconnection timelines, water availability, and early community support. Optimization criteria may include lifecycle carbon, cooling requirements, and impact on energy affordability, and use of captured methane gas (including landfill methane and food waste). Risk mitigation considerations may include diversifying siting across geographies, avoiding concentration in a single utility territory, and securing long-term water rights.

Solution 2

2

Use Low-embodied Carbon Building Materials and Sustainable Purchasing Practices

Embodied carbon in data centers refers to all GHG emissions produced to make the equipment and materials used in the building, including the structure, mechanical systems (HVAC, lighting, plumbing), and tech equipment. Embodied emissions arise from the use of materials such as steel and concrete during construction and other metals and critical minerals used for data center equipment. The semiconductors and other computer hardware will be replaced or refurbished several times during the life of the data center. The technology's embodied carbon includes emissions from mineral extraction, manufacturing, transport, installation, maintenance, and disposal, reuse, and recycling.

Embodied carbon can be a significant portion of the total emissions produced by a data center over its lifetime. In fact, for data centers powered only using renewable energy, it can account for up to 90% of total emissions, [according to construction consultant ARUP](#). (However, as of late 2025, renewables were estimated to provide only [27% of data center electricity demand](#) globally.)

Best Practice

- Integrate embodied carbon estimates directly into capital planning, supplier selection, and equipment choices.
- Optimize the design of the data center, along with the types and amounts of low-carbon construction materials needed. Include plans for IT equipment reuse and recycling.
- Use materials for innovation and clean material procurement practices for materials such as steel, concrete, aluminum, copper, and computer chips.
- Collaborate with suppliers on ensuring transparency and adopting standards such as environmental product declarations (EPDs). EPDs are standardized, third-party verifications of the environmental impacts of a product throughout its lifecycle.
- Reuse and recycle data center solid waste and computing equipment. For example, old equipment can be redeployed for less demanding workloads, resold, or recycled with data destruction protocols.
- Establish critical mineral sourcing and due diligence policies and procedures and work with suppliers and other stakeholders to improve traceability and environmental and social risk management across their critical mineral supply chains.
- Join the [iMasons Climate Accord](#), a coalition of over 250 member companies working on carbon reduction in digital infrastructure and related accounting practices.

Data center companies may be able to play an important role in helping cleaner steel and cement reach production levels that help drive down costs. This could make a meaningful contribution to global greenhouse gas emissions since steel and cement together produce roughly 16% of global emissions.

Solution 3

Contribute to Improved Watershed Health and Resilience

Data centers can collectively place significant strain on local water supplies and ecosystems, especially if they are in regions already struggling with water availability. Avoiding siting in water stressed basins and minimizing reliance on thermoelectric generation can meaningfully reduce negative impacts to local water resources.

Best Practice

- Contribute towards improved watershed health and resilience to help restore and conserve water in high-stress basins.
- Partner with local businesses, utility providers, and local governments to innovate and address shared challenges in a basin.
 - o For example, as part of its Gregory Road Data Center project in Covington, Georgia, Amazon Web Services is building a new water reuse facility that will provide water to the data center site, along with providing infrastructure to support broader water reuse in the area, helping to serve other industrial users and data centers.
 - o For example, as part of its newly published [Community-First AI Infrastructure commitment](#), Microsoft laid out a 5-point framework for its U.S. sites to minimize data center water use, invest in community water infrastructure, and advocate for public policy that helps minimize water use.
- Minimize reliance on thermoelectric generation, a step that can meaningfully reduce indirect water use.

Solution 4

4

Maximize Water Efficiency

Data centers located in water stressed regions should minimize direct water use for cooling and indirect water use for electricity production. Research published in the journal *Nature* described how a combination of siting, energy mix, and cooling strategies can **reduce water use by up to 86%** relative to high water use scenarios.

