



Data Centers and Energy Usage 101: Impacts on the Electric Grid

September 1, 2026

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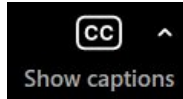
Webinar Logistics

All attendees are in “**listen only**” mode – your webcam and microphone are disabled.
The Chat function is also disabled.

Submit questions and comments via the Q&A panel



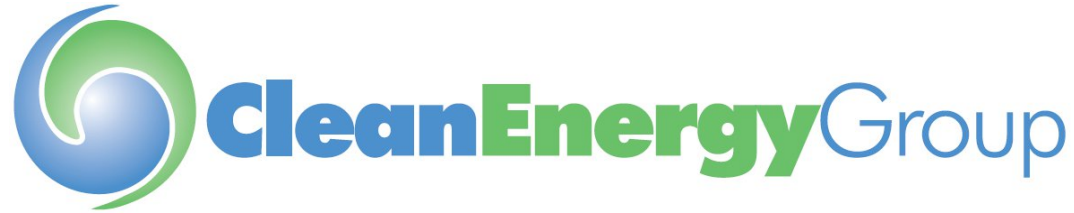
Automated **captions** are available



Speaker bios will be made available in the Chat

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Affordable, reliable, clean energy for all.



**Climate Resilience and
Community Health**



**Distributed Energy Access
and Equity**



**Energy Storage and Flexible
Demand**



Fossil Fuel Replacement

Data Center Energy Accountability Initiative

Protecting energy affordability and community health in the era of data center expansion.

CLEAN AIR COUNCIL



**ALLIANCE FOR
AFFORDABLE
ENERGY**



Pennsylvania



Photo Credit: Nikada/iStock

WEBINAR SPEAKERS

Data Centers and Energy Usage 101: Impacts on the Electric Grid



Alli Finn

Director of Community
Partnerships
AI Now Institute



Sarah Smith

Research Scientist,
Energy Analysis Division
*Lawrence Berkeley
National Laboratory*



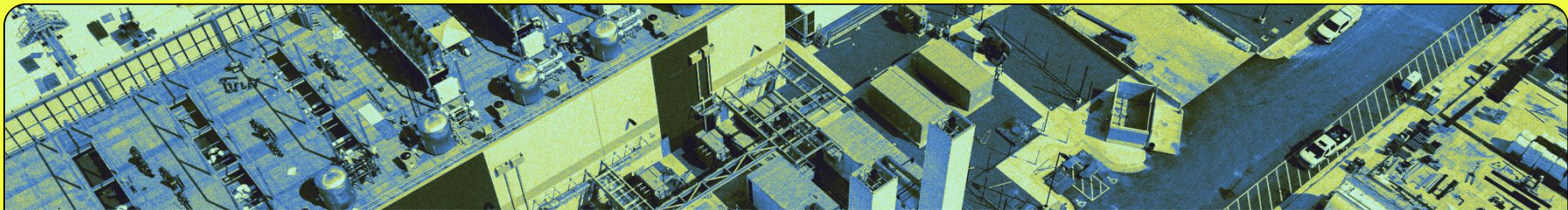
Abbe Ramanan

Project Director
*Clean Energy Group
(Moderator)*



BERKELEY LAB





Understanding the Hyperscale Boom, Energy & Community Impacts, and What to Do About It

Alli Finn | AI Now Institute

September 1, 2026

datacenters.ainowinstitute.org

AINOW

AI Now Institute

- Founded in 2017, we diagnose and produce research on AI
- Fully independent organization (no money from corporate donors)
- Our work
 - Advances research that charts a long-term strategy for the field
 - Identifies and capitalizes on actionable policy windows
 - Supports action on the ground, in partnership with a broad coalition of allies

