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BETTER DATA CENTER PROJECT

# The AI Gas Rush:

## Risks and Implications of "Bring Your Own Power"

**EXECUTIVE SUMMARY**

October 2026



# Summary

The race to scale artificial intelligence (AI) has triggered an unprecedented increase in electricity demand. As of mid-2026, the U.S. has over 300 gigawatts (GW) of AI data center capacity planned or under construction.[1] To put this in context, peak U.S. electricity demand on the hottest day in 2025 was 760 GW.[2] To bypass long wait times for grid service, developers are increasingly pursuing **"Bring Your Own Power" (BYOP)**[3] strategies, where they procure dedicated energy resources rather than relying solely on grid power.

Building on work from Global Energy Monitor, the Environmental Integrity Project, and Cleanview,[4] we estimate that **gas will power approximately 80% of energy generation from BYOP projects** coming online in the next five years. In total, we identify 177 GW of planned gas capacity, equivalent to 23% of the entire U.S.'s peak demand in 2025 and enough to power 65% of all U.S. homes.[5]

**177 GW of gas, enough to power 65% of U.S. homes**

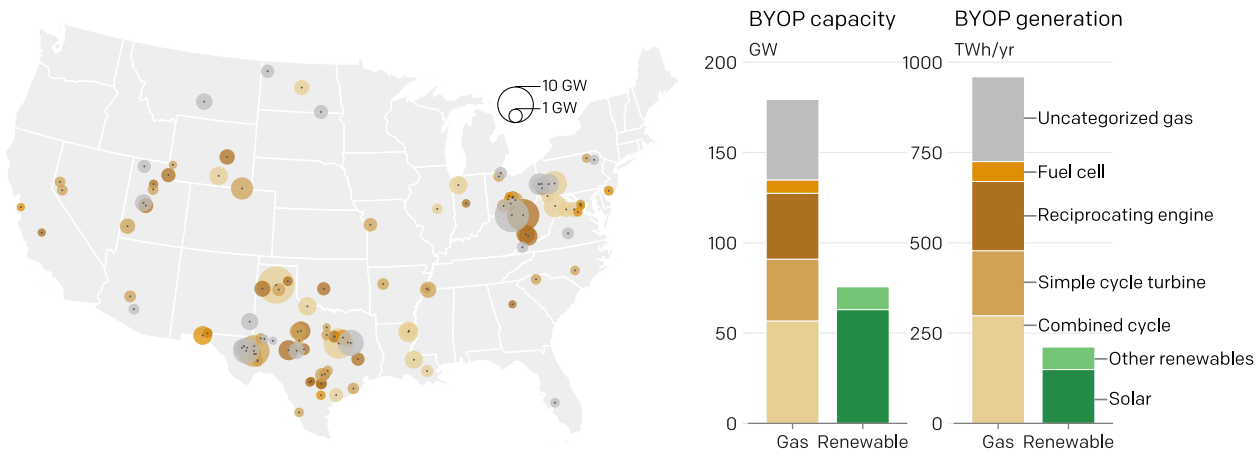



**Figure 1.** Map of BYOP gas projects (left), total announced BYOP power capacity (middle), and estimated total energy generation (right) from BYOP gas compared to renewables. Energy generation accounts for capacity factor.

These massive gas projects will have substantial impacts on people and the planet—not only worsening climate change, but harming the health of nearby communities, including those already burdened by historical and ongoing disinvestment, environmental injustice, and extractive industry. Despite these risks, policymakers across the nation are incentivizing or requiring BYOP in an attempt to address energy bill impacts from new AI data centers. But AI data center **developers are turning to BYOP to gain access to power as quickly as possible ("speed-to-power")—not to solve the energy bill impacts of AI**. This report finds potential ratepayer benefits are not guaranteed, while harms of the massive gas BYOP buildout have been inadequately addressed.

This report was prepared in response to questions received from communities, Tribal, state, and local governments, and others navigating BYOP proposals and policies. It builds on the growing body of work raising serious concerns about gas BYOP.[6]

# Key findings

## Climate & Public Health

- **Massive scale and impact:** The scale of both total and individual BYOP proposals is massive. As of August 2026, there are nine proposed gas BYOP projects that are 4.5 GW or larger. If all are built, nine of the top 10 largest power plants in the U.S. would be data center gas BYOP.

  Altogether, the current 177 GW of gas proposals would emit over 400 million metric tons of carbon dioxide equivalent ($MTCO_2e$) annually, increasing the U.S. power sector's total emissions by 23%. Ozone and particulate matter pollution from these projects could cause an estimated $5–10B in monetized health damages each year.[7]

- **Majority gas:** Building on prior reports, we estimate that for current BYOP proposals, approximately 80% of energy generation will come from gas.

- **Inefficient gas technologies with more air pollution:** More than half of disclosed gas BYOP capacity uses technologies that are less efficient and more polluting than typical gas power plants.

## Regulatory Oversight, Environmental Review & Public Participation

- **Inadequate regulatory oversight and laws to protect the environment, climate, and consumers:** BYOP projects are moving forward without sufficient oversight by entities charged with protecting people and the planet. Behind-the-meter BYOP projects can bypass important planning or regulatory processes that generally apply to large new power plants, and most gas BYOP projects are proposed in states with weak environmental laws and protections. Widespread efforts to dismantle federal environmental laws erode federal backstops, which are particularly important in states with the largest gas BYOP buildouts.

  Additionally, developers are attempting to bypass remaining legal safeguards through project segmentation to avoid more stringent permitting requirements. They may also site projects in unincorporated or industrial areas with limited local zoning or land use approvals. These factors can create significant gaps in oversight and further limit opportunities for public participation.

- **Most will seek grid connection:** Most BYOP projects are expected to seek grid connection eventually, raising important questions about the long-term economic, technical, and societal consequences of allowing future grid-connected gas projects to circumvent regulatory decision-making and protections today.