Best Practice

- Use energy sources such as solar, wind, and batteries that do not require additional water.
- Optimize data center design to improve water efficiency and reduce water consumption.
- Implement advanced cooling technologies such as chip-level cooling and liquid immersion cooling.
 - For instance, a Microsoft study found that “switching from air cooling to cold plates that cool datacenter chips more directly — a newer technology that Microsoft is deploying in its datacenters — could reduce greenhouse gas emissions and energy demand by roughly 15 percent and **water consumption by 30 to 50 percent** across the datacenters’ entire life spans. This is not just water used for cooling but also in power generation and manufacturing of components.”
- Leverage AI to maximize water efficiency, such as optimizing cooling systems, predicting demands, and detecting leaks.
- Disclose water withdrawal, consumption and discharge data, Water Usage Effectiveness (WUE), and Power Usage Effectiveness.
- Optimize WUE and PUE to minimize negative tradeoffs between increased water consumption and increased emissions.
- Further recommendations can be found in Ceres’ report [Drained By Data](#).

Solution 5

Maximize On-site and Community Energy Efficiency

Using the least amount of energy possible for the same operation reduces emissions, water use, and overall cost.

The most commonly used metric is Power Usage Effectiveness ($PUE = E_{DC} / E_{IT}$), which is the ratio of a data center's total energy used to energy used by its tech hardware. Germany has mandated a PUE of 1.2 or below for data centers that begin operating after July 1, 2026.

Best Practice

- Use energy efficient technology hardware wherever feasible. This includes using semiconductors optimized for the efficiency of each computing task. As AI service providers race to achieve profitability, energy efficiency is [becoming a key source of competitive advantage](#) and may even determine which companies have a cost structure that allows them to survive.
- Employ one of the [many software solutions](#) available to help lower power consumption.
- Use [liquid cooling](#), which directly cools computing hardware. It offers significant energy efficiency gains compared to air cooling of server racks. (Closed-loop systems consume very little water.)
- Use free cooling via cool outdoor air when available.
- Reuse excess heat in nearby buildings where possible. There is extensive information available on this from reports, including [Catching Heat: Using Waste Heat Generated from Data Centers](#).
- Minimize energy currently used to [smooth spikes in demand](#) from graphics processing units (GPUs). For example, 'dummy loads' that draw power during troughs in computing activity to keep power demand stable can waste up to 45% of electricity. Technical solutions can dramatically reduce this waste.

Community Energy Efficiency

In a report, electrification nonprofit Rewiring America laid out how tech companies could [subsidize household efficiency upgrades](#) and distributed energy resources to meet a significant portion of the data center demand growth — all at a price that is close to the cost of building gas-fired power plants.

Innovative programs like this that benefit community members could help overcome community opposition and reduce pollution and water use. Under Rewiring America's proposal, for instance, homeowners' space and water heating would be converted from traditional resistance heating to heat pumps, which are roughly 300% more efficient. These same heat pumps are also likely to improve the efficiency of homeowners' central air conditioning. An example of a data center adding distributed energy resources is described in Solution 5.

Once permitting and financing have been completed for a given data center, any committed community benefits, such as energy efficiency programs, should be implemented in parallel to the construction of the data center. Communities should not have to wait for these benefits.

Solution 6

Maximize the Use of Clean Energy

Clean energy sourcing affects water use, community acceptance, site viability, emissions, and compliance. Evaluating energy procurement holistically across water, carbon, cost, timing, and community dimensions may yield stronger outcomes in terms of speed to power, cost, emissions, and community acceptance.

Data centers should use solar, wind, geothermal, and other renewable or clean power sources, combined, as needed, with energy storage and demand response for flexibility and peak shaving. Fossil-fired generation should be avoided or minimized.

Data centers add very large new loads to their local electric grid. This can be a major source of community opposition since it may contribute to increased electricity prices and air pollution. We recommend that each data center project add new renewables and storage to the extent feasible to match its expected energy use.

If it is not possible to meet the entire energy demand for a data center using clean energy sources, companies may use certified high-quality, third-party certified, renewable energy certificates to offset their emissions. However, certificates should be used only after deploying all other renewable options.

In limited cases, new small modular reactor nuclear reactors may be considered. But new nuclear power could potentially take a decade or more to permit and build and are currently projected to be very expensive. In most cases, renewables are the quickest and least expensive clean energy sources to bring online.

Energy storage should be used to address renewable intermittency and backup power when possible. Limited low-emission natural gas fossil-fired generators should only be used to fill gaps in the cleaner sources.

Best Practice

- Bring your own new clean energy either behind the meter or in front. For example, consider contracting for new renewables distributed in communities as [Equinix did in Singapore](#).
- Match energy use 24/7 with renewables and energy storage.
- Disclose the renewable energy factor of each data center — the percentage of total energy consumption from renewable sources.
- Disclose the source and other key background if renewable energy credits are being used, so they can be determined to be measurable.