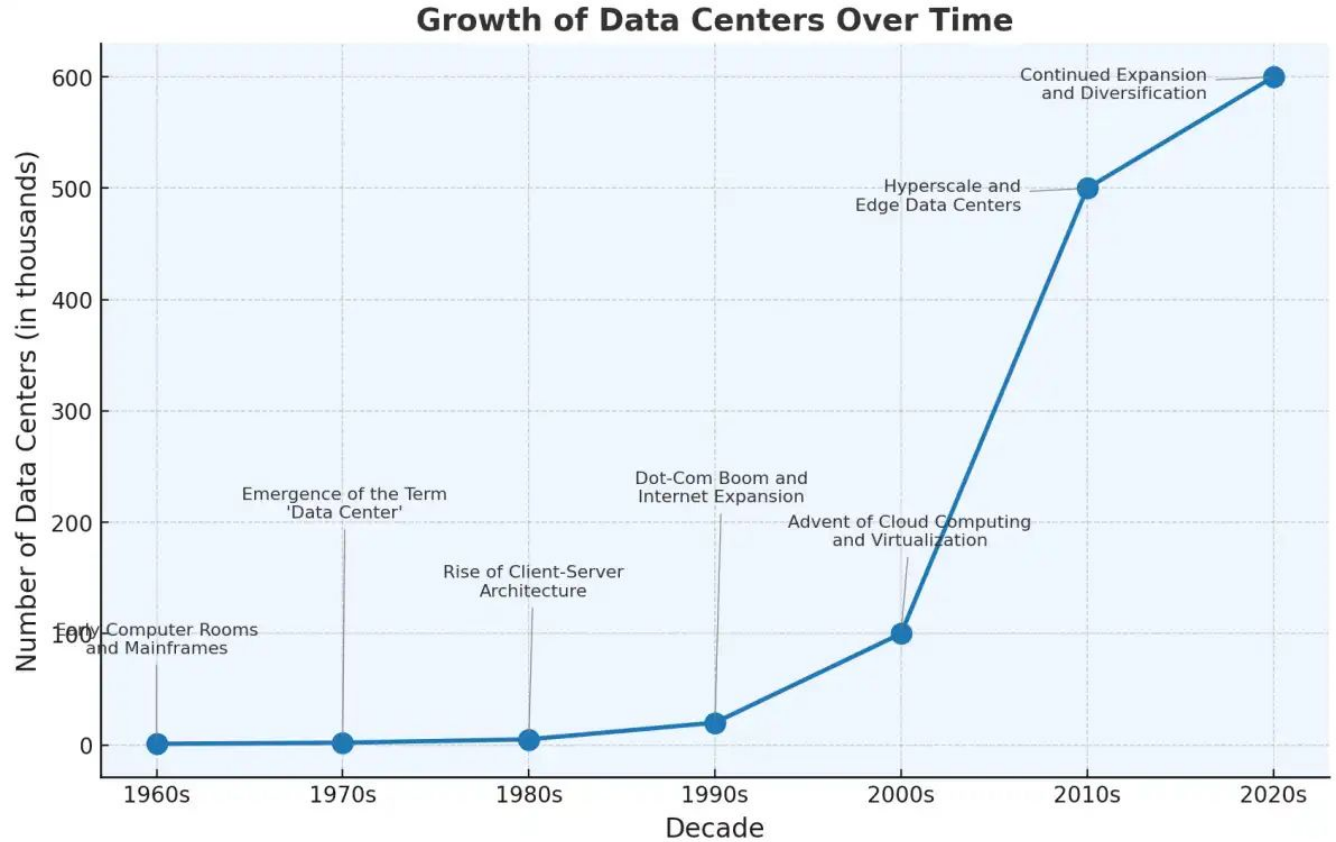
Data Center Working Group

- Founded in 2024, we are a multi-state, interdisciplinary working group fighting to stop the data center buildout – and for a future where our tech and energy infrastructure serves the public good, not corporate interests.
- What we do:
 - Monthly [Site Fight Solidarity Hour](#)
 - 1:1 support for data center fights (technical assistance, policy, organizing support)
 - Biweekly working group for orgs/people moving regional or state strategies
 - Strategizing on federal policy and nationwide advocacy