- **Secrecy and lack of public participation:** A pervasive lack of transparency, non-disclosure agreements, and project segmentation mean the relationship between AI data centers and their BYOP projects is often obscured. This further erodes opportunities for public participation and excludes communities—particularly members of overburdened communities—from meaningfully participating in the decisions that affect them.

## Economic & Policy Landscape

- **Economic risks to ratepayers and communities remain:** BYOP is not a simple solution to affordability concerns: There are many pathways through which BYOP projects can drive up energy bills including increased demand for gas and energy infrastructure, and if grid-connected, upward pressure on capacity and electricity prices. Tax exemptions and other public subsidies often further undermine claimed economic benefits.

- **BYOP policies lack sufficient safeguards:** The majority of enacted BYOP state laws focus on ratepayer impacts while facilitating BYOP via incentives like expedited permitting or exemptions from public utility commission (PUC) oversight. While more protective policies are starting to emerge, they're often not in states where the majority of gas BYOP is planned and do not address the full range of impacts.

- **Rapidly evolving landscape:** The policy and industry landscape for BYOP is changing rapidly, and decisions made over the next few years will have an outsized impact on communities and the planet.

# What does "Bring Your Own Power" actually mean?

"BYOP" describes an arrangement in which AI data center developers secure and fund their own dedicated primary power generation rather than relying solely on utilities to procure power. These arrangements are commonly described as "behind the meter" or BTM,[8] but BYOP proposals can encompass a broad range of configurations beyond just BTM. The details of these configurations matter because they have different implications for climate, public health, governance, opportunities for public participation, electricity system planning, and energy costs.

Common configurations of BYOP include:

- **Fully islanded:** both the data center and power plant are completely physically and electrically separate from the grid.
- **BTM + grid:** the associated data center relies on both BTM power sources and the grid. Can also include arrangements where the power plant exports power to the grid.
- **Physical power purchase agreements (PPAs):** energy from new capacity resources "brought" by a developer via PPA and delivered through the grid. We intentionally exclude resources that are not near or able to physically deliver energy to the project (e.g., renewable energy credits or virtual PPAs) because they do not address the local impacts of a new large load.

We expect most BYOP projects to be configured as BTM + grid long-term. Many proposals plan to start fully islanded but intend to connect to the grid eventually due to the lower energy costs, services, and reliability the grid provides.

# Technologies



Simple cycle gas turbines at OpenAI's campus in Abilene, TX (Evan Simon, Floodlight)

We identify 177 GW of gas BYOP proposals. Comparing this total to renewable projects and PPAs disclosed by data center developers, we estimate that **gas will power approximately 80% of energy generation from BYOP projects** coming online in the next five years.[9]

We also find that **more than half of disclosed gas capacity uses less efficient and more polluting technologies which are atypical for large power plants**.

AI data center developers are mainly deploying four types of gas-powered generation for BYOP: reciprocating internal combustion engines (RICE), simple cycle gas turbines (SCGT), combined cycle gas turbines (CCGT), and fuel cells. We find that disclosed proposed capacity consists of 27% RICE, 25% SCGT, 42% CCGT, and 6% fuel cells.[10]

Typically, both RICE and SCGT that provide grid power run infrequently to meet peak demand. However, current gas BYOP projects are running these units nearly continuously, for thousands of hours per year.

### Types of gas-powered generation for BYOP

| | |
|---|---|
| **Gas Engines (RICE)** | Gas is combusted to propel pistons, similar to a car engine. **42–50% efficiency.** Small (2–20 MW/unit) and can start in ~1 min. Tend to leak >1% of input methane, increasing $CO_2e$ footprint by >25%. Used for peaking on the grid, typically running less than 20% of the time. |
| **Simple Cycle Gas Turbines (SCGT)** | Gas is combusted to turn turbine blades. Low efficiency of **35–43%.** Medium capacity (15–220 MW/unit) and can start in <10 min. "**Aeroderivatives**" and "**mobile gas turbines**" are types of SCGTs with designs modified from jet engines. Also used for peaking on the grid, typically running 15% of the time or less. |
| **Combined Cycle Gas Turbines (CCGT)** | Combines a combustion turbine (like those in SCGTs) with a steam turbine to recover waste heat, increasing efficiency to **58–64%.** Large (80–700 MW/unit). Highest water use. By far the most common type of gas generation on the U.S. grid, providing "**85% of total natural gas-fired electricity**". CCGTs usually run over 60% of the time. |
| **Fuel Cells** | Use electrochemical conversion, rather than combustion, to generate electricity at **53–65% efficiency.** Very small (0.32 MW/unit), but slow to start. Much lower air pollution than combustion technologies, but similar $CO_2$ emissions as CCGT when using gas, which is the predominant fuel being used today. |

In the near term, most of the proposed clean BYOP capacity is solar (63 GW) and wind (8 GW), with 164 GWh of battery storage. Further out, 4 GW of geothermal BYOP is expected to come online by 2033. Other proposed zero-carbon resources include nuclear power (22 GW planned by 2040). We note that most clean energy proposed for data centers is grid-connected and procured through PPAs. Because it is often challenging to assess whether these projects truly provide new and deliverable power that qualifies them as "BYOP",[11] we use the most generous assessment and include all PPAs and announced clean energy proposals. This means that our reported capacities likely overstate what would actually qualify as "clean BYOP".