Solution 7

Use Demand Flexibility and Peak Shaving

Data centers should participate in utility demand response programs.

A report [by Duke University's](#) Nicholas Institute for Energy, Environment & Sustainability found that if data centers can reduce their demand by roughly 40 hours per year on average, the U.S. could avoid building approximately 100 GW in new generation capacity. This could potentially save \$100–150 billion in capital expenditure.

What makes this approach so feasible is that the average curtailment time (or the use of backup storage) that the report proposes is just 2.5 hours, with an average demand reduction of 50%. As an early proof of concept, Google signed [demand response agreements](#) with Tennessee Valley Authority, Indiana Michigan Power, and Omaha Public Power District. In a related development, the U.S. DOE [sent a letter](#) instructing data centers to be ready to use their backup generators to support the grid during Winter Storm Fern in January 2026.

Best Practice

- Data centers should maximize demand response programs with electric utilities, which could reduce the need for new grid infrastructure and allow for faster interconnection to the grid.
- Electric utility regulators should incentivize utilities and virtual power plants to offer demand response to data centers.

Deploy Smart Grid-enabled Resources

Utilities and data center companies should maximize the use of virtual power plants, distributed energy resources, and grid enhancing technologies to address new electricity demand.

Virtual power plants coordinate distributed energy resources to reduce peak demand and minimize the need for grid upgrades and new generation. Grid enhancing technologies and grid modernization optimize transmission and distribution capacity, potentially speeding interconnection times. All of these solutions can dramatically reduce system costs compared to traditional approaches for building new generation, transmission, and distribution.

Smart grid technologies allow utilities to meet growing electricity demand by making more efficient use of existing resources or by adding new infrastructure that is more effective than traditional technologies for transmission and distribution. And in fact, the pressures to build data centers in the U.S., combined with equipment shortages and political pressure to keep electricity prices from rising, may create the conditions that would spur the deployment of cost-effective, full-scale smart technology.

Minimize the Impact on Local Communities and Ratepayers

Data centers can impact a local community in many ways. Besides the cost of electricity and the use of water, facilities can have an impact on noise, traffic, land use, and jobs. Communities hosting these facilities deserve tangible benefits. [Comprehensive community benefit agreements](#), developed collaboratively with the community, can help address public concerns, provide transparency, and ensure that communities affected by the construction and operation of data centers receive greater long-term benefits.

For example, electricity price increases are now a hot-button issue nationally, and communities are increasingly sensitive to who bears the cost of new grid upgrades. To avoid shifting these burdens onto households and other local businesses, data center developers should pay all incremental costs associated with their projects.

Well-designed electricity tariffs for data centers would reflect this reality, incentivizing some of the solutions we describe, such as efficiency, flexibility, and demand response, along with ensuring that data centers pay a fair portion of grid upgrade costs.

A further challenge is the risk of stranded or underutilized assets. If utilities spend heavily on infrastructure to serve large new data centers, but those operators do not end up using as much electricity, the resulting costs of the infrastructure buildout would then have to be recovered from all other utility customers. This exposure could occur for several reasons:

- A start-up could run into financial trouble that impacts many projects it helped to finance and have ripple effects due to circular financing arrangements.
- The AI valuation bubble may burst, driving many companies in the AI ecosystem out of business or impairing their ability to make debt payments.
- AI business and pricing models may not develop quickly enough to service debt payments or may not cover all of the investments.
- Demand for AI may not grow as rapidly as expected, leaving data center projects with unused capacity.

Best Practice

- Data center contracts with utilities should guarantee payments to address all risks and incremental costs to other utility customers, including the risks of stranded or underutilized utility assets.
- Utility pricing for data center power should incentivize demand response during peak system demand.
- Policy makers and utilities should consider ways that data centers can help pay for efficiency programs, distributed energy resources, and virtual power plants on their local grid.

Solution 10

10

Publicly Disclose Key Sustainability Metrics and Participate in Public Benchmarks

Data center operators should disclosure common metrics, in particular around energy and water use and pollution, and take part in benchmarks.