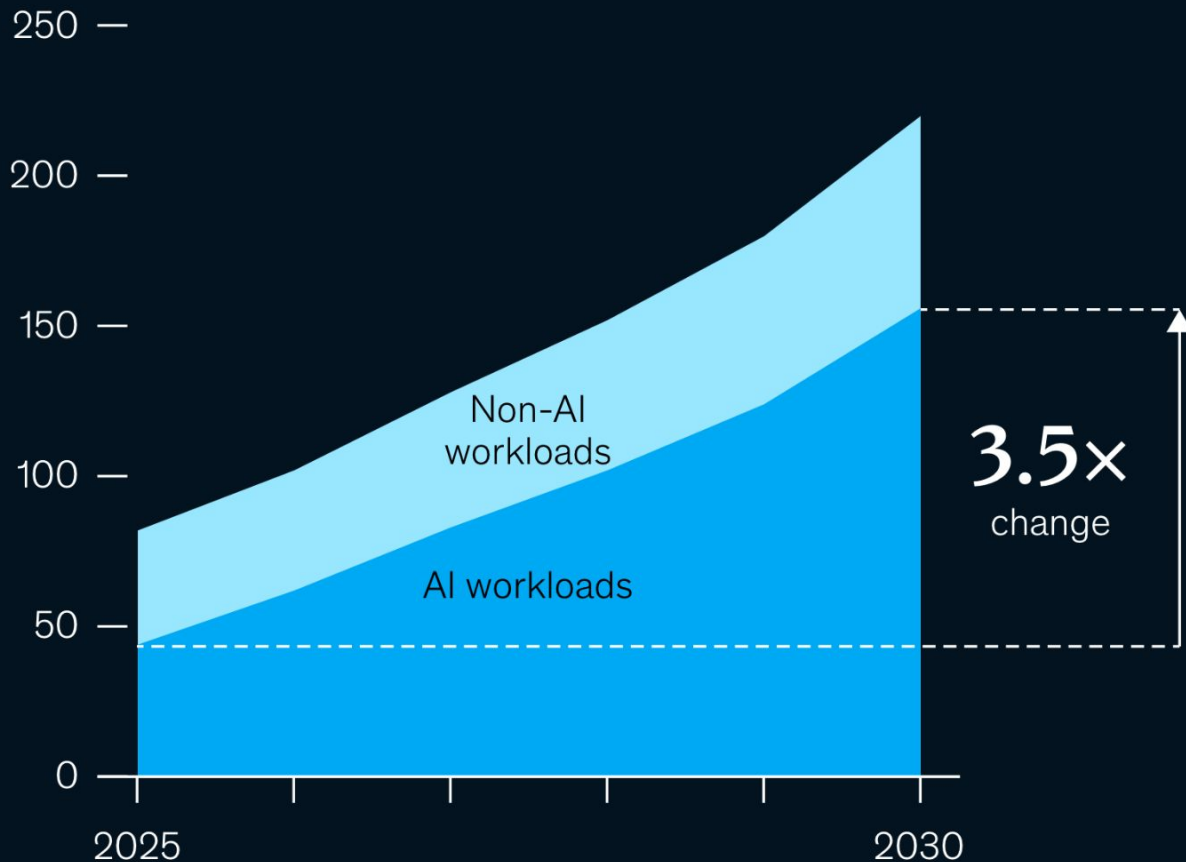
Hugh Kenny, The Piedmont Environmental Council

Why is this moment different?



AI Driving ~70% of Data Center Demand

Estimated global data
center capacity
demand in GW
(midrange scenario)



Ground Truths: Understanding AI

1

AI = hyper
consolidation of
Big Tech power

2

The current AI
market is
precarious.