# Risks

BYOP projects will have wide-ranging impacts on public health, the climate, energy bills, natural and cultural resources, and more—on top of the many other significant and documented societal, economic, and environmental harms associated with AI data centers outside of the scope of this particular report. Some key BYOP-specific risks include:

**Increased air pollution and public health costs.** Gas power plants emit air pollution including nitrogen oxides ($NO_X$), carbon monoxide (CO), volatile organic compounds (VOCs), fine particulate matter ($PM_{2.5}$), and sulfur dioxide ($SO_2$), which have well-established harmful health impacts. BYOP gas power plants are already having considerable impacts on communities: SpaceXAI's Colossus 1 and 2 near Memphis, Tenn., some of the first examples of gas BYOP, operate **dozens of gas turbines** without pollution controls, resulting in high emissions of $NO_X$. We estimate that the **current gas BYOP proposals alone could result in 330–580 premature deaths per year and $5–10 billion in annual monetized health damages**.

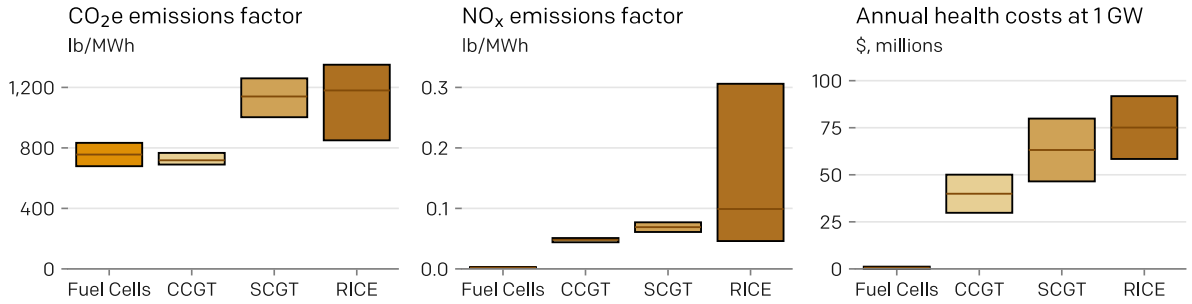



Figure 2. $CO_2e$ (left) and $NO_x$ (middle) emissions factors by technology for units with selective catalytic reduction (SCR) $NO_x$ controls. Annual health costs (right) are representative nationally-averaged estimates for a 1 GW plant operated at 60% capacity factor using EPA's benefits per ton. Actual health costs will vary based on regional factors.[12]

**Increased greenhouse gas emissions and climate change impacts.** If the 129 BYOP gas plants we identified operated at 60% capacity factor, they would emit 400 million $MTCO_2e$ per year, representing a 23% increase over current U.S. power sector emissions.[13] This could result in economic damages of $100 billion per year in 2030.[14] Figure 2 shows emissions factors of common BYOP gas technologies.

**Water impacts.** Separate from the cooling water use of the AI data centers, gas power plants can use vastly different amounts of water depending on their design, with some using very little and some using billions of gallons per year. The impacts of this increased water demand will vary by project and regionally, but there is risk for increased water stress given that many projects are located in areas already facing water scarcity.[15] While current BYOP gas proposals use less water on average than grid-connected gas, they will consume significantly more water than if renewables were used instead.[16]

**Data centers could divert clean energy needed to decarbonize other sectors.** Even if policies are put in place to ensure AI data centers bring their own *clean* energy, their skyrocketing energy demand would create significant competition for clean energy resources making it harder to reach climate and decarbonization goals. This is already happening: in January 2026, **Amazon outbid a utility** for a shovel-ready 1.2 GW solar and 1.2 GW battery storage project. The project was far along in the regulatory and permitting process, as well as the grid connection queue. It would have helped the utility meet Oregon's clean energy requirements and kept electricity costs low for customers.

**Inadequate energy regulatory oversight.** Existing energy regulatory structures were not designed for—and are insufficient to handle—the rapid development of hundreds of gigawatts of new BTM generation built specifically to serve AI data centers. This creates the risk that BYOP projects may move forward without the oversight of entities tasked with protecting consumers and the public interest. Exacerbating this risk are federal and state efforts to reduce regulations, both broadly and specifically for AI data center BYOP. West Virginia's "Microgrid Law," for example, exempts fully islanded power plants from public utility regulation, including exemptions from obtaining a certificate of convenience and necessity, siting requirements, and more.

One consequence of operating outside of typical utility regulatory structures is that BTM/islanded projects **may fall outside the scope of renewable portfolio standard (RPS)/clean energy standard (CES) requirements**, which apply to retail electricity sales and/or utilities.[17,18] Some states, including New Hampshire and New Mexico, have enacted laws exempting BTM from state RPS requirements, while others like Delaware and Washington are passing laws to require BYOP adherence to their clean energy laws.

**Inadequate environmental review.** BYOP projects are also operating outside of laws designed to protect the environment and provide opportunities for public participation. The current federal administration's plan for environmental deregulation for AI data centers[19] includes reducing protections under the Clean Air Act, the Clean Water Act, the Endangered Species Act, the National Environmental Policy Act, and more—many of which apply to gas BYOP. A recent report from the Environmental Protection Network[20] identified "at least 30 federal actions increasing pollution-related health risks" related to data centers. Examples include: **exclusion from the Acid Rain Program**, **reduced monitoring and reporting** for small and medium "temporary" turbines, and allowing regulators to **issue permits before required pollution offsets have been identified and secured** in areas that do not meet federal air-quality standards. The EPA has also recently proposed allowing the **elimination of public participation requirements** for so-called "minor" air pollution sources. This will likely further incentivize projects to pursue segmentation and synthetic minor strategies to avoid more stringent major source review. At the state level, the majority of gas BYOP proposals are in states without an environmental review statute. Many states are also passing new BYOP-friendly laws—such as Ohio's "shot clock" in which siting gets automatically approved in 60–90 days unless regulators act. Meaningful environmental review requires a complete understanding of the project, which is often obscured by the speed and lack of transparency of the AI data center buildout.

**Higher energy bills.** While BYOP data centers may delay, avoid, or decrease certain grid-related costs, **BYOP projects can drive up electricity and gas bills due to increased demand for gas fuel, gas turbines and other energy infrastructure**. Additionally, grid-connected BYOP data centers can still cause grid-related infrastructure costs and put upward pressure on capacity and electricity prices.

