The Power Behind AI

Wave of Dirty Gas Power Plants Planned for Data Centers

ENVIRONMENTAL INTEGRITY PROJECT

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The data center industry is increasingly turning to natural gas-fired power plants for the electricity required for artificial intelligence, despite the large amount of greenhouse gas pollution produced by this fossil fuel. Photo by iStock.

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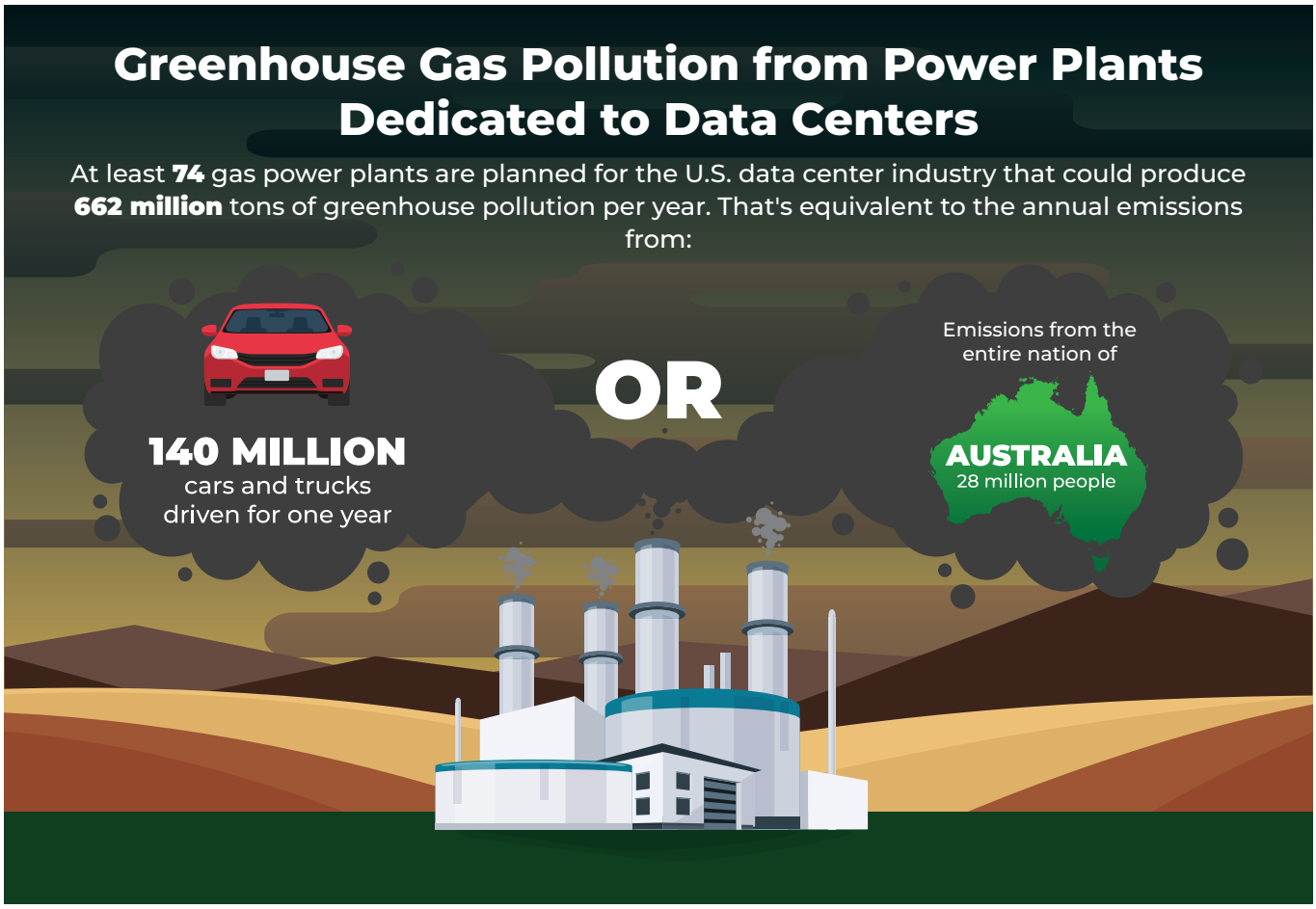
EXECUTIVE SUMMARY

At least 74 natural gas-fired power plants are planned across the U.S. to provide energy for the rapidly-growing data center industry.[1] These proposed gas plants, which would be dedicated to serving data centers, are expected to generate 143 gigawatts of electricity – enough to power the state of California nearly three times over.[2] The plants would also release nearly 662 million tons per year of greenhouse gas pollution, which would have the climate-warming impact of 140 million cars and trucks driving for a year or the emissions from the entire nation of Australia.[3] Beyond greenhouse gases, this wave of power plants for data centers could also release 159,142 tons of health-harming air pollutants, including 44,281 tons of nitrogen oxides that contribute to smog and lung damage and 32,684 tons of fine particulate matter, which can trigger heart and asthma attacks.[4]

And this is just the tip of the iceberg. This pollution is a small fraction of the likely environmental impact of the booming artificial intelligence (AI) industry and affiliated data centers. These 74 planned gas plants, including 71 new power plants and three plant expansions,[5] would be connected directly to data centers — so-called "behind-the-meter" power plants. These plants are designed to provide their electricity primarily to data centers and not to compete with local households and businesses on regional power grids. More power plants are being planned across the U.S. that will indirectly serve the growing data center industry along with other consumers on the grid, which will likely drive up electricity prices for nearby residents.[6] Beyond the air and climate impacts from the gas-fired power plants discussed in this report, data centers also have diesel backup generators that release air



pollution. The centers are also large consumers of water that are often built in water-stressed regions. In short, the economic and environmental ripple effects of the growing data center industry are far broader than what is discussed in this report.

The wave of proposed data center projects is triggering protests in local communities and legislative efforts at the state and local level, including proposed moratoriums in a half-dozen states and bills in Congress that would put a pause on the industry.[7] At the same time, President Trump's Department of Justice is threatening to sue states that attempt to regulate data center growth[8] and Trump's Environmental Protection Agency is actively promoting the AI industry.[9] Because soaring electricity rates caused by data centers are controversial, in March, President Trump called on data center developers to build power plants dedicated to their own projects as part of his "Ratepayer Protection Pledge."[10] The pledge is voluntary, so its impact is unclear. But even before the pledge, a growing number of data center companies started announcing that they would build their own dedicated or "behind-the-meter" power plants, many of which would be fueled by natural gas.

An aerial view of a data center being constructed inside "Data Center Alley" in Ashburn, Virginia. Photo by iStock.

Fossil fuels should not power a technology of the future. While additional data centers may be needed to accommodate shifts in technology, they should be powered by clean energy, including solar farms and wind turbines with ample battery storage systems.[11] At a minimum, developers of data centers and their gas power plants should be required to use modern and efficient technology that minimizes air pollution. For example, combined-cycle natural gas turbines that capture waste heat and recycle it are more efficient and less polluting than simple-cycle turbines.[12] Companies should also be required to implement technologies that minimize water use for cooling and power generation, and these facilities should not be constructed in areas struggling with water shortages.

Moreover, governments at all levels must be transparent about the review and approval process for data centers and related power plants so that communities have a meaningful say in decisions that impact their health and wellbeing. Examples of communities fighting data centers and their power plants because of pollution and quality-of-life impacts in Pennsylvania, Texas, West Virginia, Tennessee, and Mississippi can be found on pages 19 to 26 of this report.

Skepticism about the proposed wave of data centers and the dirty gas plants that will power them is warranted because of their range of potential impacts on the economy, environment, and public health. There is no justification for the government, at any level, to fast-track approvals of these projects or keep negotiations with industry secret. Transparency and accountability are necessary to prevent harm to local communities – including air pollution and excessive water consumption – and limit the potential damage of poorly-planned data centers on the climate, economy, and social well-being of communities across the U.S. A thoughtful, open, and deliberative review process should not be rushed or abandoned for data centers or their power plants in pursuit of AI supremacy or because of false claims from the Trump Administration about an "energy emergency" that creates a pretext for an avalanche of dirty power plants.[13]

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CHAPTER 1

Big Picture: The Data Center Boom

Power demand for the booming data center industry could hit 106 gigawatts by 2035 — enough electricity to power about 100 million homes. Photo by iStock.

Big Picture: The Data Center Boom

Data centers are large, warehouse-like buildings where computer hardware that processes digital information is stored. According to a December 2025 analysis, nearly 3,000 new data centers are under construction or planned across the U.S. — adding to the more than 4,000 already in operation.[14] Some data centers occupy more than a million square feet, or more land than 17 football fields.[15]

While data centers have been around for decades, the rapid growth in the industry in recent years has been driven by the rise in artificial intelligence (AI) technology, which requires massive amounts of computing power to operate. The rise of ChatGPT in 2022 ignited a race for tech companies intent on grabbing AI market share, and has led them to invest hundreds of billions of dollars in data centers and AI computing chips.[16]

A December 2025 BloombergNEF report found that data center power demand could hit 106 gigawatts by 2035, a 36 percent jump from the previous outlook, published just seven months prior.[17] For comparison, one gigawatt of electricity can power about 750,000 to one million homes, or a medium-sized city.[18] According to the report, data centers are getting larger, which is causing them to be sited farther away from urban areas. Public opinion on data centers is also souring.[19] A 2025 University of Michigan report on the impacts of data centers on their local communities found three possible reasons for the unpopularity of these projects: Data centers can lead to higher electricity prices for nearby consumers, they impose significant costs on the local environment including air and water pollution, and they don't deliver on promises of stable, high-paying jobs.[20] According to the report, while data center construction creates jobs, once the facilities are completed, they require relatively few employees to operate and the jobs they do create locally are typically short-term and low-wage positions such as security, maintenance, and janitorial work.