3

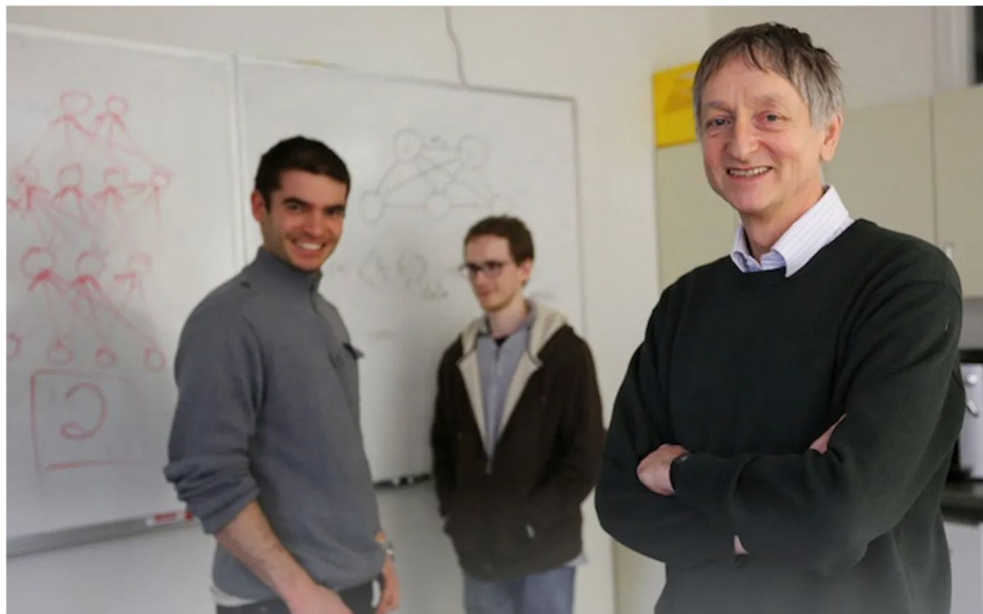
Market power <-->
political power

Logic of Scale:

The AlexNet “Moment” (2012)

Google Hires Brains that Helped Supercharge Machine Learning

Google has hired the man who showed how to make computers learn much like the human brain.