**Lost revenue from incentives.** Though many are now trying to repeal them, 37 states have sales and use tax exemptions for data centers[21] which can cost governments hundreds of millions to billions of dollars annually in lost tax revenue.[22] **BYOP projects can contribute to these losses because state definitions of what counts as data center equipment tend to be broad**[23] and can include equipment for energy to operate or maintain the data center. At a local level, data centers often take advantage of existing property tax breaks, payments in lieu of taxes, or tax increment financing designed to attract new job-intensive industries or negotiate new tax breaks or subsidies—including for gas BYOP facilities.[24,25] These incentives are in addition to financial incentives already granted to the fossil fuel industry.

# Policy elements

Against the backdrop of pro-BYOP policies and developers moving full-steam-ahead with gas BYOP proposals, strong and comprehensive action is needed. Below, we highlight considerations as a starting point, while recognizing that this field is evolving rapidly and that pathways will vary by jurisdiction. First, two foundational questions must be addressed prior to development of BYOP policy:

**What problems does BYOP solve, what problems does it create, and for whom?**

Developers are proposing BYOP projects to achieve their "speed-to-power" objectives, not to solve the energy bill impacts of AI data centers. Constructing BYOP policies in such a way that they avoid harms and provide real benefits to people and the planet, rather than serving corporate interests, is no easy feat. **Given the enormous implications of building hundreds of gigawatts of new power generation—most of which is gas—with limited regulatory oversight and environmental protections, decisions about whether to allow and how to regulate BYOP for data centers should not be rushed or treated as the only path forward.**

**How are those who will be most impacted by BYOP be engaged in shaping policies and how will they have a continuing voice?**

**BYOP policies must be developed in collaboration with frontline groups—particularly environmental justice communities and those who have been systematically excluded from decision-making processes—and foreground their concerns, participation, and priorities**. It is not enough for frontline communities to be consulted on individual project proposals; they must also be engaged directly in co-creation of the policies themselves. Additionally, because the breadth and scale of impacts from AI data center BYOP projects is so vast—affecting public health, climate, energy systems, the economy, jobs, land, water, and more—policies should be developed in collaboration with the range of constituents representing all of those interests. Considerations should be made for how these communities participate, such as language accessibility, personal security, financial capacity, and technical support.

If BYOP policies do move forward, they must address the full range of interconnected risks and impacts. Key elements of a comprehensive BYOP policy include:

**Clean energy that benefits all.** BYOP policies must require clean energy and do so in a way that is transparent, verifiable, and creates sufficient "new, near, and now" capacity. Policies should also fully mitigate any grid impacts of the data center's load, ideally matching the data center's 24/7 energy demand, and deliver broad benefits. Without such requirements, even clean BYOP projects could lock up energy resources for the exclusive benefit of data centers and make climate, decarbonization, and energy affordability goals harder to meet.

**Good siting practices.** Safeguards should be in place to restrict BYOP gas projects where they exacerbate existing harms, including in communities with poor air quality, areas of high natural and

cultural resource value, and areas with water availability concerns. Early engagement with Tribes with current and ancestral connection to the region, obtaining Free, Prior, and Informed Consent, and preserving Tribal sovereignty are baseline requirements.

**Strong regulation and oversight.** Fully addressing the impacts of BYOP projects requires oversight by entities with expertise, resources, and discretionary decision-making authority covering the full range of impacts—with the ability to put in place and enforce strong protections over construction, operation, and decommissioning of the project. These entities must prioritize public interest over industry interests and be accountable to impacted communities. Policies or systems for coordination can help avoid gaps in oversight, support holistic cumulative assessments, and support collaboration and information-sharing across jurisdictions.

**Meaningful environmental review.** The magnitude and range of impacts associated with BYOP projects warrant comprehensive environmental reviews that consider direct, indirect, and cumulative impacts on air quality, climate, water, noise, and biological and cultural resources. The review should consider the whole of the project—including the data center, primary power generation, and backup generation. It should also avoid segmentation and provide meaningful opportunities for public participation in decision-making. If projects do move forward, protective measures should be put in place to avoid, minimize, and mitigate impacts identified by review.

**Community self-determination.** Communities have the right to understand BYOP proposals, establish policies and safeguards to protect their health, and determine if BYOP projects should move forward and under what conditions. Frontline and environmental justice communities should be centered and resourced to fully engage before key decisions are made. To ensure transparency, full information on the project and its impacts should be provided sufficiently in advance and in an accessible manner. Ongoing reporting and monitoring are also essential.

**Cost responsibility and economic protections.** Decision-makers should perform a true cost-benefit analysis for each project. Policies must carefully, thoroughly, and proactively address the full costs of BYOP projects to protect the public, including direct and indirect costs impacting residential energy bills, lost state and local tax revenue, and decommissioning and restoration costs.

**Enforcement.** Policies that lack sufficient penalties for and enforcement of non-compliance risk functioning as voluntary standards rather than requirements. Independent verification, regular public reporting, and providing clear pathways for affected parties to raise concerns and seek review are essential. Ensuring that policies are not only established but that agencies have the resources to enforce them is particularly important given that the capacity of local, state, and federal agencies has been eroded over time, while the developers proposing these projects have enormous financial resources and strong incentives to move quickly. Penalties must be sufficient to deter noncompliance, rather than allowing violations to become simply another cost of doing business. In many instances, financial penalties may not be sufficient, given the deep pockets of this industry.

# The rapidly evolving policy landscape

Numerous policies have been put forth at both federal and state levels over the last two years that either explicitly or indirectly encourage or facilitate BYOP. The landscape continues to evolve rapidly with many more policies expected in the near future.