Between March 2024 and March 2025, 16 data center projects were delayed or blocked by a growing wave of local, bipartisan backlash.[21] Both Democrats and Republicans are responding to the increasing negativity associated with data centers. The Trump Administration in March 2026 announced a "Ratepayer Protection Pledge" asking technology companies to build their own power plants for their data centers or otherwise cover the costs of their

Data centers can drive up local electricity rates while mostly creating short-term and low-wage jobs. Photo by iStock.

energy use so it is not passed on to consumers.[22] Experts are skeptical that the pledge, which is nonbinding and lacks any enforcement mechanisms, will do much to prevent rising consumer electricity costs.[23] Behind-the-meter power plants, while they would not compete on the electric grid, would compete for a share of the natural gas supply and available natural gas turbines, driving costs up for consumers and other industrial users.[24]

Sen. Bernie Sanders (I-VT) and Rep. Alexandria Ocasio-Cortez (D-NY) in March 2026 introduced legislation proposing a moratorium on all new data center construction nationwide until AI safeguards, including worker and environmental protections, are in place.[25] At least nine states, including Vermont, Wisconsin, Minnesota, and South Carolina are considering legislation to slow, delay, or limit data center construction.[26] Maine Governor Janet Mills recently vetoed a proposed moratorium in her state.[27] Locally, the cities of Monterey Park, California, and Ashville, Ohio, among other locations, have passed temporary bans or pauses on new data centers.[28]

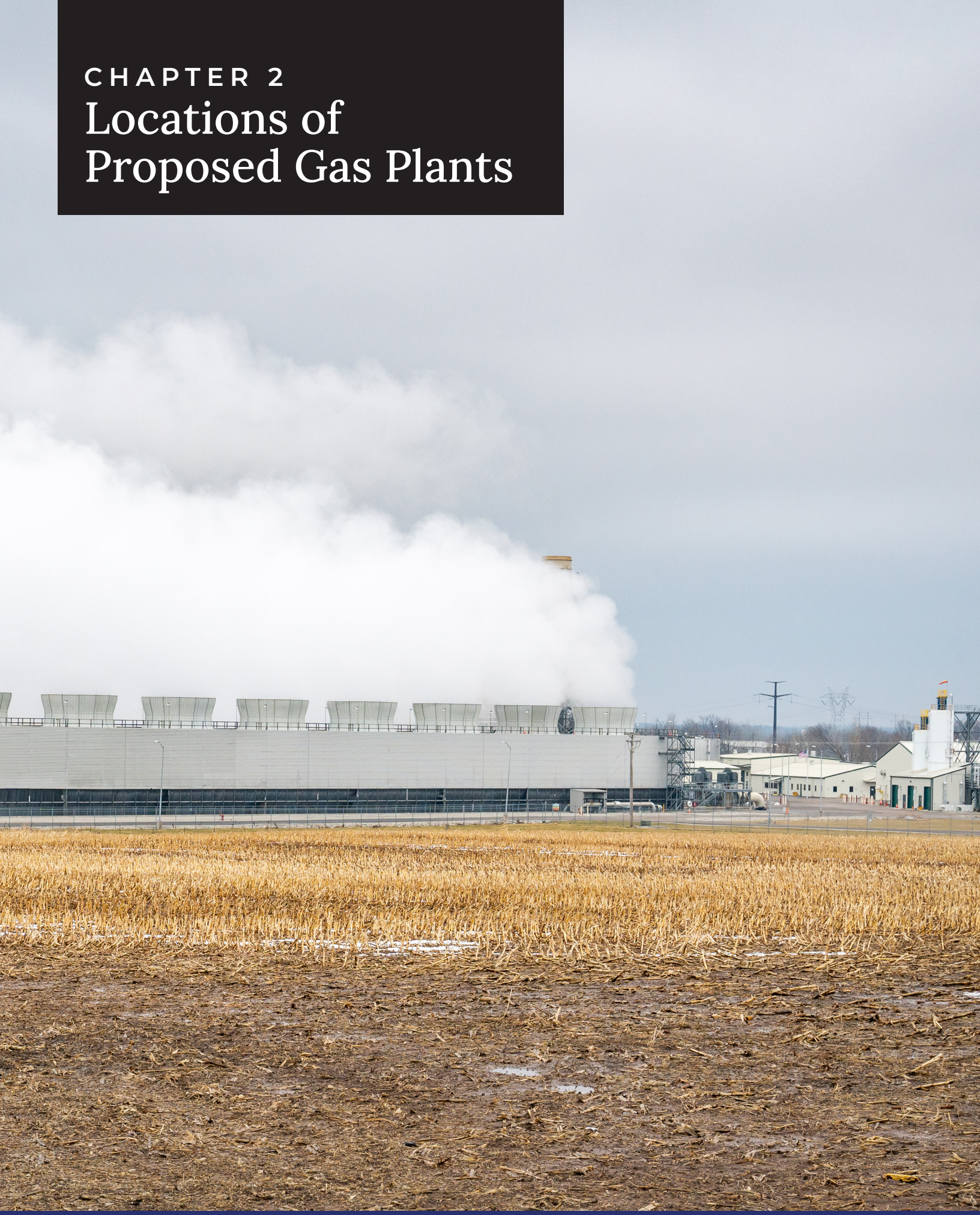
By 2028, data centers could consume up to 12% of total electricity in the United States, up from 4.4 percent in 2023.

By 2028, data centers could consume up to 12 percent of total electricity in the United States, up from 4.4 percent in 2023.[29] All of this growth has left tech and data center industries scrambling to locate new power sources. About 40 percent of power for data centers came from gas power plants in 2024, with approximately 24 percent from wind and solar, 20 percent from nuclear, and 15 percent from coal.[30]

A recent report from Global Energy Monitor (GEM), a San Francisco–based nonprofit that tracks oil and gas developments, found that more than a third of new gas power demand in the last two years across the country is explicitly linked to data centers. According to the analysis, the U.S. nearly tripled the amount of gas-fired power capacity in development in 2025, totaling almost 252 gigawatts, allowing it to surpass China as the world's top gas plant developer.[31]

CHAPTER 2

Locations of Proposed Gas Plants



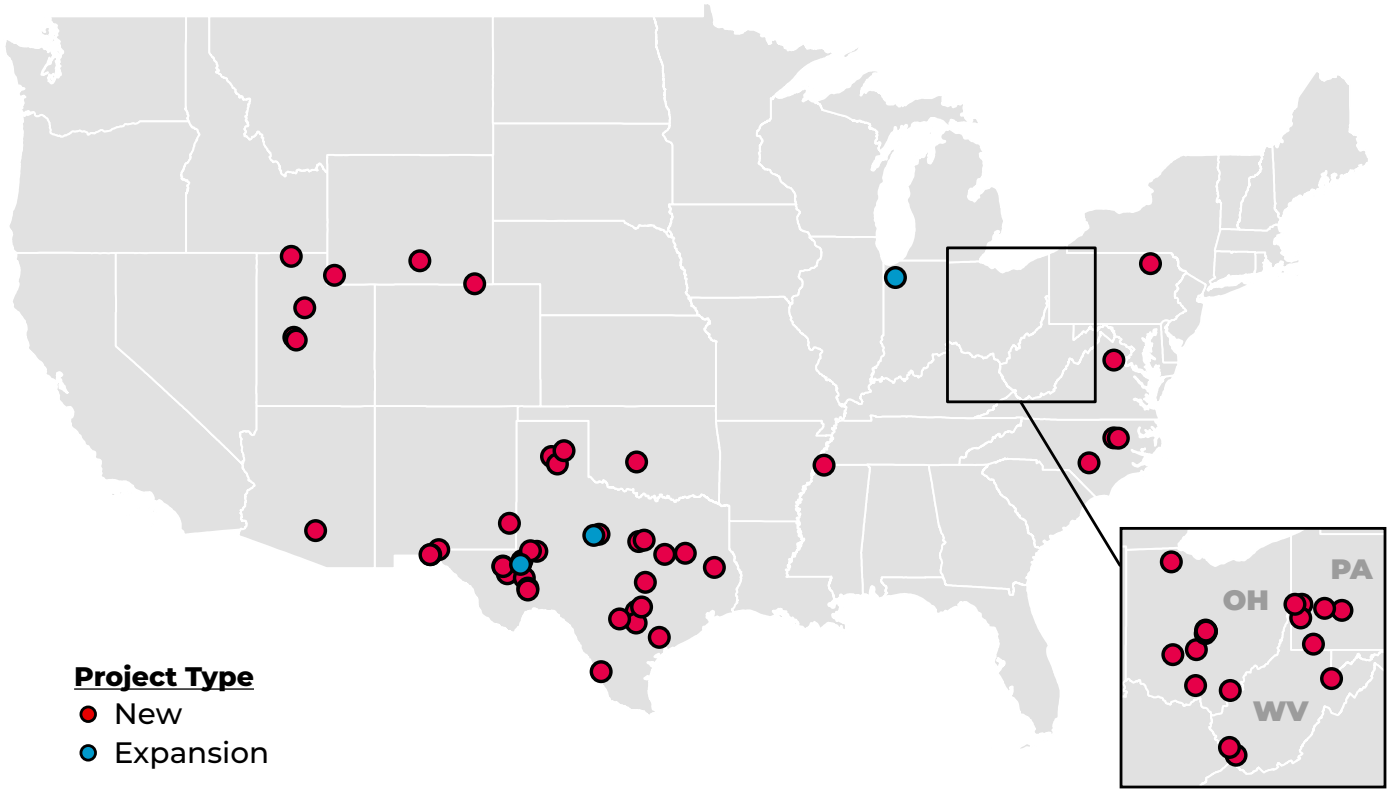
At least 74 natural gas-fired power plants are planned that would be dedicated to new data centers across the U.S., with the largest number proposed for Texas, Ohio, Pennsylvania, West Virginia, and Wyoming. Photo by Chad Davis, Flickr.

Locations of Proposed Gas Plants

The data center boom has come to nearly every part of the United States, but the projects are unevenly distributed. An April 2026 analysis from Pew Research found that Virginia and Texas lead the country in sheer numbers of data centers; they are already home to 398 and 296 operating data centers, respectively.[32] In the coming years, states in the Midwest and South are slated to see the largest growth in data centers. The same Pew Research analysis found that the South has 754 planned data centers, a 62 percent increase over existing data centers, while the Midwest could add 419 data centers, a 64 percent increase.[33]

A similar trend is emerging for gas power plants that would serve data centers. Seventy four proposed power plants dedicated to data centers have been publicly announced, including 71 new plants and three expansions of existing power plants. Nearly half of these 74 plants – 32 – would be located in Texas. Many proposed power plants would be in the Ohio River Valley, with 10 in Ohio, 6 in western Pennsylvania, and 4 in West Virginia. Some developers have turned their attention farther west, with 4 of the proposed plants in Wyoming.