**Nothing about this
moment is inevitable.**

**This is NOT the only way
to develop AI.**

Understanding Data Center Impacts

Democratic Processes

Affordability

Clean Air, Energy, & Water

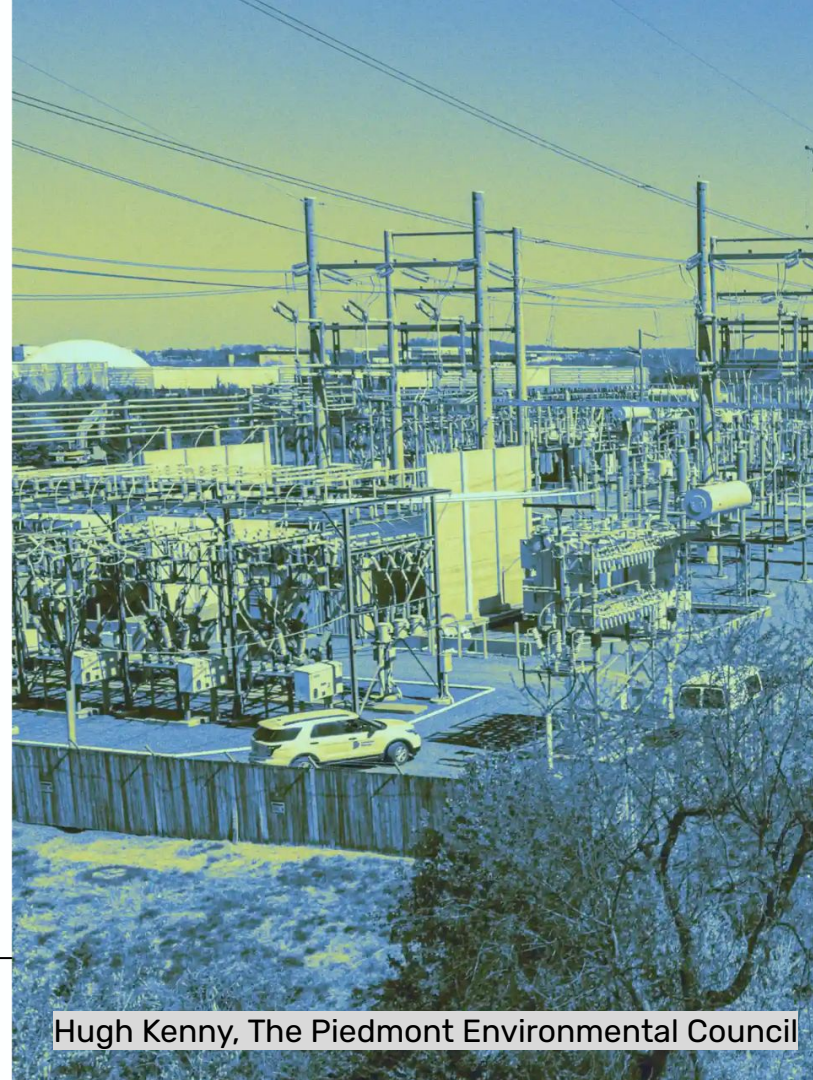
Local Budgets

Community Futures



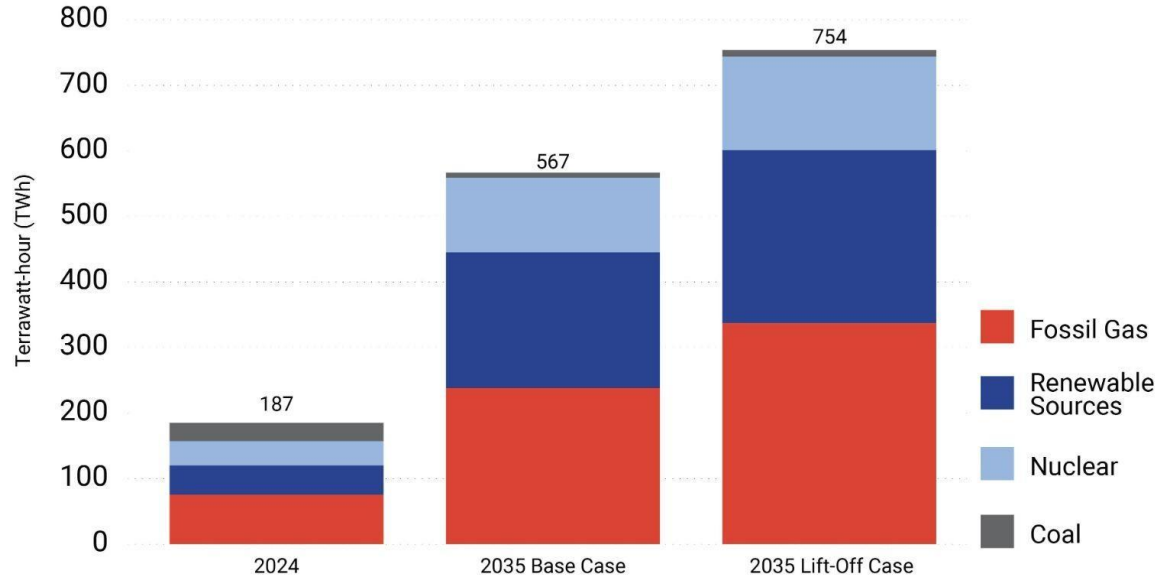
Harms: Our Energy Grid & Futures

- Higher electricity bills exacerbate the affordability crisis
- Destabilized energy grid
- Reversing climate progress
- Private equity takeover and vertical integration of utilities



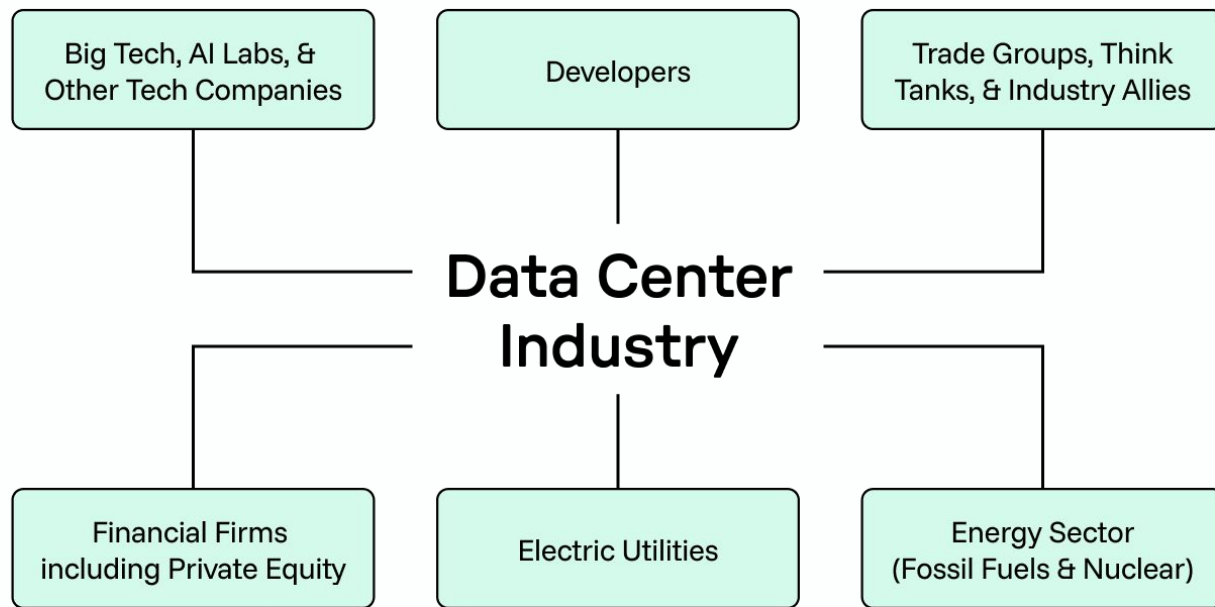
AI DATA CENTERS ARE THE NEW LIFELINE FOR THE FOSSIL FUEL AND UTILITIES INDUSTRIES