The **Trump administration has been a significant supporter of BYOP while simultaneously pursuing policies that favor gas over renewables**, thereby facilitating the proliferation of gas BYOP. In addition to the dismantling of environmental laws and protections discussed above, Trump's non-binding ratepayer protection pledge, announced in March 2026 and now signed by over 300 organizations, asks tech companies to "build, bring, or buy power for data centers". Concurrently, the Federal Energy Regulatory Commission (FERC) directed regional grid operators to revisit the rules that govern how AI data centers connect to the electric grid, including by accommodating co-location arrangements and behind-the-meter generation. Still, it remains to be seen if the proposed rules will adequately protect ratepayers and preserve pathways for clean energy. Several bills have also been introduced in Congress this year that explicitly support BYOP, most of which lack clean energy requirements.

As of August 2026, we have identified **more than 10 states with enacted BYOP-focused laws**.[26] A theme across these bills is a focus on attempting to address ratepayer impacts, and most bills include segmentation of infrastructure costs. BYOP is facilitated in a variety of ways, including creation of new classifications that allow third-party suppliers to build, own, and operate facilities; exemptions from regulatory requirements; and expedited permitting.[27] The majority of these laws are fuel agnostic thus creating a favorable climate for gas buildout. Some laws have sought to establish stronger guardrails, including a focus on clean energy. For example, Maryland and New Jersey incentivize (but do not require) clean BYOP, while both Delaware (via legislation) and Massachusetts (via executive order) subject BYOP to their respective renewable portfolio and clean energy standards, with fees applied as a penalty for noncompliance. But even these emerging protections address only a subset of BYOP risks, and the strongest policies have generally emerged outside the states with the largest proposed gas BYOP buildout.

# Case Study: Homer City Generating Station

Coal plant redevelopment and streamlined permitting in a gas-producing state

The Homer City Generating Station is a planned **4.5 GW** gas power plant located in Indiana County, PA. A redevelopment of a decommissioned 2 GW coal-fired power plant, it will serve power to a co-located Amazon data center campus, while also serving power to the grid. Homer City sits within the **Marcellus Shale formation** (Figure 3), the largest gas field in the U.S.

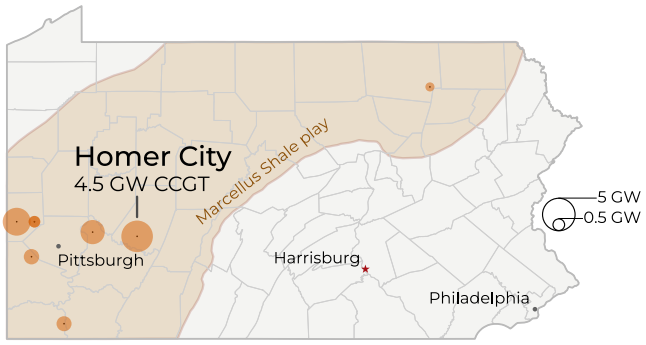



**Figure 3.** BYOP gas plants in Pennsylvania

- **$CO_2$ emissions**: Expected $CO_2e$ emissions of 10.5 million tons per year, 2.4 times higher than the coal plant's 2022 levels. This would increase Pennsylvania's total $CO_2$ emissions from electricity generation by nearly 15%.
- **Air Pollution**: Total estimated $PM_{2.5}$ and VOC emissions will be significantly higher than the coal plant's,[28] and $NO_x$ emissions would place it in the top 10% of $NO_x$ emitters among U.S. power plants. Air pollutant emissions could result in an estimated $210–360 million in annual monetized health damages.
- **Water**: Estimated water withdrawal of up to 34 million gallons per day, primarily used for evaporative cooling of the combined cycle gas turbines.
- **Streamlined permitting**: Pennsylvania DEP provided the Homer City plant a "**concierge level of service**," approving its air permit in just seven months—when projects of this size often take over a year. The project received $NO_x$ emission reduction credits from the coal plant's closure, allowing it to avoid the strictest review requirements.
- **No zoning**: Center and Black Lick Townships, where the Homer City campus sits, do not have a zoning code that would geographically limit where particular uses may be sited, consistent with a third of municipalities in PA.
- **Energy deregulation**: Power generation in Pennsylvania is deregulated and Pennsylvania's Public Utility Commission will exercise only limited oversight for the Homer City gas plant, such as for gas line safety.

# Case Study: Ohio

Expedited approvals with local preemption, tax incentives, and segmented projects

As of August 2026, Ohio has **nearly 16 GW of proposed BYOP capacity**, including SB Energy's grid-connected 9 GW **PORTS Technology campus**.[29] Of this, 6.6 GW will be islanded capacity across 12 facilities. Most of the proposed off-grid projects in Ohio use simple cycle gas turbines or gas engines with relatively low efficiencies of about 38–43%.[30]

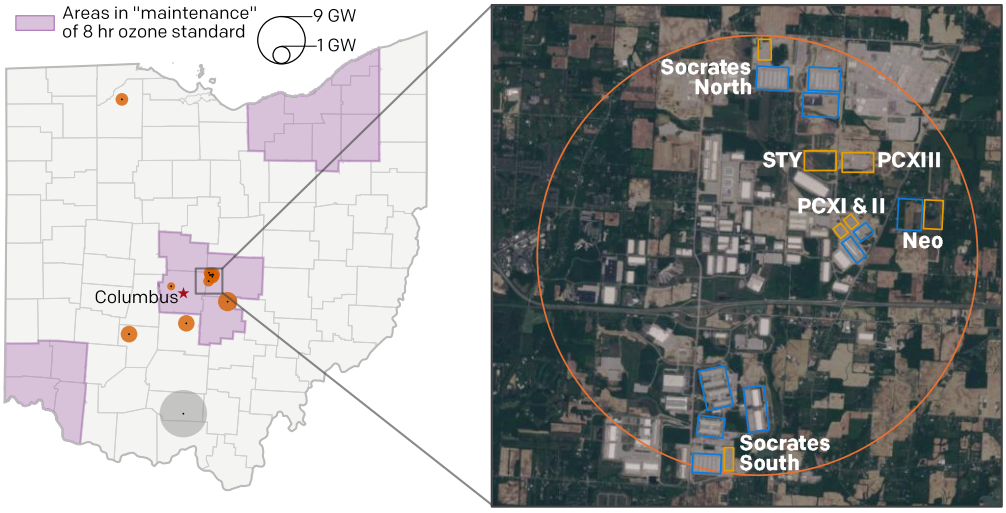



**Figure 4.** Map of Ohio's BYOP gas plants and satellite imagery of seven Meta and PowerConneX projects concentrated in 2.5-mile radius in Licking County.