Disclosure of key sustainability metrics for data centers is critical to different audiences for several reasons. Investors in data center operators and hyperscalers are seeking information about the potential risks they are exposed to, along with which companies are applying best practices. Some hyperscalers, for instance, are facing scrutiny related to possible backtracking on their ambitious climate goals.

As the headlines make clear, local opposition to new data centers and the [potential impact](#) that the facilities have on water resources, energy prices, and pollution is only escalating. For both investors and local communities, disclosure can reveal best practices and help data center companies improve operations and increase community buy in. Disclosure of common metrics and participation in benchmarks is necessary for sustainability leaders to prove that they are in fact out front.

Best Practice

- Disclose key sustainability metrics.
- Disclose the details of how each metric and sub metric are calculated. Skipping this step can lead to inconsistent reporting across the industry, creating confusion about the effectiveness of the strategies used.
- Update metrics and calculations as necessary to keep up with best practice in disclosure.
- Disclose forward-looking policy advocacy objectives on the kinds of items identified in these solutions, as well as actual lobbying and political spending.

Solution 11

11

Advocate for Public Policies that Support Solutions that are Fair, Reliable, and Clean

Data center load growth presents strong leverage for policy solutions that benefit all stakeholders. While understanding all locations have unique considerations, we believe collectively the approaches we lay out have the potential to lead to win/win solutions that are fast, fair, reliable, and clean.

Affordability is currently the main political driver for policy makers. Clean energy is frequently the fastest, cheapest, and most reliable source of new generation of power. 2026 is the year of ‘energy politics,’ with high state and federal engagement and voter responsiveness to [affordability](#) issues and energy prices.

The U.S. also needs permitting reform at both the state and federal levels to overcome barriers to accelerated deployment of energy. It is critical that data center developers, owners, and operators are active in policy discussions on the key principles outlined here.

The growing strain on energy and water resources and other community concerns has led to an ongoing, nationwide wave of state legislative activity to address various elements of data centers. In 2025, there were more than [230 data center bills](#) introduced in all 50 states, with at least 40 bills enacted in 21 states. More than 300 bills have been filed or are expected in 2026.

Best Practice

- Advocate for public policies that support building data centers in ways that are fair, affordable, and clean.
- On the federal level, advocate for policy priorities that advance the key solutions advanced here.

Appendix of Helpful Resources

Cross-cutting Resources

Pew Research Center: [What we know about energy use at U.S. data centers amid the AI boom](#) [Article]

- This article provides an overview of U.S. data center electricity use, highlighting trends in energy demand, pricing, and Americans' perspectives on AI's environmental impact.

Innovation for Cool Earth Forum (ICEF): [Sustainable Data Centers Roadmap](#) [Report]

- ICEF's roadmap is a comprehensive resource that presents a pathway toward sustainability from both technological and policy perspectives, along with new opportunities to use climate solutions.

RMI: [Fast, Flexible Solutions for Data Centers](#) [Article]

- This article presents a range of strategies—including efficiency measures and modular, low-cost clean energy options—to reduce the risks of over-building infrastructure and increasing ratepayer burdens.

World Economic Forum: [6 ways data centres can cut their emissions—without compromising the AI boom](#) [Article]

- Written by the chief sustainability officer of NTT DATA, a data center services provider, this article outlines key strategies for lowering emissions and improving sustainability.

Dutch Data Center Association: [Sustainability and Energy](#) [Report]

- The report provides insights into the environmental performance of data centers in the Netherlands.

Site Selection

Nature: [Environmental impact and net-zero pathways for sustainable artificial intelligence servers in the USA](#) [Article]

- This study reveals the importance of data center location and estimates how choosing different sites can impact water and greenhouse gas emissions.

10a Labs: [Data Center Watch](#) [Webpage]

- A research project from AI security and intelligence firm 10a Labs that provides updated information on local community concerns tied to data center development.

Heatmap News: [Heatmap Pro](#) [Service]

- A subscription service created by climate news site Heatmap News to help developers build data center projects with local support.

The Brookings Institution: [Why community benefit agreements are necessary for data centers](#) [Report]

- This report outlines how data center developers can work closely with local community leaders to develop practical community benefit agreements that address public concerns.