Map 1: Proposed Gas Plants Dedicated to Data Centers



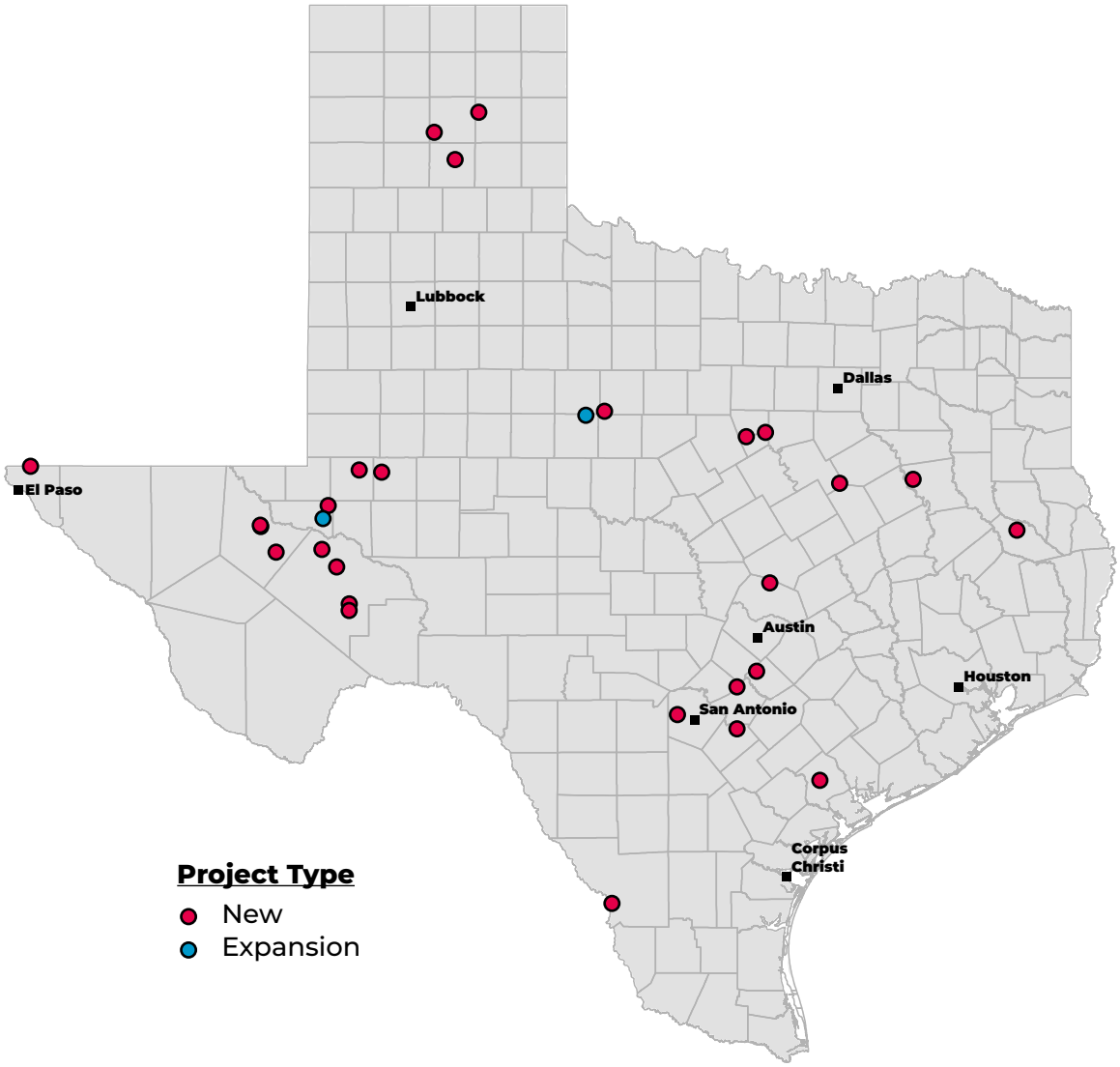
Note: Location information was unavailable for seven proposed power plants and are not displayed on the map above. Some power plants are closely located and may not be visible. See Appendix C for the full list of known projects.

Developers consider several factors when choosing where to build a new data center with dedicated gas power. Chief among them are land availability, plentiful natural gas supply, and favorable regulatory environments.[34] Wyoming and West Virginia are among the least populated states and have large areas available for development. More populous states like Texas, Ohio, and Pennsylvania include vast rural and exurban areas with relatively inexpensive land. These five states are also major natural gas producers. According to the most recent data available from the Energy Information Administration, these states routinely account for over 60 percent of all natural gas

produced for consumers in the United States.[35] Thus, these states also already have extensive infrastructure for extracting, processing, and transporting natural gas.

These five states also share regulatory environments designed to attract investment from data center developers. Wyoming, West Virginia, Ohio, Pennsylvania, and Texas all offer tax breaks to data center developers. All these states offer complete or partial sales tax exemptions for some aspects of a data center.[36] West Virginia also offers data centers a property tax abatement that reduces the assessed value of a data center to its "salvage value."[37] Some states even offer incentives for developers looking to build new gas power plants, even if the plant would be dedicated to serving a data center. For instance, the Texas Energy Fund program provides grants and loans to new gas-fired power plants, including ones serving data centers, as long as no more than 50 percent of the plant's capacity is dedicated to the data center.[38] Ohio's sales tax exemption for data centers can also extend to any property used to generate electricity for those centers, including gas power plants.[39] In May 2026, Ohio Governor Mike DeWine paused consideration of new data center tax exemption requests, though it's unclear if any changes will be made to these tax breaks.[40]

Map 2: Proposed Gas Plants Dedicated to Data Centers in Texas



Note: Location information was unavailable for three proposed power plants in Texas and are not displayed on the map above. Some power plants are closely located and may not be visible. See Appendix C for the full list of known projects.

CHAPTER 3

Environmental Impacts and Permitting

The gas fired power plants planned for the data center industry that are described in this report could release 662 million tons of greenhouse gases per year. That is more climate warming pollution than the state of California emitted in 2023, or the nations of Australia or France that year. Photo by Chad Davis, Flickr.

Environmental Impacts and Permitting

Power plants and associated data centers must obtain approvals and permits from a variety of local, state, or federal government bodies, depending on the project and its location, before they can build and begin operating. One of the approvals needed is a Clean Air Act construction permit, which authorizes construction of air emission sources and limits the amount of air pollution a plant can release.

The growth in gas power plants for data centers could mean an increase in demand for natural gas of 6 billion cubic feet per day by 2030, which would also mean more pipelines, processing plants, leaks and greenhouse gas pollution.
Photo by Arbyreed, Flickr.

Clean Air Act construction permits include an early estimate of the amount of pollution a plant could emit each year once the plant is operating. This emission estimate, called the potential to emit, assumes emission sources would operate at maximum allowable capacity with federally-required pollution controls.[41] The Environmental Integrity Project (EIP) examined the permit applications, draft permits, and final permits issued to power plants that would directly serve data centers to determine how much pollution they could emit. In the overwhelming majority of cases, emissions from permits do not include emissions from backup generators at data centers, which can also be large sources of emissions. Permitted emissions can be higher or lower than actual emissions reported from year to year. Ideally, companies keep emissions below their permit limits and comply with the law. However, this is not always the case and some facilities exceed their permitted limits. Additionally, some companies manipulate or short-circuit the permit review process to avoid the most stringent air pollution control requirements and deprive communities of their right to participate in public hearings and express concerns about major sources of pollution in their neighborhoods.[42] See Appendix A for a discussion of this problem and the permit status for all projects identified by EIP.

For plants that haven't applied for permits yet, we estimated emissions from their natural gas-fired turbine and engines. These estimates do not include backup generators at data centers or other smaller sources of emissions at the power plant, like storage tanks. See Appendix B for our methodology. Appendix C includes a list of all behind-the-meter gas plants identified by EIP along with each plant's potential emissions.

Climate Impacts

In total the 74 proposed gas power plants that would serve data centers could emit over 662 million tons of greenhouse gases per year. This is more greenhouse gases than the entire state of California emitted in all of 2023, which was 397 million tons of greenhouse gases.[43] It's also more climate-warming pollution than Australia or France released that year.[44] Put another way, the potential greenhouse gas emissions from gas power plants dedicated to data centers would be equivalent to the amount of greenhouse gases emitted by over 140 million cars and trucks operating for a year.[45]

These emissions estimates do not account for the associated pollution increase that would come from any new natural gas infrastructure (such as pipelines) required to provide adequate natural gas for all of these power plants or the data centers themselves. A 2024 article from S&P Global estimated that additional electricity demand from data centers could increase natural gas demand by up to six billion cubic feet per day by 2030.[46, 47] Such a steep increase in demand for natural gas would mean additional natural gas pipelines, processing plants, and storage

facilities, which would mean more emissions from operation of these facilities and leaks. Some of the largest gas power plants proposed for data centers could emit nearly as much greenhouse gases as the largest cities in the United States.

Table 1. Planned Data Center Gas Plants with Largest Potential Greenhouse Gas Emissions

Facility	State	Potential Greenhouse Gas Emissions (tons/yr)
Portsmouth Powered Land Project	OH	53,387,753*
Monarch Compute Campus Power Plant	WV	45,880,400*
Fermi America Project Matador	TX	40,322,831
Stratos Project/Wonder Valley	UT	38,651,880*
GW Ranch Energy Center	TX	33,204,964
Texas Power Generation Hub (Nextera-Comstock Power Station)	TX	30,175,686*
Chevron AI Data Center Project	TBD	29,015,083*
FO Permian Partners Data Center Complex	TX	29,015,083*
Nexus Data Center Hubbard Power Plant	TX	22,746,568
Shippingport Power Station (Formerly Bruce Mansfield Power Plant)	PA	21,128,783*

Sources: The greenhouse gas estimates in the table are based on permit documents, except for the numbers marked with an asterisk (*), which are based on EIP estimates.

To put these greenhouse gas emissions totals in perspective, New York City in 2024 released about 48 million tons of greenhouse gases from all of its energy use, transportation, and waste generation and processing.[48] In comparison, a single power plant planned for a data center in Ohio, the Portsmouth Powered Land Project, could emit 53 million tons of greenhouse gases per year, more than all of New York City.[49] In West Virginia, the Monarch Compute Campus Power Plant could release 46 million tons of greenhouse gas pollution, almost as much as the Big Apple. And in Texas, Fermi America's Project Matador, the gas-fired generator planned for the proposed President Donald J. Trump Advanced Energy and Intelligence Campus, could emit more than 40 million tons of greenhouse gases per year.