- **Air Pollution**: Excluding the PORTS campus, which has yet to file a permit application, these gas plants have estimated annual emissions of 1,530 tons of $NO_x$, 1,100 tons of $PM_{2.5}$, 600 tons of $SO_2$, and 1,050 tons of VOC. Relative to Ohio's entire power-sector emissions, these represent increases of 23% for $PM_{2.5}$ and 5% for $NO_x$.[31] We estimate that the health costs could reach $590 million to $1 billion per year.[32]
- **$CO_2$ emissions**: Ohio's 16 GW of BYOP projects are expected to emit 41 million tons of $CO_2$ per year,[33] which would increase Ohio's total $CO_2$ emissions from electricity generation by 58%.
- **Expedited permitting**: Projects are deemed approved if the state's power siting board does not issue a decision within a 60- to 90-day "shot clock."
- **Tax giveaways**: BYOP projects in Ohio receive significant tax subsidies, including **exemptions** for Meta, Google, and Amazon from all sales and use taxes for up to 40 years for their data centers and associated **power generation facilities**.[34] Local governments also grant additional significant local tax incentives.[35]
- **Segmentation**: Licking County showcases a common tactic of physical "segmentation," where developers split up projects to speed permitting and avoid more stringent "major source" reviews. Four BYOP proposals serving a **single development project at Meta** are all located within a 2.5-mile radius (Figure 4). With 1.7 GW of nameplate capacity, total potential emissions are 868 tons per year (tpy) $NO_x$ and 482 tpy $PM_{2.5}$, but projects are split **so each site falls just under the 250 tpy major source threshold**.[36]

# Case Study: McCloud Generation in El Paso, TX

Utility-owned BTM plant with plans to connect to grid

McCloud Generation (Figure 5) is a 366 MW gas plant comprised of 813 gas generators owned and operated by El Paso Electric Company ("EPE") that will exclusively serve Meta's Wurldwide data center BTM during a "bridge period" of "up to 5 years."[37,38] Once this period ends, the gas plant could apply to connect to the grid.

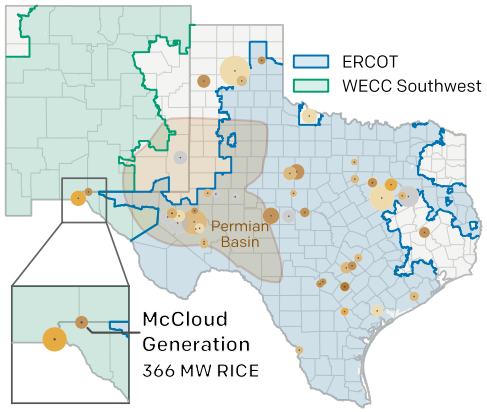



**Figure 5.** BYOP gas plants in Texas

EPE and Meta **originally indicated the data center would be powered by renewable energy**,[39] but when Meta later expanded and accelerated the project—up to 440 MW by 2027 and **1 GW by 2029**[40]—EPE decided to use inefficient gas generators.[41] EPE emphasizes that these units were chosen over more efficient alternatives because they could be installed quickly, just 18 months from the permit application.[42]

- **Air Pollution**: Potential emissions at full capacity could exceed major source thresholds for $NO_x$ and CO (100 tpy) as well as hazardous air pollutants (25 tpy). McCloud received a "synthetic" minor permit, however, as they plan to limit the data center's maximum power draw to keep emissions under 100 tpy.
- **$CO_2$ Emissions**: McCloud has three times higher carbon intensity than EPE's current fleet average, and its projected annual emissions of 1.35M tons $CO_2e$ would represent a **50% increase in EPE's entire current carbon footprint**.[43]
- **Environmental deregulation**: Texas' approach to permitting and environmental review has led to **extremely quick approvals** for BYOP projects. McCloud's air permit was issued within 20 days, without public notice or opportunities for participation.[44]
- **Obscured project scope**: Key features of Meta's Wurldwide data center plan surprised local officials and the public—including intent to rely on a dedicated gas plant for power. Approval of local incentives and a public land sale both occurred before public disclosure of Meta as the end user.
- **Intent for future grid connection**: McCloud will start out BTM but intends to seek interconnection after a bridge period of up to five years. Meta has not committed to longer-term cost responsibility for the facility, raising concerns about ratepayer impacts and the risk of stranded assets, particularly given that the inefficiency of the chosen technology could increase fuel and operation costs by >60% over SCGTs. However, judges overseeing the case recently recommended requiring EPE to hold retail customers "harmless" for all capital and operating costs; it remains to be seen if the commission will adopt these protections.[45]
- **Tax giveaways**: Meta received exemptions from 100% of its state sales taxes and 80% property tax breaks from the City and County of El Paso for 15 and 10 years, respectively.[46,47]

# Potential community intervention points

Communities across the U.S. are currently navigating BYOP gas proposals. Potential points of engagement will vary significantly by location and project, but may include:

**Technology or configuration dependent**

- Air permits
- Climate or clean energy requirements
- Gas pipeline approvals
- Water permits or approvals
- Environmental statutes or cumulative impact laws
- Disclosure or reporting requirements

**Grid and utility commissions**

- Large load tariff
- Special contract or power purchase agreement review and approval
- Rate cases
- Energy siting

**Local approvals**

- Zoning and land use
- Other local approvals and regulations, e.g., noise, roads, stormwater, construction, etc.
- Incentives and subsidies
- Decommissioning

# Authors' Note

BYOP is only one aspect of the broader risks associated with the rapid expansion of AI data centers. This report is not intended to de-emphasize other critical (and related) harms, including water impacts, toxic pollution including PFAS, land use, economic impacts, privacy, civil rights, and environmental justice. We believe that communities have a right to meaningful participation in decisions about whether and how large energy infrastructure is developed and who it benefits, and that everyone deserves clean air and water, healthy and comfortable surroundings, a sustainable local economy, and a stable climate.