Fuel Mix of Electricity Demand for U.S. Data Centers, 2024 v. 2035



U.S. data center energy use in 2024 and in IEA's Base Case and Lift-Off Case 2035 scenarios. For each scenario, total data center energy use is displayed as a label.

Which Corporate Players Are Driving the Buildout?



Visualisation by Little Sis and PnP (2026)

Electric Utilities: Who Are They?

- **Investor owned utilities** e.g. Entergy Energy, TXNM Energy
- **Public utilities and utility cooperatives** e.g. Tacoma Power, Northern Virginia Electric Cooperative
- **Independent power providers** e.g. AES, Constellation Energy

Electric Utilities: What's Their Playbook?

- Exploiting regulated utility markets by pushing data center costs onto ratepayers
- Lobbying for sales tax exemptions for data centers
- Supporting data center land grabs from developers
- Entrenching public secrecy through back-door agreements and NDAs signed between utilities and data centers
- Working with fossil fuel players to jointly lobby to entrench dirty energy in the data center industry

CASE STUDY

Utilities driving gas-powered data centers: Entergy, an investor-owned utility operating in AR, LA, MS, and TX, plans to build 10 new gas-powered plants in Louisiana specifically for Meta's data center.

Energy (Fossil Fuels): Who Are They?

- **Historically prominent fossil fuel companies** e.g. ExxonMobil, Chevron, EQT and Energy Transfer
- **Newer companies linked to the tech elite** e.g. Bold Data & Energy Company

Energy (Fossil Fuels): What's Their Playbook?

- Direct fossil fuel to data center energy agreements (backed by Big Tech and private equity)
- Energy lobbyists partnering with data center developer and Big Tech lobbies
- Back-door deals to fast-track gas turbines to power data centers, with disproportionate impacts on historic environmental justice communities.

CASE STUDY

Chevron & Microsoft: In early 2026, Chevron and Microsoft entered into an exclusivity agreement involving the construction of dedicated fracked-gas infrastructure to power a Microsoft AI data center campus in West Texas. The \$7 billion deal would involve a reported 2.5GW in power generation.

What's the industry's response to these concerns?

- ✖ Data centers pay their “fair share”
- ✖ Bring your own power (BYOP)
- ✖ “Clean” data centers
- ✖ Funding our clean energy transition(?)

**The industry
is presenting
communities with
*a false choice.***

What Do We Do About It?



Mapping local, state, and federal policy interventions to stop or restrict data center development.