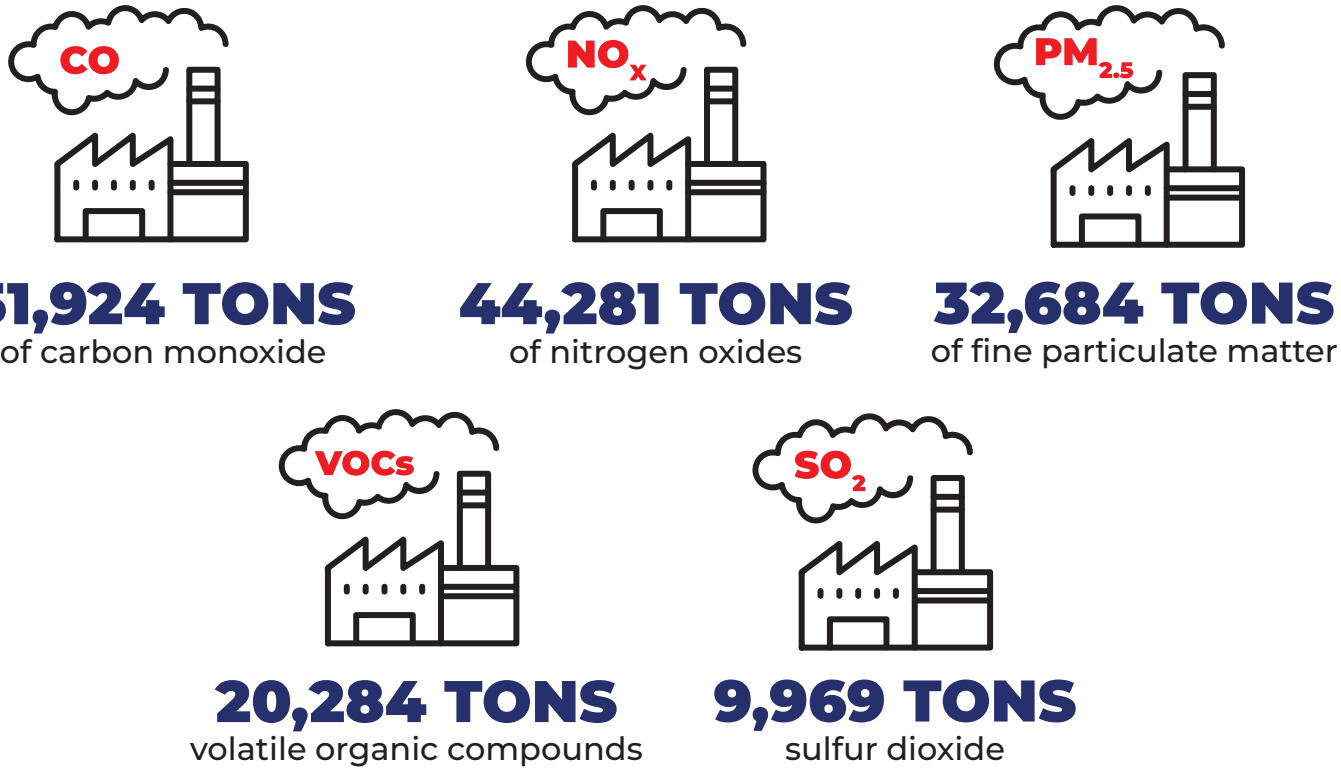
The Portsmouth Powered Land Project is a proposed gas power plant for a data center that would be located in southern Ohio at the site of a now-closed uranium enrichment plant, shown here. Photo of the Portsmouth Gaseous Diffusion Plant by the U.S. Department of Energy, Flickr.

Health-Damaging Air Pollutants

On top of planet-warming greenhouse gas emissions, these gas-fired power plants could emit huge amounts of other air pollutants that contribute to poor air quality and can damage people's health. Gas plants emit what are classified by EPA as "criteria" pollutants. These are a family of air pollutants and precursors that are regulated because of their established impacts on public health and the environment.[50] They include particulate matter, nitrogen oxides, sulfur dioxide, carbon monoxide, and volatile organic compounds.

- **Particulate matter (PM)**, commonly referred to as soot, is a mixture of tiny solid particles and liquid droplets that can be inhaled deep into the lungs and bloodstream.
- **Fine particulate matter ($PM_{2.5}$)**, which is less than 2.5 micrometers in diameter, is particularly dangerous. Long-term exposure of this pollutant has been linked to higher risks of lung cancer, heart attacks, strokes, and neurological impairments.[51]
- **Nitrogen oxides (NO_x)** can harm the respiratory system and react with other chemicals in the air to produce ground-level ozone — a component of smog — and particulate matter.[52, 53]
- **Sulfur dioxide (SO_2)** can irritate the respiratory system and reduce lung function.[54]
- **Carbon monoxide (CO)**, with regular exposure, can cause permanent mental or physical damage at low levels and death at very high levels.[55]
- **Volatile organic compounds (VOCs)**, a group of chemical compounds that evaporate easily at room temperature, can impair breathing and cause nausea. With long-term exposure, some VOCs can cause cancer or damage the central nervous system.[56]

Using information from permit documents and our own estimates, we found that the 74 proposed gas power plants that would serve data centers could emit 159,142 tons per year of "criteria" air pollutants and precursors, including:



Some of the proposed plants would be in areas that already have unsafe levels of ground-level ozone or smog or would be located very close to these areas. Four proposed plants would be located in areas that are not attaining air quality standards for ground-level ozone: the VoltaGrid SAT 2 Power Plant in San Antonio, Texas; the McCloud Generation Facility north of El Paso, Texas; the Project Jupiter East Microgrid in New Mexico; and the Eagle Mountain Power Plant (Aquila Project) in Utah. Three more plants would be within 10 miles of these areas with unhealthy levels of ozone air pollution: Project Jupiter West Microgrid in New Mexico; Pacifico Ft. Spunky Power Plant in Texas; and the BFC Power and Cheyenne Power Hub in Wyoming.

Table 2. Proposed Gas Plants Dedicated to Data Centers with the Largest Potential Emissions of Health-Damaging Air Pollutants (tons per year)

Facility	State	Fine Particulate Matter ($PM_{2.5}$)	Nitrogen Oxides (NO_x)	Volatile Organic Compounds (VOCs)	Sulfur Dioxide (SO_2)	Carbon Monoxide (CO)
Portsmouth Powered Land Project	OH	2,843*	3,221*	1,543*	844*	3,921*
GW Ranch Energy Center	TX	991	2,830	838	398	5,955
Monarch Compute Campus Power Plant	WV	1,893*	2,606*	1,907*	598*	3,601*
Stratos Project/Wonder Valley	UT	2,348*	2,660*	1,275*	697*	3,239*
Fermi America Project Matador	TX	2,024	3,590	992	483	2,760
Texas Power Generation Hub (Nextera-Comstock Power Station)	TX	1,607*	1,820*	872*	477*	2,216*
Chevron AI Data Center Project	TBD	1,545*	1,750*	839*	459*	2,131*
FO Permian Partners Data Center Complex	TX	1,545*	1,750*	839*	459*	2,131*
Nexus Data Center Hubbard Power Plant	TX	1,298	1,550	509	264	2,305
Shippingport Power Station (Formerly Bruce Mansfield Power Plant)	PA	1,125*	1,275*	611*	334*	1,552*

Sources: The greenhouse gas estimates in the table are based on permit documents, except for the numbers marked with an asterisk (*), which are based on EIP estimates.

Impact on Vulnerable Communities

An analysis of the demographic and health profiles of the communities surrounding these proposed gas power plants revealed that many already suffer from poor health. About 89 percent of the proposed plants with known locations and available life expectancy data, 62 of 70, are planned or under construction in counties where life expectancy is already below the U.S. average of 77.1 years.[57] Appendix C contains a link to a spreadsheet with demographic statistics for each plant.

American life expectancies tend to be shorter in areas with higher rates of chronic disease, poverty, and drug use, and in areas with greater racial disparities, among other factors.[58] In some places where these projects are proposed, the gap is huge. For example, the life expectancy in Mingo County, West Virginia, is 11 years lower than the national average. In several counties in Texas, North Carolina, and Wyoming where gas plants are planned for data centers, the life expectancy is five to eight years below the national average. On average, life expectancy where these projects are proposed is two to three years lower than the U.S. average. Only eight of the 70 plants with known locations are located in counties where life expectancy exceeds the national average.

Moreover, many of these power plants would be located near vulnerable populations. At least 188 schools are located within three miles of proposed gas power plants dedicated to data centers, risking the health of children and adolescents who are particularly vulnerable to even short-term exposure to air pollutants.[59] Forty percent of

the population living within three miles of one of 67 proposed gas plants are in low-income households (223,489 of 562,582 people).[60] It is well established that low-income populations experience worse health and more premature death.[61] Saddling these communities with pollution from new gas power plants could worsen health disparities and perpetuate environmental and social injustice.

Water Consumption

Data centers can use up to
5 million
gallons of water a day. But about
66%
of data centers are planned or built in water-stressed regions.

As the data center boom grows, so do concerns about the amount of water data centers and their power plants consume. Estimates of overall U.S. data center water use range from about 160 billion to 228 billion gallons per year, or about 450 million to 625 million gallons each day.[62] Large facilities, often used for AI, can use up to five million gallons of water per day.[63]

The infrastructure needed to support data centers also need water. Studies of data centers connected to the electricity grid have found that power plants use between 75 to 92 percent of all the water needed to keep data centers running.[64] Many data centers rely on gas-fired power plants, some of which turn water into steam to drive turbines, which generate electricity.[65] Some plants also use water for cooling. Gas-fired power plants using "combined-cycle" generation (which combine gas and steam-powered turbines) require an average of about 2,800 gallons of water per megawatt hour.[66] At least sixteen of the power plants identified in this report plan to use combined-cycle generating technology, with an estimated generating capacity of 40,896 megawatts of power. If they produce this much electricity, and operate around the clock, they could need an estimated 2.75 billion gallons of water every day, or about the amount that would fill 4,168 Olympic swimming pools.[67] Some of this water would be lost to evaporation and some may need to be treated before being released back into the environment.[68] Other power plants identified in this report would not use combined-cycle generation, and so would not need water to run their turbines. Some power plants also plan to use air cooling instead of older technology that uses water.

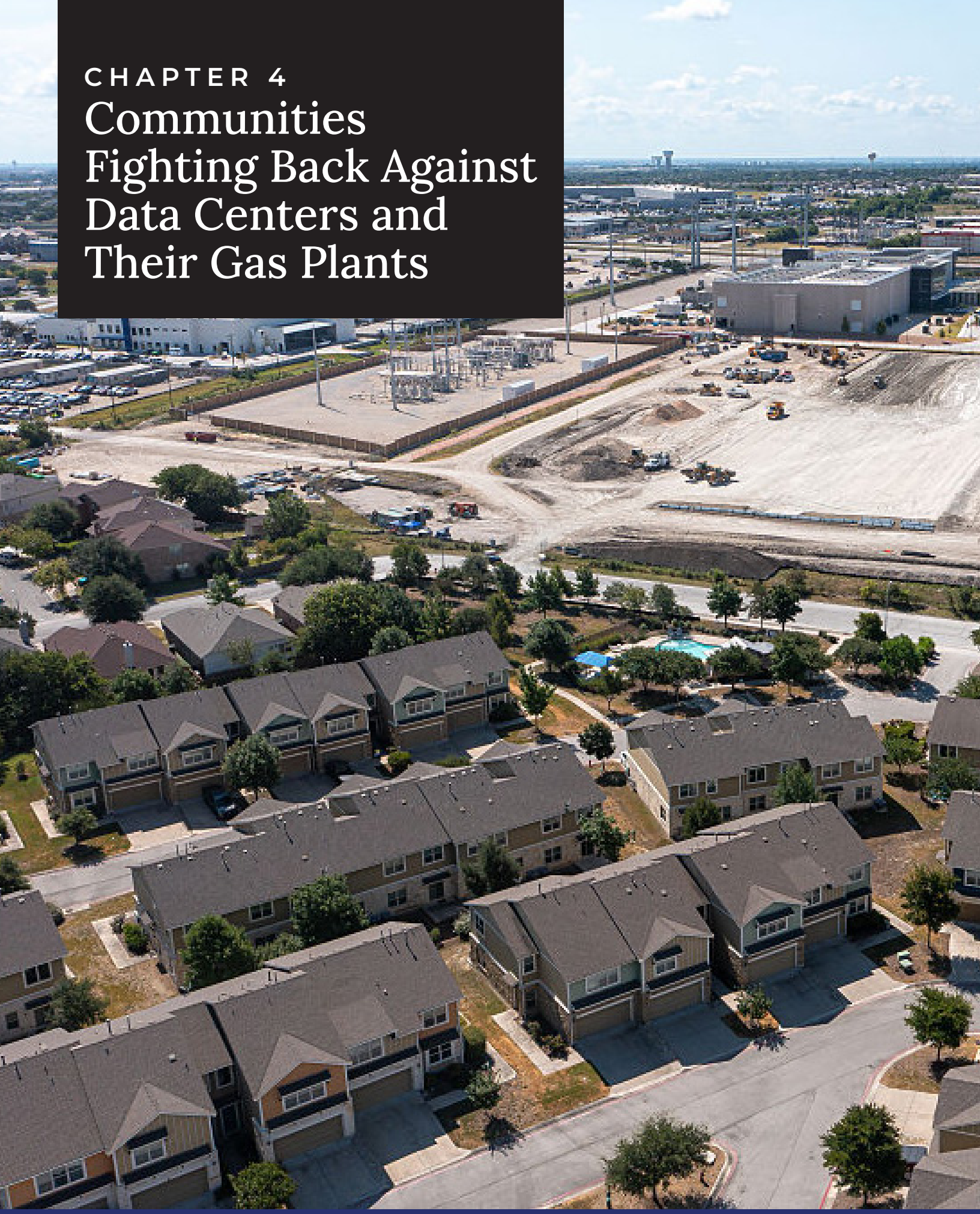
In addition, many data centers themselves use water to cool their hard drives, computer chips, and electrical systems, which can overheat.[69] Several methods are employed to cool data center equipment, and the method often varies depending on size of the facility and ambient temperature. The most common method to cool data centers is air cooling, which involves pushing cold air through racks of servers to expel hot air.[70] Despite the name, in many cases, air cooling does involve water because it is often paired with water-intensive cooling systems, like evaporative cooling.[71] Evaporative cooling is effective at reducing temperatures but uses large amounts of water.[72] Other data centers use water chillers or refrigerants.[73] Air cooling systems that avoid using water do not cool as efficiently and often consume more electricity.[74]