## Authors

John Bangsund, PhD, Better Data Center Project
Catherine Casomar, PhD, Better Data Center Project
Mandy DeRoche, Earthjustice
Callie Rabinovitz, Earthjustice

## Contributors

Sarah K Friedman, Better Data Center Project
Jennifer Kates, Municipal Advocacy Project
Tanya Paslawski, Elevated Engagement
Shannon Fisk, Earthjustice



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Read the full report at www.earthjustice.org/byop


For more information, contact:
info@betterdatacenterproject.com, datacenters@earthjustice.org


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www.betterdatacenterproject.com

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# Notes and Sources

[1] Capacity estimates compiled from **Cleanview**, **FracTracker**, and **Aterio** data center trackers. We note that much of the 300 GW likely won't be built by 2030; **Lawrence Berkeley National Laboratory** projects 150 GW by 2030.

[2] Peak U.S. electricity demand from the **EIA**.

[3] BYOP is commonly described as "behind the meter" or BTM generation, and though about 70% of BYOP proposals include some portion of BTM generation, the terms are not synonymous.

[4] Environmental Integrity Project, July 2026. **The Power Behind AI: Wave of Dirty Gas Power Plants Planned for Data Centers.** Global Energy Monitor, August 2026. **U.S. gas power proposals tied to data centers nearly double in six months**. Cleanview, June 2026. **Bypassing the Grid: How Data Center Developers Are Building Their Own Power Plants**.

[5] Our total gas capacity figure of 177 GW differs from EIP (143 GW) and GEM (189 GW) partly because of new announcements and canceled projects since each respective report was published and partly due to different selection criteria. For our analysis, we considered any gas project that was explicitly contracted to power one or more specific data center projects to be "BYOP"—whether they were fully islanded, behind-the-meter with potential for exports to the grid, or front-of-the-meter (FTM). For grid-connected and utility-operated projects, we looked for clear announcements of agreements or contracts between the power developers and data centers. For our full methodology, see the **full report**.

[6] In addition to note 4, see recent reports from: **PennFuture** and **Regulatory Assistance Project**.

[7] Emissions estimates in this report assume a capacity factor of 60% (meaning projects will produce 60% of their peak power on average over the year). Actual emissions will vary, but existing on-site power plants at data centers generally emit 45–75% of their permitted totals (e.g., **Vantage VA2**). See **our full report** for details on methodology and assumptions.

[8] BTM energy generation is on the customer side of the utility's "meter" and therefore serves the customer's load without passing through the meter as grid-delivered electricity. BTM resources are typically on-site, co-located, or otherwise nearby.

[9] To compare gas and renewables over the same timeframe, we only considered U.S. projects starting operations in 2024 or later. Complete dataset and methodology details are included in **our full report**. While a significant portion of renewable PPAs is virtual, and therefore not what we consider "BYOP," it is difficult to find data disaggregating physical and virtual PPAs, so we include all announced PPAs to provide a generous upper-bound estimate. Energy generation estimates account for variations in capacity factor between technologies.

[10] Based on data from **EIP**, **GEM**, **Cleanview**, and our analysis of permits. See the full data set at: **www.earthjustice.org/byop-dataset**.

[11] See note 9 above. We argue that clean BYOP capacity should be "near, new, and now". "Near" means that the capacity should be located within the same region and able to offset grid impacts of the facility. "New" means the capacity would not have otherwise been built. "Now" means the power should offset the data center's 24/7 demand, e.g., by pairing renewables with energy storage. Many PPAs are executed on projects that are already completed or under construction and hence would not satisfy the "new" component as they would have otherwise been built.

[12] Health costs are based on totals of representative annual emissions multiplied by **EPA's benefits per ton** (BPT) for $PM_{2.5}$, $NO_x$, VOC, $SO_2$, and $NH_3$. Ranges reflect BPT variation across the industrial boiler, internal

combustion engine, and electricity generating unit sectors. BPT factors are nationally averaged, and real health costs could be much higher or lower depending on regional population and meteorological factors. For our full methodology, see **our full report**.

[13] The entire U.S. electric power sector's emissions were 1,485M metric tons CO2 in 2025 (**EIA**).

[14] Based on the EPA's social cost of carbon for a 2030 emission year and 2% discount rate, converted from 2020 to 2023 dollars using **BLS CPI-U**: $271/MTCO$_2$e or $246 per short ton $CO_2$. See Table ES.1. U.S. EPA (2023). **EPA Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances**.

[15] M. Siddik, et al. (2021). "The Environmental Footprint of Data Centers in the United States." Env. Res. Lett. DOI: **10.1088/1748-9326/abfba1**.

[16] M. Cook (2026). **Thirsty Data and the Lone Star State: The Impact of Data Center Growth on Texas' Water Supply**. Houston Advanced Research Center.

[17] **State Electricity Portfolio Standards Map**. Clean Air Task Force.

[18] According to the **National Conference of State Legislatures,** "RPS requirements can apply only to investor-owned utilities (IOUs), although many states also include municipalities and electric cooperatives (Munis and Co-ops), sometimes with a lower target."