Embodied Emissions and Construction

Amazon: [Innovate, collaborate, scale: Inside Amazon’s approach to decarbonizing its global network of buildings](#) [Article]

- This article, written by a sustainability director at Amazon for its corporate website, outlines Amazon’s strategy to decarbonize its buildings—including data centers—including by adopting lower carbon materials and technologies.

Microsoft: [Sustainable by design: Advancing low carbon materials](#) [Article]

- Written by Microsoft’s chief sustainability officer, this article on the company’s website outlines Microsoft’s strategy for reducing embodied carbon in materials and construction.

Clean Energy

RMI: [How “Power Couples” Can Help the United States Win the Global AI Race](#) [Article]

- RMI’s analysis describes how pairing the construction of data centers and clean energy near existing grid connection sites can provide data centers with rapid access to energy without risking grid reliability or imposing costs on consumers.

Data Centre Magazine: [Top Ten: Data Centres Using 100% Renewable Energy](#) [Article]

- This news article provides a list of the world’s largest data centers powered 100% by renewable energy, ranked by a combination of factors.

Canary Media: [Google plans to build gigawatts of clean power and data centers together](#) [Article]

- This news article describes plans by Google and its partners to spend \$20 billion by 2030 on building renewable energy and storage near planned data centers.

Water Use

Ceres: [Drained by Data: The Cumulative Impact of Data Centers on Regional Water Stress](#) [Report]

- This report analyzes the growing stress on local and regional water supplies from the growth of data centers, using Phoenix, Arizona as case study.

Ceres: [Valuing Water Finance Initiative Benchmark](#) [Report]

- This biannual benchmark by Ceres evaluates the corporate water stewardship practices of four water-intensive industries, including the tech industry.

Microsoft: [Our 2024 Environmental Sustainability Report](#) [Article]

- In this article on its website, Microsoft executives outline the company’s move toward zero-water cooling technologies.

Demand Flexibility

Nicholas Institute for Energy, Environment & Sustainability, Duke University: [Rethinking Load Growth: Assessing the Potential for Integration of Large Flexible Loads in US Power Systems](#) [Report]

- This report describes how data centers can use demand flexibility strategies to offset the need for new generation capacity.

Piclo: [Independent Marketplace for Energy Flexibility](#) [Service]

- Piclo is a company that provides a marketplace for demand flexibility services in Australia, Europe, and the U.S.

[Emerald AI](#) and [Camus](#) [Services]

- Emerald AI and Camus are startups that offer demand flexibility services for data centers.

Smart Grid and Distributed Resources

U.S. Department of Energy: [Pathways to Commercial Liftoff: Innovative Grid Deployment](#) [Report]

- This report outlines pathways to accelerate the deployment of grid modernization technologies.

Sierra Club: [Demanding Better: How growing demand for electricity can drive a cleaner grid](#) [Report]

- In this report, the Sierra Club explores how large tech companies can meet their growing need for electricity while supporting cleaner grids.

Rewiring America: [Homegrown energy: How household upgrades can meet 100 percent of data center demand growth](#) [Report]

- This report describes how tech companies can meet a significant portion of data center energy demand by paying for heat pumps, rooftop solar, and batteries for consumers.

Transparency, Benchmarking, and Energy Purchasing Disclosure

Open Compute Project: [Data Center Facility Sustainability Metrics](#) [Report]

- This report outlines a set of sustainability metrics for data center facilities, including for energy and water.

Clarity AI: [Data Center Emissions Are Rising. Are Firms Doing Enough?](#) [Article]

- This article from startup Clarity AI describes how the company benchmarked the decarbonization strategies of leading data center operators.

Inside Climate News: [A New Unifying Issue: Just About Everyone Hates Data Centers](#) [Article]

- This news article explains how special rates and requirements for long-term contracts exist to reduce risk to ratepayers.

ARUP: [Nature and technology: balancing data centres with biodiversity](#) [Article]

- This article by design consultant ARUP explores design strategies that data centers can adopt to reduce their environmental impact.

About Ceres

Ceres is a nonprofit advocacy organization working to accelerate the transition to a cleaner, more just, and resilient economy. With data-driven research and expert analysis, we inspire investors and companies to act on the world's sustainability challenges and advocate for market and policy solutions. Together, our efforts transform industries, unlock new business opportunities, and foster innovation and job growth — proving that sustainability is the bottom line. For more information, visit ceres.org.