Data centers and their power systems often obtain water from local sources, either from the ground, from rivers and streams and other waterways, or from wastewater treatment plants.[75] Using treated wastewater that is non-potable conserves drinking water, but one study estimated that more than half of the water used in data centers comes from potable water supplies.[76]

While the total amount of water used by data centers in the U.S. is a fraction of one percent of the nation's total water consumption, the industry can put significant pressure on local water supplies in drought-prone areas.[77] Since 2022, two-thirds of U.S. data centers have been built or planned in water-stressed regions.[78] This suggests that water conservation and better location planning are important to protect public water supplies from this thirsty industry.

CHAPTER 4

Communities Fighting Back Against Data Centers and Their Gas Plants



In Round Rock, Texas, construction on the Sabey Data Center next to a residential neighborhood. Photo by Aaron E. Martinez/The Austin American-Statesman via Getty Images.

PENNSYLVANIA

One of America's Largest Gas Plants Proposed for 3,200-Acre Data Campus

The smokestacks of the former coal-fired Homer City Generating Station fall in a demolition to make way for a new natural gas-fired power plant in Western Pennsylvania. Photo by Gene J. Puskar, AP Photo.

Only weeks after the smokestacks and cooling towers that served Pennsylvania's largest coal plant were torn down in March 2025, the planned construction of an enormous gas-fired power plant was announced for the same site, about an hour east of Pittsburgh in Indiana County.

The bulk of the Homer City Generating Station's over 4 gigawatt capacity — enough to power over three million homes — will power a nearby 3,200-acre data center campus.[79]

In the fall, several environmental groups submitted public comments to the Pennsylvania Department of Environmental Protection asking it to reconsider its approval of the project. They argued that nearby communities would suffer the consequences of increased air pollution, noise, odors, and tainted drinking water while benefitting little economically from the plant.[80]

In December, three of the groups — Clean Air Council, PennFuture, and Sierra Club — appealed the state-issued air quality permit to the Pennsylvania Environmental Hearing Board.[81] According to the groups, the plant would emit more greenhouse gases each year than all the cars on Pennsylvania's roads. The groups are also challenging errors in the plan approval, including violations of the Clean Air Act, Pennsylvania's Environmental Rights Amendment, and the state's Environmental Justice Policy.[82]

Alex Bomstein, Executive Director of the Pennsylvania-based Clean Air Council, said it's a shame that Homer City is

going from hosting a very large and heavily polluting coal-fired power plant to being the proposed site of one of the largest gas-fired power plants in the country.[83]

The former coal plant reported releasing 1.3 million tons of greenhouse gases in 2023.[84] Although the developers claim the new gas-fired plant will release about half that amount, it will still mean large quantities of climate-warming pollution, especially compared to clean energy sources that could replace it, like solar or wind power.[85]

Bomstein said if these large data centers must be built to power artificial intelligence, solar power with battery storage is a much smarter option, because it is better for the environment and cheaper to run over the long term.

"Gas requires a large fuel price year after year," Bomstein said. "And eventually the gas runs out and you have to put in solar anyway. There's not a limitless supply of gas even in Pennsylvania."

The Homer City Generating Station would utilize gas from the Marcellus Shale, the largest natural gas field in the U.S. Pennsylvania is the second-largest producer of natural gas in America behind Texas, and the Keystone state has three dozen gas-fired power plants operating.[86]

At an event announcing the new Homer City plant, Pennsylvania Governor Josh Shapiro said he wants to "make sure that we win the battle on AI here in America, and we don't let China beat us on that front."[87]

Rally in Indiana, Pennsylvania, against the proposed Homer City data center and gas plant by Concerned Residents of Western PA (CROW.) Photo from the group.

Karen Feridun, co-founder of the Better Path Coalition, which advocates for a transition away from fossil fuels in Pennsylvania, said Shapiro's all-of-the-above energy plan is a relic left over from the Obama era when it was already out of touch with the reality of impending climate chaos.[88]

"The sad reality is that Pennsylvania lags behind the rest of the country in renewable energy production and our governor is doing nothing about it," Feridun said. "Instead, he chases after fossil fuel projects."

Feridun called data centers the state's new "cracker plants," referring to ethane crackers, which convert natural gas into ethylene, a key building block for plastics. "The state government is always desperate to find new ways to keep the natural gas industry alive," she said. "It's likely that data centers will disappoint our leaders who will have to scramble to find another excuse to drill and frack."

About 200 people attended a community meeting in Indiana County in late January organized by Concerned Residents of Western PA to voice their concerns over the gas plant. Dana Driscoll, a farmer who lives less than ten miles from the planned data center, said she is concerned about the impact the center would have on water supply, noting that the area is already running low and receiving warnings about drought.[89]

WEST VIRGINIA

Residents Fight Data Center Planned Near Outdoor Recreation Hub

Outside the town hall of Davis, West Virginia, residents hold up signs protesting the Ridgeline power plant and data center. Photo by Tucker United.

In Tucker County, West Virginia, residents, local officials, and environmental groups are resisting plans for a natural gas-fired plant to power a data center. A Virginia company is planning the data center in a former coal mining region that has since become a center for outdoor recreation and where half of the land is made up of state parks, national forests, and wildlife refuges.

In March 2025, Fundamental Data applied to build its Ridgeline Power Plant on about 500 acres near the tiny towns of Davis and Thomas. The company's facility could generate over 1.6 gigawatts of electricity, enough for more than one million homes in a county with a population of approximately 7,000.[90, 91]

West Virginia has a long history with coal, timber, natural gas, and chemical industries that have generated profits for a few while leaving pollution-scarred landscapes for everyone else. The state is now seeing a wave of new data center projects, along with at least four new gas-fired power plants to supply them with electricity.

State officials are hoping to attract more of these centers. West Virginia's development agency boasts about the state's "abundant" power and water supplies, along with low taxes and "streamlined regulations."[92] A bill that passed the state's legislature earlier last year stripped local governments of their control over data centers via zoning ordinances.[93] Republican state legislators have tried twice to pass bills expanding tax breaks for data centers and their power suppliers,[94] though both bills failed amid grassroots opposition.

"It's hard to see what benefits they're even planning on providing to people here," said Nikki Forrester, spokesperson for Tucker United, a group founded to organize against Fundamental Data's project.[95] "The jobs are going to go to high-level people out of state, and they're going to bring in their own construction workers, most likely, because that's how a lot of these complexes are built."

In April 2025, Fundamental Data representatives told The Wall Street Journal that their facility could cover 10,000 acres and be "among the largest data center campuses in the world."[96]

However, in its permit application, the company claimed it would restrict the hours the plant operates in order to keep its air pollution low enough to be called a "minor" source under the Clean Air Act. The distinction allows companies to avoid the more stringent reviews and tighter pollution limits required for "major" sources.

Even so, the facility could release up to nearly 29,000 pounds of hazardous air pollution per year, according to permit documents.[97] Fundamental Data also plans to store diesel fuel at the site, causing concerns about fuel spills and air pollution from burning much dirtier diesel fuel.

In a health study by Harvard- and Massachusetts Institute of Technology-educated researchers commissioned by Tucker United, researchers found that the plant's pollution could cause up to $35 million per year in additional health-related costs.[98] This includes one or two additional deaths per year, as projected by a model developed by the EPA.

Ridgeline Power Plant could release up to nearly **29,000 pounds** of hazardous air pollution per year.

Grassroots opposition to the project has attracted support from three Democratic U.S. Senators, who in March wrote to Fundamental Data's Casey Chapman seeking more information on the project.[99] "You are undoubtedly aware that your local air pollutants—including nitrogen oxides, volatile organic compounds, particulate matter, carbon monoxide, and benzene—will pollute the air surrounding the project, creating health issues for your neighbors, including asthma, heart attacks, stroke, reproductive issues, and cancer, with possible lethal effects," the senators' letter states.

Chapman responded that the company chose its location because of proximity to nearby natural gas fields and power transmission line interconnections. Also important, he said, were "abundant water resources." The land was "of significant scale in a jurisdiction that does not impose the local zoning, permitting, and regulatory layers that add cost and time to projects of this type elsewhere in the country."[100] Chapman also said the company would install 1.3 gigawatts of solar generation, something Forrester said she was hearing for the first time.

"It's still difficult for us to put weight into what the company is saying because the details they provide differ depending on what source they're telling them to," Forrester said.

The West Virginia Department of Environmental Protection issued an air permit for the facility in August 2025.[101] Community and environmental groups Tucker United, the West Virginia Highlands Conservancy and the Sierra Club appealed the decision to the state's Air Quality Board, which sided with the state agency.[102] On March 6, the groups filed another notice that they intend to challenge the board's decision before the state's Intermediate Court of Appeals and the West Virginia Supreme Court.[103]

TENNESSEE

Elon Musk's xAI Power Grab Sparks Fight for Environmental Justice

Gas turbines at Elon Musk's xAI data center in Memphis, Tennessee, have sparked protests from local residents, in part because of their health-damaging soot pollution. Photo by George Walker IV, AP.