[19] See **"Winning the Race: America's AI Action Plan"** and **America's AI Action Plan After One Year: What the Administration Has Done, and What Comes Next**.

[20] Environmental Protection Network; Safer, Not Sicker campaign (September 2026). **The Hidden Health Costs of AI Data Centers**: More Power, More Pollution, Fewer Federal Protections.

[21] There is a growing trend of legislation to remove exemptions generally, while other states, like **Minnesota**, have enacted legislation removing the exemption for energy purchased for a facility.

[22] Good Jobs First (June 2026). **Even Cloudier with a Greater Loss of Spending Control: How Data Center Tax Abatements Undermine Public Budgets**.

[23] S. Wright, et al. (Jan. 2024). **Tricks and Traps of Data Center State Tax Incentives**. Tax Notes.

[24] In Texas, **Energy Forge One received $228 million in school property tax breaks through the Jobs, Energy, Technology and Innovation (JETI) program** for a co-located gas facility.

[25] In New Mexico, **Project Jupiter received an integrated property tax package covering both the AI campus and its fossil microgrid**.

[26] States with enacted BYOP-focused laws include: West Virginia, New Hampshire, Ohio, Utah, Oklahoma, Tennessee, New Mexico, Nebraska, Maryland, New Jersey, and Delaware. Though they may have significant impacts on how BYOP unfolds, we exclude from this count policies that primarily address ratepayer cost allocation or other issues that do not explicitly focus on BYOP.

[27] Examples include West Virginia's "Microgrid Law", New Hampshire's HB 672, and Ohio's HB 15. Oklahoma's SB 480 requires gas. New Mexico's Microgrid Law HB93 exempts BYOP microgrids from the state's renewable portfolio standard which sets a 50% renewables requirement by 2030, while creating a longer-term requirement of "net-zero-carbon-resources" by 2045.

[28] From 2021–2022, the coal plant emitted 220 tpy PM2.5 and 11 tpy VOC. At a 60% capacity factor, Homer City is expected to emit 500 tpy PM2.5 and 200 tpy VOC. The coal plant had higher CO, NOx, and SO2 emissions.

[29] The PORTS campus is currently slated for 800 MW to 2 GW of power in the first phase with expansions planned up to 9.2 GW. Parts of this capacity are intended to serve the grid. See OPSB Case No. **26-0746-EL-BGN**.

[30] **PowerConneX II** and III use Wärtsilä 18V50SG engines which have slightly higher efficiency at ~50%. Amazon's **73 MW fuel cell project in Hilliard** will use Bloom fuel cells with 53–65% efficiency. The grid-connected PORTS technology campus plans to use a combination of CCGT and SCGT.

[31] Ohio's PM2.5 from **eGRID 2021** estimates: 4,756 tons. NOx from **eGRID 2023** data: 28,608 tons (unadjusted).

[32] Health costs estimated with EPA's COBRA, 2023 dollars. See methodology in **our full report**.

[33] Assumes 60% capacity factor. PORTS will use CCGT and SCGT, though the mix has not been disclosed, so its emissions were estimated for an average intensity of 900 lb $CO_2$/MWh.

[34] Under **O.R.C. § 122.175(4)(b)**, these sales and use tax exemptions apply to equipment used to "generate, transform, transmit, distribute, or manage electricity [ ... ] to be used in conducting a computer data center business."

[35] These and other incentive programs grew to cost the state much as **$1.6 b/yr** before a recent pause on new tax abatement approvals.

[36] These projects are Title V major sources, but by falling under major New Source Review (NSR) thresholds they avoid Prevention of Significant Deterioration (PSD) review, which requires best available control technology and air quality modeling that considers cumulative impacts with other nearby emissions sources.

[37] D. Mendoza-Moyers (March 2026). **El Paso Electric filings detail power plant impact behind Meta's $10 billion data center**. El Paso Matters. See also Texas PUC Docket No. **59076**.

[38] El Paso Electric Company's Application for CCN before Public Utility Commission of Texas, Docket No. **59076** (December 8, 2025).

[39] M. Pskowski (Jan. 2026). **Meta Wants Data Center in Sunny El Paso to Rely on Natural Gas**. Inside Climate News. In a **contract with the city**, it was noted Meta "is exploring (but shall not be obligated to pursue) options to use alternative energy sources, including solar panels, geothermal cooling and wind energy".

[40] As of August 2026, Meta plans to cover these additional power needs through the grid. However, EPE's current service capacity is just 2 GW for all customers, and it is unclear how this demand will be met.

[41] "This CCN application [is addressing] a near-term capacity need - 220 MW on essentially a 24/7 basis beginning in mid-2027 [...] the Enchanted Rock built resource is the only generation capable of meeting these requirements." From: "Rebuttal Testimony of James Schichtl on Behalf of EPE Company", 6/23/2026. PUCT Docket No. **59076-128**.

[42] Ibid. p. 10: "a combined-cycle gas unit could not be designed, approved, and constructed in the timeframe required by Wurldwide".

[43] El Paso Electric. **2025 Sustainability Report**. In 2025, EPE generated 10.8 GWh at 0.2412 short ton $CO_2$e/MWh (483 lb/MWh), corresponding to 2.6 million tons of $CO_2$e.

[44] Standard air permits were granted in October 2025. A description of the permitting process and a copy of the issued air permit are included with **EPE's PUC filings**. Also see **Trump's Vision for A.I. Dominance Comes With Major Air Pollution, NYT, 2026**.

[45] Proposal for Decision at pp. 37 and 58, PUCT Docket No. **59076-176**. Sept. 23, 2026.

[46] Texas Tribune (April 8, 2026). **Texas is giving data centers more than $1 billion in tax breaks each year**.

[47] City and County tax abatement agreements available from **Sembrando Esperanza**.