<https://datacenters.ainowinstitute.org/>

Local Interventions

Mandate 24/7 Renewable
Energy Requirements

Prohibit Off-Grid and “Behind-
the-Meter” Power Generation

Prohibit Backup Diesel
Generators

Establish Continued Energy
Transparency Mechanisms as a
Condition of Approval

Retain the Right to Curb or Shut
Down Energy During Citywide
Emergencies

Establish Strong Enforcement
Mechanisms for Violations

State & Regional Interventions

Protect Grid Stability

Accelerate Renewable Energy
Infrastructure and Use

Federal Interventions

Mobilize Authority Under the
Federal Energy Regulatory
Commission (FERC) to Oversee
Data Centers

Energy

Data center expansion is returning communities to reliance on fossil fuels and reversing our limited climate progress. States are keeping coal plants open, building new gas-fired power plants, and reopening nuclear plants solely for data center use. According to the Center for Biological Diversity, carbon emissions from data center expansion, primarily powered by fracked gas and coal, are expected to triple by 2035, reaching 10 percent of our economy-wide emissions and 44 percent of the power-sector emissions allowable to meet the US 2035 climate target.

See [Ratepayer Protections](#) for interventions to protect everyday people from carrying the costs of rapid data center infrastructure buildout.

- BEHIND THE METER
- FOSSIL FUELS
- NUCLEAR
- OVERSIGHT
- RENEWABLES
- STABILITY

Local Interventions

Local governments are empowered to pass ordinances limiting the harmful effects of rapid energy rollout while rejecting proposals that do not work in the community’s best interest. More comprehensive structural interventions targeting our energy and power systems are best done at the state level.

Avenues for Intervention: Data Centers & Energy

Local government
(especially the zoning board)

Permitting bodies
(air, water, land use)

Public utility commissions
(rate cases, tariff, regulatory compliance
certifications/CPCNs)

State government

Courts

Local: Leverage Approval Process

Require capacity commitments and “will serve” letters as a condition of permit approval

- Contractual agreements that utility company has existing capacity to meet data center demand

Require continued energy transparency as a condition of approval

- Require data centers to make electricity use public in monthly reporting

Strong enforcement mechanisms for violations

- Hold data centers liable for exceeding energy thresholds estimated in the will serve letter and zoning application

EXAMPLE

A bipartisan coalition of state legislators proposed that PJM can force data centers to stop using electricity during peak demand.

Local: Regulate Energy Use

Mandate 24/7 zero-emissions, additional renewable energy to be approved

Prohibit off-grid and “behind the meter” power generation

- If “bring your own power,” scrutinize commitments and ensure additional and renewable

Prohibit back-up diesel generators

- If necessary, ensure:
 - Adequate permit control, prohibit jurisdiction shopping
 - Proper notification
 - Mandated pollution control equipment
 - Required cumulative impact reporting

Tax all electricity use with no exemptions (where no preemption)

- Increase rate during energy emergencies (heatwaves)

EXAMPLE

Ohio SB 2 (proposed)

specifies utility companies will not be responsible for costs associated with supply behind-the-meter electric generation services.

Colorado’s Energy and Carbon Management Commision rules require oil and gas operators to consider cumulative impacts for permits

State: Strong Ratepayer Protections

Protect ratepayers from subsidizing the costs of data centers

- Require data centers to pay separately for 100% of the costs needed to service them
- Institute an equitable tariff schedule
- Investigate or revise cost allocation methodology and formulas
- Directly allocate additional fees to data centers where applicable (ie study fees)

Amend state transparency laws to require full disclosure

- Data center power usage is not exempt from public disclosure laws
- Prohibit NDAs in economic development deals

EXAMPLE

In **Oregon**, large industrial users like data centers were paying about 8 cents per kilowatt hour (kWh), while residential customers paid 20 cents per kWh. The newly proposed tariff schedule institutes a higher rate.

State: Strong Ratepayer Protections

Protect ratepayers from data center instability

- Develop separate rate classes for large-load customers (20 MW or more)
 - *Can do this via Public Utility Commission approval, petition, tariff class*
- Require protective contract guarantees:
 - Minimum contract lengths
 - Minimum demand
 - Up-front payments
 - Up-front security deposits
- Early termination penalties and exit fees

EXAMPLE

Strong example: **Oregon's HB 3546** (passed) requires the public utility commission to create a new classification for industrial energy users (more than 20 MW)

AEP Ohio's settlement requires an exit fee equal to minimum charges for **36 months** after notice of termination

State: Promote Grid Stability & Renewables

Protect grid stability

- Safeguards to mitigate inconsistent monthly energy usage (demand charges, demand shedding)
- Retain the right to curb or shut down energy during emergencies and peak demand
- Institute electricity caps
- Require data centers to follow energy efficiency standards

Accelerate renewable energy infrastructure and use

- Mandate 24/7 zero-emissions, additional renewable energy to be approved
- Oppose development of fossil-fuel-based generation and transmission infrastructure

EXAMPLE

Maine caps the share of in-state electricity sales from the power provider to data centers at 25 percent.