Over the past two years, billionaire Elon Musk's artificial intelligence company has turned South Memphis into ground zero for one of the most contentious energy and environmental battles in the country.

In lower-income, majority Black neighborhoods along the Tennessee-Mississippi state line, Musk's xAI has been installing dozens of gas turbines to generate electricity for its "Colossus" data center supercomputers that will expose residents to higher levels of soot pollution, according to a recent health study.[104]

In South Memphis, xAI built its supercomputer in a neighborhood called Boxtown, a community founded by formerly enslaved people who built homes out of wood salvaged from train cars in the years after the Civil War.[105] Before Colossus, the area already hosted an oil refinery and a steel mill, said KeShaun Pearson, executive director of Memphis Communities Against Pollution.

"It is a continuous battle for what we know is our human right," Pearson said. "I believe we have a human right to clean air, clean water, and a healthy environment."[106]

> "It is a continuous battle for what we know is our human right. I believe **we have a human right** to clean air, clean water, and a healthy environment."
>
> - **KeShaun Pearson**, Executive Director of Memphis Communities Against Pollution

The conflict began in June 2024, when the Greater Memphis Chamber of Commerce announced that xAI would build Colossus 1, what it called the "world's largest supercomputer."[107] xAI said it launched the facility in only 122 days.[108] The company's massive data center was built to train Grok, Musk's AI large language model designed as a competitor to other AI tools such as OpenAI's ChatGPT and Anthropic's Claude.

Training and running an AI model requires massive amounts of power. For Colossus 1, xAI originally sought and received approval to receive up to 150 megawatts of electricity at a time from the Tennessee Valley Authority via the local electric grid.[109] The company then later won approval from the Tennessee Valley Authority for another 150 megawatts, bringing the total request to 300 megawatts, enough to power about 60,000 homes.[110]

However, xAI's demands for power proved larger than local power providers could supply. The company has supplemented its connection to the grid with dozens of gas-fired turbines of its own to scale up its computing power. Aerial surveys conducted by the Southern Environmental Law Center (SELC) and SouthWings found 35 turbines on-site at Colossus 1.[111] Thermal imaging confirmed that at least 33 of them were running at maximum capacity.

Following a formal notice of intent to sue filed by the center on behalf of the National Association for the Advancement of Colored People (NAACP), xAI removed all but 15 turbines from Colossus 1. The company received a permit for those turbines from the Shelby County Health Department, the local air quality authority.[112]

But the company promptly applied the same playbook to its second facility. Late last year, xAI launched Colossus 2, a second data center in Southaven, Mississippi, just across the Tennessee state line. Earthjustice and SELC, again representing the NAACP, on February 13 filed a formal notice of intent to sue under the Clean Air Act, alleging that xAI installed 27 unpermitted gas turbines there as well.

"xAI is running a de facto power plant without an air permit, without necessary pollution controls, and without regard for families living as close as a half mile away," said Laura Thoms, enforcement director at Earthjustice.[113]

After residents and environmental groups raised red flags about the facility using portable natural gas-fired power units, xAI earlier this year began seeking an official permit to install 41 turbines in Southaven.[114]

The Mississippi Department of Environmental Quality granted xAI's permit application on March 11. The decision followed a February 17 hearing during which hundreds of residents testified about the noise and air pollution from dozens of turbines installed near their homes.[115]

Christian Dennis speaks against xAI's use of gas turbines during a meeting of the Memphis and Shelby County Air Pollution Control Board in Memphis, Tennessee. Photo by George Walker IV, AP.

TEXAS

Company Plans Trump AI Complex with Enough Gas Plants to Power New York City

Construction crews install power infrastructure at Fermi America's Project Matador site near Amarillo, Texas. Photo by Fermi America.

Of the 32 natural gas-fired power plants planned for data centers in Texas, a project planned in the Texas Panhandle stands out. Fermi America, whose founders include former Texas Gov. Rick Perry, President Trump's energy secretary during his first term, is planning an immense power plant near Amarillo, a town of 204,000 people. The company has proposed building enough turbines to power New York City[116] for a data center complex nearly three times the size of the Pentagon.[117]

The company is calling the site the "President Donald J. Trump Advanced Energy and Intelligence Campus" with a gas power plant known as Project Matador. In June 2025, the company went public with its proposal for its "hypergrid" with massive power generators hooked up to an 18-million-square-foot data center.[118] The company said early on it intended to build 17 gigawatts of energy generation, consisting of natural gas, nuclear, and solar. The company's application to build four nuclear reactors is still pending before the Nuclear Regulatory Commission.[119]

With its nuclear power applications still awaiting approval, the company has already received an air quality permit from the Texas Commission on Environmental Quality for 90 gas-fired turbines that combined could generate up to 6 gigawatts of electricity.[120] On March 27, it applied for a second permit to build another 51 turbines, capable of generating 5.2 gigawatts.[121]

Combined, the 141 turbines could produce 40 million tons per year of climate-warming greenhouse gases. That's roughly equivalent to more than eight million cars and trucks driving for a year or more than nine new coal-fired power plants.[122] All these turbines could also generate nearly 10,000 tons per year of health-harming pollutants, such as smog and soot.

Kendra Seawright, organizer with community group Panhandle 1st Coalition, said people who work for the largest local employers are worried about the fallout from publicly opposing a project that has the backing of the political establishment.[123]

"It's just sad to know that we are aware of how much pollution there is going to be," said Seawright. "Those people that work at those neighboring businesses are not allowed to speak out against it, they're not allowed to voice their concerns, and everyone else is either fully unaware or doesn't know what they're allowed to do about it."

In drought-stricken West Texas, the proposed President Donald J. Trump Advanced Energy and Intelligence Campus could consume up to

2.5 million gallons

of water per day.

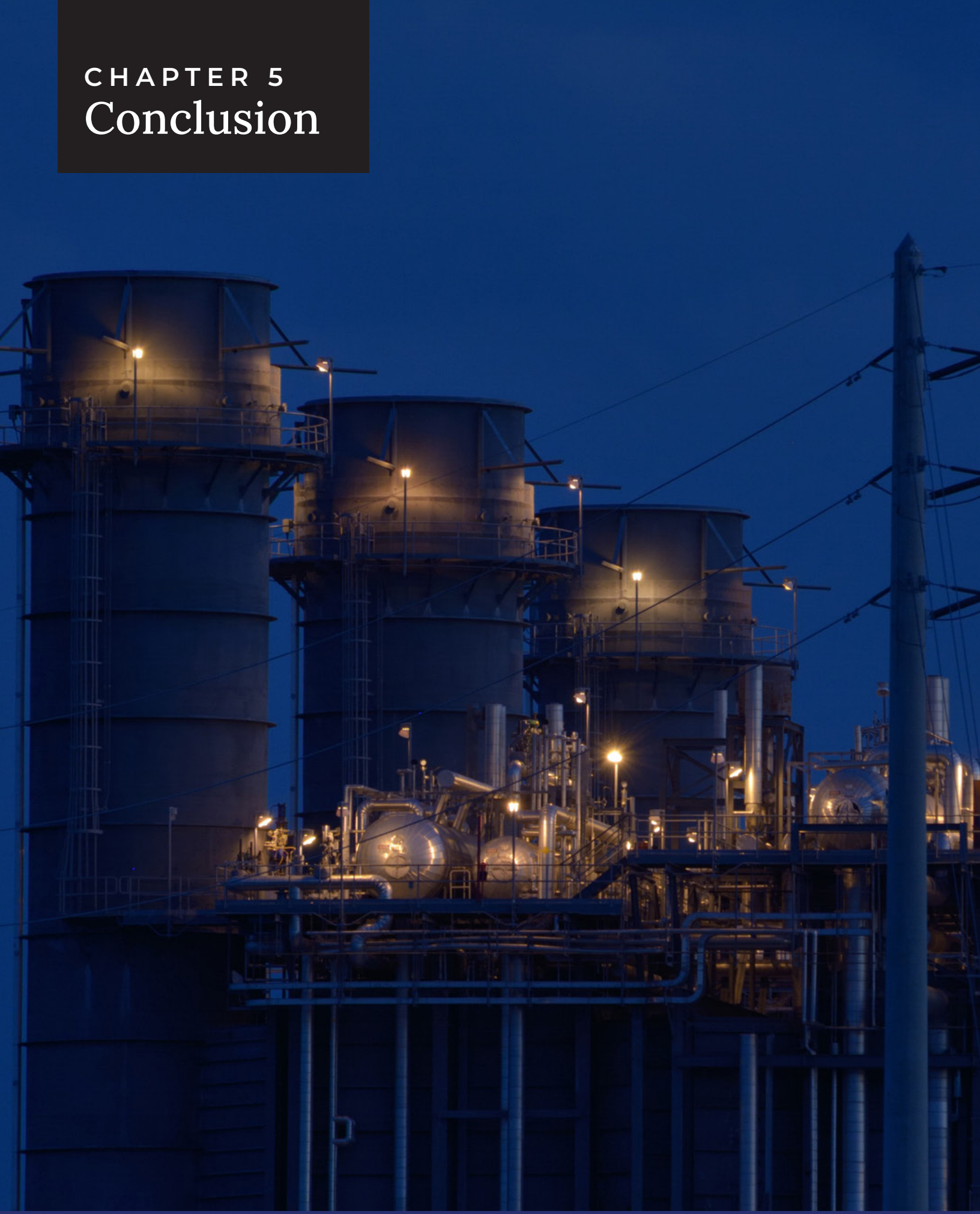
Water use is also a serious concern in a drought-prone region dependent on groundwater, with the Amarillo City Council in October 2025 approving the sale of up to 2.5 million gallons per day to Fermi for 20 years.[124] Most of the region's drinking water comes from the Ogallala Aquifer, a vast groundwater-bearing rock formation stretching across most of the Great Plains that has been in a steady decline since the mid-20th Century.[125] Crops such as wheat, corn, and soybeans cannot grow in the Texas Panhandle without irrigation from the aquifer.

Whether Fermi America can realize its vision of an AI data hub on the High Plains is not yet clear, with no announcements yet of an anchor client to use its servers. The company's stock price has plummeted 81 percent since the company went public in October 2025.[126] Its chief executive officer and chief financial officer both resigned in April.[127] Its former CEO, Toby Neugebauer, reportedly had a public confrontation with U.S. Commerce Secretary Howard Lutnick in March over potential South Korean investment in the project.[128]

However, the project appears to still be moving forward, with the company in February releasing a photo of construction at the site as part of its construction of its first 2.3 gigawatts of power generation.[129]

CHAPTER 5

Conclusion



Although many data centers are proposing to use dirty gas-fired power plants, developers could significantly reduce their environmental impact by relying more on solar and wind combined with battery systems. Photo by iStock.

Conclusion

Investments in artificial intelligence are driving the construction of a huge wave of data centers and dirty gas power plants across the U.S. EIP identified at least 71 new behind-the-meter gas-fired power plants including 3 expansions of existing plants, that are dedicated to providing electricity directly to data centers.

These gas power plants pose serious risks to our climate, as well as the health and wellbeing of nearby communities. The 74 proposed gas plants could release a staggering 662 million tons per year of greenhouse gases, which is as much climate-warming pollution as from 140 million cars and trucks driving for a year. That is more greenhouse gas pollution than the entire nations of France or Australia released in 2023. In addition, these power plants could release 159,142 tons per year of other air pollutants, including 44,281 tons of nitrogen oxides that contribute to smog and lung damage and 32,684 tons of fine particulate matter, which can trigger heart and asthma attacks. In some cases, they could also consume large amounts of water in regions where this resource is limited.

We can meet rising electricity demand without relying on dirty gas plants. For data centers, developers should rely on clean energy sources, such as solar power and wind combined with battery storage systems. Any gas plants that are built should be required to employ the most advanced and efficient technologies — such as combined-cycle turbines — that produce less pollution. And, at a minimum, data centers should be required to use technologies that limit the amount of water consumed for their power plants and computer cooling systems and should not be constructed in regions that are already suffering from water shortages.

Local communities in Pennsylvania, West Virginia, Texas, Tennessee, Mississippi and elsewhere are fighting data centers and gas plants in their neighborhoods because of their impacts on climate, air quality, water consumption, and quality of life. Governments at all levels must ensure that the rights and health of local residents come first. The approval process for these projects should be open, transparent, and deliberative — and should not be rushed or hushed into secrecy in the pursuit of AI supremacy or because of false claims about an "energy emergency." There is no emergency, and there are solutions to power data centers that limit environmental and health impacts and do not trample on the quality of life of local residents.

Appendix A: Clean Air Act Permitting

As of April 30, 2026, half of the proposed gas power plants described in this report that would directly power data centers had not yet applied for permission to build under the Clean Air Act. Of those that had started the process, 15 had submitted applications to state or local agencies to build all or part of their proposed plant or expansion, and four more had received a draft approval. Another 24 had received final approval to construct the plant under the federal Clean Air Act. Of those 25, four were under construction as of April 30, 2026. (See spreadsheet linked in Appendix C for details on each project.)

Table 3. Gas Power Plant Projects for Data Centers, by Permit Status

Clean Air Act Permit Status	Number of projects	Potential Greenhouse Gas Emissions (tons/yr)
No application submitted	43	385,545,197
Application pending	15	113,453,479
Draft permit proposed	4	29,081,765
Final permit issued	24	133,728,916

Note: Public records available in Oil & Gas Watch Database, as of April 30, 2026. Some facilities will be built in phases and will need multiple Clean Air Act construction permits. For this reason, the number of permits, projects, and plants do not always match.[130]

Communities have the right to participate in the Clean Air Act permitting process for large sources of air pollution. However, some companies building large gas power plants are taking shortcuts by applying for permits intended for much smaller sources of pollution even for plants that are likely "major" sources of pollution under the Clean Air Act. The permits for smaller pollution sources have weaker pollution control requirements and don't provide an opportunity for the public to participate in the permit process, which includes public hearings, the right to submit comments and have the agency respond to them, and the ability to seek review of an unlawful permit decision.[131] Some developers may also seek a permit for each construction phase of the gas plant instead of a permit for the entire gas plant, which allows them to argue that the construction project will result in much smaller air pollution increases that do not exceed “major” source pollution thresholds under the Clean Air Act. Minor and general permits usually have less stringent monitoring and testing requirements, making it difficult for regulators and the public to hold them accountable for illegal pollution. Also, if several of these “minor” sources are clustered in one place – around data centers, which also emit air pollution from diesel generators and other backup power equipment – the air emissions in a given area can add up to unhealthy levels of pollution that deserve stronger pollution control and monitoring requirements.

Appendix B: Methodology

EIP identified proposed power plants using the following sources: News articles, company announcements, Global Energy Monitor's Global Oil and Gas Plant Tracker, Cleanview data, and FracTracker's Data Centers Tracker.[132, 133, 134] We limited our review to behind-the-meter power plants that would be primarily fueled by natural gas and would generate at least 100 MW of electricity for data centers.

This report focuses on the potential pollution impacts of new or expanding natural gas-fired power plants that had not yet been built as of April 30, 2026. These include plants that were in early planning stages, those that may have had some or all of the required permits to start construction, or those that were under construction.

Identifying Plants that would Directly Power Data Centers

We considered a power plant to be "behind-the-meter" if it would supply some electricity directly to a data center without routing it through the wider electrical grid. Some developers have publicly stated that they eventually plan to connect a power plant, or some portion of the power plant, to the grid in the future so that they can sell excess electricity back to the grid. We still considered these power plants to be "behind-the-meter." EIP made these determinations using information from news articles, regulatory filings, permit documents, company statements, Global Energy Monitor's Global Oil and Gas Plant Tracker, Cleanview data, and FracTracker's Data Centers Tracker.

If it was unclear whether a plant would directly power a data center, we excluded it from this report. For example, the website for NextEra Energy and Basin Electric Power Cooperative's proposed River Run Energy Center in North Dakota claims "The facility will anchor a multi-gigawatt data center campus."[135] However, the plant is also backed by a local electric cooperative and developers also stated that they had submitted an application to the Southwestern Power Pool, a regional electricity transmission operator, for evaluation. It was not clear whether this plant would directly power a data center or if power for the data center would be provided through the local grid. In other cases, we were able to determine that a plant would directly power a data center, but not the generating capacity that would be dedicated to a data center. In these situations, we did not include a capacity figure in the data and we did not estimate the plant's emissions.

Estimating Air Pollution Emissions

We used two methods to determine the potential emissions from gas-fired power plants: 1) Clean Air Act construction permit records, and 2) emission calculations.

Permit Emissions. Wherever available, we relied on annual emission totals from Clean Air Act construction permit records, which are based on a plant's "potential to emit." Potential to emit is a legal term that assumes emission sources would operate at maximum allowable capacity with federally-required pollution controls.[136] Public records like permit applications, draft permits, agency rationales, and final permits contain company and/or government-calculated potential emissions from the proposed project, including any gas-fired turbines or engines, supporting equipment, and, in the rare cases where companies include emissions from data centers in the same Clean Air Act project, co-owned and co-located data centers.[137] We also relied on permit emissions in one case (Pecos Power Generation) where a company plans to build two identical plants, but as of April 30, 2026, permit records were only available for one.[138, 139] EIP obtained permit records from state and local environmental agencies' websites and through public information requests. Electronic copies are available online at oilandgaswatch.org.

Calculated Emissions. 43 of the projects were in early development stages, and project developers had not yet applied for Clean Air Act construction permits as of April 30, 2026. In these cases, we estimated emissions from natural gas-fired turbines and internal combustion engines using emission factors, researched heat values, and publicly-available generation capacity, if available. We also used emission calculations to fill gaps where permit

records omitted one or more pollutants, including greenhouse gases, sulfur dioxide, and hazardous air pollutants, where appropriate.

We verified our emission methodology in two ways. First, we calculated estimates for plants with permit records using our emissions methodology to verify that our estimates were similar with the permit emissions for that plant. Second, for plants without permit records, where possible, we verified our emission estimates against permit emissions for other plants that planned to use the same or similar generating technology (simple-cycle, combined-cycle, or internal combustion engines) and generate around the same amount of power.

The estimates that we calculated are not identical to the "potential to emit" included in permit records, which are highly plant specific and often rely on manufacturer specifications for emission sources. The estimated emissions in this report also do not include emissions from associated power plant equipment like backup generators, tanks, or on-site, co-located data centers, which may or may not be included in the potential emissions found in permit documents. Our emission calculations assumed:

- Plants would run year-round (8,760 hours per year), based on operating times documented in public records for similar plants.
- All plants would use selective catalytic reforming (SCR) to control nitrogen oxides and an oxidation catalyst to control carbon monoxide and hydrocarbon emissions, based on our review of permit documents for similar plants.[140]
- Natural gas has a heat content of 1,020 Btu/scf.[141]
- Heat rate values (Btu/kW-hr) vary by engine or turbine type:
  - Simple-cycle: 10,688 Btu/kW-hr[142]
  - Internal combustion engine: 9,025 Btu/kW-hr[143]
  - Combined-cycle: 7,614 Btu/kW-hr.
- Plants would use simple-cycle turbines unless they stated publicly that they would use combined-cycle turbines or internal combustion engines. Simple-cycle turbines are the most common among recently-permitted data center power plants.
- All plants would install the type of generating equipment they publicly claimed would be installed. For example, if a company said in a press release that their plant would use natural-gas fired combined-cycle turbines, they would install that kind of turbine. Companies sometimes change plant configurations depending on availability, cost, and other factors.

Emission Equation

Plant Capacity (MW) x 1000 kW/MW x Heat Rate (Btu/kW-hr) x Operation (8,760 hr/yr) x Emission Factor (lbs pollutant/MMBtu) x 1 ton/2000 lbs x 1 MMBtu/1,000,000 Btu = tons pollutant/year

Table 4. Criteria Air Pollutant Emission Factors[144]

Pollutant	Controlled or Uncontrolled	Emission Factors	
Nitrogen Oxides	Controlled	2 PPM	0.007477 lb/MMBtu
Carbon Monoxide	Controlled	4 PPM	0.009104 lb/MMBtu
Particulate Matter	Uncontrolled	0.0066 lb/MMBtu	
Volatile Organic Compounds	Controlled (hydrocarbons)	1 PPM	0.003584 lb/MMBtu
Sulfur Dioxide	Uncontrolled	0.7 grains S / 100 scf	0.001959 lb/MMBtu
Formaldehyde (Proxy for Hazardous Air Pollutants)	Controlled	0.0036 lb/MMBtu	

To estimate greenhouse gas emissions from proposed gas power plants, we adapted emission factors published by the Argonne National Laboratory.[145]

Emission Equation
Plant Capacity (MW) x Operation (8,760 hr/yr) x Emission Factor (tons pollutant/MWh) = tons pollutant/year

Table 5. Greenhouse Gas Emission Factors[146]

Combustion Technology	Pollutant	Emission Factors
Simple-Cycle Turbine (SC/GT)	Carbon Dioxide Equivalent (CO_2e)	0.66 tons/MWh
Combined-Cycle Turbine (CC)	Carbon Dioxide Equivalent (CO_2e)	0.43 tons/MWh
Internal Combustion Engine (ICE)	Carbon Dioxide Equivalent (CO_2e)	0.49 tons/MWh

All greenhouse gas emission data from permit records and estimates are presented as carbon-dioxide equivalents, using the 100-year global warming potentials found in the EPA's Greenhouse Gas Reporting Rule (Table A-1 to Subpart A of Part 98, Title 40).