EXAMPLE

Minnesota signed a law requiring the state's public utility commission to consider the state's electricity standards during approvals.

Federal: Mobilize Authority under the Federal Energy Regulatory Commission (FERC)

Ensure data centers pay for infrastructure costs and upgrades

- *Upcoming June proposal on federal power*

Reject colocation policies that enable AI data centers to soak up available energy

- Require transparent, enforceable tariff rules

Mandate load flexibility programs and interconnection requirements

- Require data centers to reduce or shift their electricity usage during peak demand periods and times of grid stress

Compel the collection and publication of energy use data

- Require disclosure when power sellers are affiliated with data centers

EXAMPLE

June 2026: Expected FERC proposal outlining federal authority to regulate data centers

All Levels: Reassert Democratic Control

Bold public power campaigns

- Support campaigns to shift from investor-owned utilities to publicly or mutually owned utilities

Tackle concentrated power across the energy stack

- Promote a robust anti-monopoly toolkit

Prevent private equity takeover of investor-owned utilities

- Leverage authorities from Federal Energy Regulatory Commission (FERC), the Department of Justice (DOJ), and the Federal Communications Commission (FCC) to prohibit the private equity takeover of investor-owned utilities

EXAMPLE

Public power campaigns in [Milwaukee](#), [New York](#), and [Tucson](#) are demanding shifts to democratically controlled power systems to protect against rapidly rising electricity prices.

Policy & Organizing Resources

North Star Data Center Policy Toolkit (AI Now Institute)

- <https://datacenters.ainowinstitute.org/>

Recorded Trainings

- Policy in Practice: <https://datacenters.ainowinstitute.org/trainings/>

Site Fight Guide for Communities (Data Center Working Group)

- <https://bit.ly/site-fight-guide>

Get in touch / Policy support: datacenters@ainowinstitute.org

Get involved: Data Center Working Group Interest Form

- <https://bit.ly/interest-form-DC-working-group>



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Clean Energy Group Webinar | September 1, 2026

[View webinar recording and slides here](#)

The following resources were compiled by webinar panelist Alli Finn and CEG staff.

Links and Resources:

Data Center Policy Recs: North Star Data Center Policy Toolkit (AI Now Institute)

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- Site Fight Guide for Communities (Data Center Working Group):
<https://bit.ly/site-fight-guide>

Get Involved: Data Center Working Group Interest Form

<https://bit.ly/interest-form-DC-working-group>

Summary of forthcoming report on the corporate players driving the data center buildout: <https://ainowinstitute.org/general/data-center-industry-mapping-working-draft>

Data centers in space – Adam Becker Podcast:

<https://podcasts.apple.com/at/podcast/data-centers-in-space-with-dr-adam-becker-2026-03-02/id1690426042?i=1000755743538>

Energy Policy Recs: <https://datacenters.ainowinstitute.org/issue-area/energy>

Ratepayer Protection Policy Recs: <https://datacenters.ainowinstitute.org/issue-area/ratepayer-protections>

United States Data Center Energy Usage Report: 2025 Update (Berkeley Lab):

<https://eta.lbl.gov/publications/united-states-data-center-energy-2025>

AI, Data Centers, and Energy Fact Sheet (Clean Energy Group):

www.cleangroup.org/publication/ai-data-centers-and-energy

See Clean Energy Group's full webinar archive at cleangroup.org/webinars

Thank You



Abbe Ramanan

Project Director
Clean Energy Group
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Upcoming Webinars

The Road Forward for Medium- and Long-Duration Energy Storage
(September 9)

An Introduction to Virtual Power Plants (VPPs)
(September 29)

Read more and register at www.cleanegroup.org/webinars



www.cleanegroup.org | info@cleanegroup.org