Demographic Analysis

We relied on the Public Environmental Data Partners' recreated EPA Environmental Justice Analysis Multisite (EJAM) tool to estimate, within 3 miles of each facility, the number of people and the percent of the population identifying as people of color or in low-income households.[147] Low-income households are defined as those where the household income is less than twice the federal poverty level. Facility-level demographic data were limited to 67 facilities. Facility location information was unavailable or insufficient for seven facilities (for example, limited to a city, county, or region). There are no residents living within 3 miles of six facilities. The EJAM tool was also used to estimate the total population, number of schools (specifically, public elementary and secondary schools), percent people of color, and percent population in low-income within 3 miles of the 67 proposed facilities where location information was available.

Life expectancy estimates were obtained from the University of Wisconsin Population Health Institute's 2025 County Health Rankings & Roadmaps dataset, which are based on 2020-2022 data from the National Center for Health Statistics' Natality and Mortality Files and Census Population estimates.[148] We included life expectancy at the county-level in our analysis, where that information was available based on permit records or public announcements. Unlike demographic data from EJAM, we included facilities with approximate locations if we could determine the county.

Identifying Plants In or Near Non-Attainment Areas for Ozone Pollution

Facilities located within ozone nonattainment and maintenance areas were identified through a spatial analysis workflow in ArcGIS Pro. Facility point locations were gathered using public records and news media. Ozone nonattainment area polygons were obtained from the U.S. EPA Office of Air and Radiation (OAR) web service, specifically the state-level Ozone 8-hr (2015 standard) designation layers.. The 'Select Layer by Location' geoprocessing tool was then used with the spatial relationship set to 'Intersect' to identify facility points that intersected the ozone nonattainment polygons.

To identify facilities located within 10 miles of these ozone nonattainment and maintenance areas, a 10-mile buffer was generated around the respective polygons using the 'Buffer' tool. The 'Select Layer by Location' tool was then run using the buffered polygons as the 'Selected Features' and the facility points as the 'Input,' with the relationship set to 'Intersect.'

Appendix C: List of Known Gas Plant Projects Dedicated to Data Centers

Click here for a detailed spreadsheet with pollution and demographic information for each project, as well as links to available public records.

State	County/Parish	Plant Name	Project Type	Expected Operating Year	Generating Capacity (MW)	Greenhouse Gases as CO_2e (tons/yr)	Total Criteria Pollutants (tons/yr)	Hazardous Air Pollutants and/or Formaldehyde (tons/yr)
AZ	Pinal County	Vermaland La Osa Data Center Campus Power Plant	New	Unknown	Unknown	Unknown	Unknown	Unknown
IN	Jasper County	Schahfer Generating Station	Expansion	Unknown	2,300	7,072,554	2,927	80.70
MS	DeSoto County	xAI Southaven Power Plant	New	2026	1,240	6,410,729	1,381	19.07
NC	Cumberland County	Fayetteville NetZero Data Center and Power Station	New	Unknown	300	1,740,905	403	5.06
NC	Edgecombe County	Kingsboro NetZero Data Center and Power Station	New	2029	1,800	10,445,430	2,421	30.34
NC	Edgecombe County	Tarboro NetZero Data Center and Power Station	New	Unknown	300	1,740,905	403	5.06
NE	TBD	Tenaska Gas Power Plant	New	2029	3,000	11,370,720	2,874	36.02
NM	Lea County	New Era Lea County Power Station	New	2028	2,000	11,606,033	2,689	33.71
NM	Dona Ana County	Project Jupiter East Microgrid	New	Q4 2026	2,393	8,666,492	853	24.22
NM	Dona Ana County	Project Jupiter West Microgrid	New	Q2 2026	1,676	5,628,148	966	19.80
OH	Wood County	Apollo Generating Station	New	Q3 2027	514	2,475,581	905	24.40
OH	Pickaway County	Ashville Energy Center	New	2027	800	4,642,413	1,076	13.48
OH	Fayette County	Bluegrass Power Generation Facility	New	2028/2030	1,184	5,643,355	1,749	4.23
OH	Licking County	EdgeConneX New Albany North Power Plant	New	Unknown	577	1,620,767	651	50.90
OH	Pike County	Portsmouth Powered Land Project	New	Unknown	9,200	53,387,753	12,372	155.05
OH	Licking County	PowerConneX I and II New Albany Energy Center	New	2026	336	515,358	641	1.71
OH	Licking County	PowerConneX New Albany 3 Energy Center	New	2027	430	2,495,297	578	7.25
OH	Licking County	Socrates North Power Generation Facility	New	2026	307	1,514,024	779	34.42
OH	Licking County	Socrates South Power Generation Facility	New	2026	307	1,514,024	779	34.15

State	County/Parish	Plant Name	Project Type	Expected Operating Year	Generating Capacity (MW)	Greenhouse Gases as CO_2e (tons/yr)	Total Criteria Pollutants (tons/yr)	Hazardous Air Pollutants and/or Formaldehyde (tons/yr)
OH	Licking County	Socrates the Younger Generating Station	New	2H 2028	350	1,825,295	688	13.99
OK	Grady County	Chickasha Industrial Park Power Station	New	2028/2029	500	2,901,508	672	8.43
PA	Beaver County	Aliquippa Data Center Power Plant	New	2028	500	2,901,508	672	8.43
PA	Washington County	Fort Cherry Power Station	New	Unknown	1,000	5,803,017	1,345	16.85
PA	Indiana County	Homer City Generating Station	New	2029	4,678	17,551,454	3,632	57.10
PA	Greene County	Project Hummingbird Power Plant	New	2029	944	3,577,987	904	11.33
PA	Beaver County	Shippingport Power Station (Formerly Bruce Mansfield Power Plant)	New	2028	3,641	21,128,783	4,896	61.36
PA	Westmoreland County	TECfusions Keystone Connect Power Plant	New	2031/Unknown	2,700	15,668,145	3,631	45.50
PA	Bradford County	Wyalusing Energy Center	New	Q1 2026	248	1,113,659	313	5.07
TBD	TBD	NextEra Exxon Southeast Power Plant	New	Unknown	1,200	4,548,288	1,149	14.41
TX	Reeves County	Alpha Digital Campus Power Plant	New	2027/2028	2,000	11,606,033	2,689	33.71
TX	TBD	Chevron AI Data Center Project	New	2027	5,000	29,015,083	6,724	84.27
TX	Ward County	Circe Energy Data Centers E. Monahans Campus	New	2027	160	687,145	322	18.25
TX	Comal County	CloudBurst Data Center Power Plant	New	Q4 2026	1,200	6,963,620	1,614	20.22
TX	Victoria County	Crusoe-Blue Energy Data Center Power Station	New	2028	1,500	8,704,525	2,017	25.28
TX	Webb County	Data City Energy Center	New	2026	Unknown	Unknown	Unknown	Unknown
TX	Reeves County	Featherwood Energies Pecos Power Plant	New	Q2 2027	931	5,402,608	457	15.69
TX	Carson County	Fermi America Project Matador	New	Q2 2027	11,280	40,322,831	9,850	196.98

State	County/Parish	Plant Name	Project Type	Expected Operating Year	Generating Capacity (MW)	Greenhouse Gases as CO_2e (tons/yr)	Total Criteria Pollutants (tons/yr)	Hazardous Air Pollutants and/or Formaldehyde (tons/yr)
TX	Midland County	FO Permian Partners Data Center Complex	New	2026	5,000	29,015,083	6,724	84.27
TX	Armstrong County	Goodnight Data Center Power Plant	New	Q2 2027	933	4,594,980	1,650	20.61
TX	Pecos County	GW Ranch Energy Center	New	Q2 2027	7,650	33,204,964	11,013	159.87
TX	Reeves County	Kilby Power Plant	New	Unknown	2,869	13,890,275	3,230	139.29
TX	Glasscock County	Lone Star Project	New	Unknown	100	580,302	134	1.69
TX	Taylor County	Longhorn Data Center Power Plant	Expansion	Q1 2027	1,398	6,352,606	2,235	35.60
TX	El Paso County	McCloud Generation Facility	New	Q2 2027	366	1,571,843	241	20.46
TX	Williamson County	Mesones Data Center Campus	New	Unknown	Unknown	Unknown	Unknown	Unknown
TX	Wilson County	Misae Wilson Power Plant	New	Q2 2028	519	2,228,925	682	9.82
TX	Pecos County	MMEX Pecos Power Plant	New	Unknown	640	2,425,754	613	7.68
TX	Hill County	Nexus Data Center Hubbard Power Plant	New	2027	7,227	22,746,568	5,926	128.80
TX	Hood County	NRG Tolar Power Center	New	Unknown	2,014	4,208,815	910	19.39
TX	Hood County	Pacifico Ft. Spunky Power Plant	New	2028	473	2,744,827	796	5.76
TX	Gray County	Pampa Data Center Power Plant	New	2026	400	2,321,207	538	6.74
TX	Reeves County	Pecos Power Generation	New	2027	956	3,623,469	365	11.48
TX	Pecos County	Poolside Generating Station	New	2027/2028	332	1,555,427	428	7.56
TX	Pecos County	Rock House Draw Generating Station	New	Q4 2025	576	2,473,720	384	14.76
TX	Ector County	Texas Critical Data Centers Power Plant	New	2026/2027	1,000	5,803,017	1,345	16.85
TX	Anderson County	Texas Power Generation Hub (Nextera-Comstock Power Station)	New	2028 / 2029 / 2031 / 2032	5,200	30,175,686	6,993	87.64
TX	Caldwell County	Tract Austin Power Plant	New	2028	Unknown	Unknown	Unknown	Unknown
TX	Angelina County	Verdant Power Plant	New	2026	600	3,481,810	711	10.75

State	County/Parish	Plant Name	Project Type	Expected Operating Year	Generating Capacity (MW)	Greenhouse Gases as CO_2e (tons/yr)	Total Criteria Pollutants (tons/yr)	Hazardous Air Pollutants and/or Formaldehyde (tons/yr)
TX	Shackleford County	VoltaGrid ABI-1 Electric Generating Station	New	Q2 2026	2,582	10,627,597	2,585	461.20
TX	Bexar County	VoltaGrid SAT-2 Power Plant	New	Q4 2025	149	639,903	176	25.04
TX	Ward County	Xenergy Monahans Power Plant	Expansion	Unknown	98	420,876	202	5.59
UT	Millard County	Creekstone Delta Gigasite Data Center	New	2030/2035	2,000	8,589,307	2,271	28.46
UT	Utah County	Eagle Mountain Power Plant (Aquila Project)	New	2027/2028	521	2,367,343	580	15.88
UT	Millard County	Joule Capital Data Center and Power Station	New	2027/2028	1,500	6,302,663	2,042	144.09
UT	Box Elder County	Stratos Project/Wonder Valley	New	2036	9,000	38,651,880	10,219	128.08
VA	Fauquier County	Remington Technology Park	New	2027	215	923,350	171	3.06
WV	Mingo County	Adams Fork Data Center Energy Campus	New	2027	2,850	7,222,837	712	0.86
WV	Mingo County	Adams Fork Harless Data Center Energy Campus	New	2027	2,850	7,222,837	714	0.87
WV	Mason County	Monarch Compute Campus Power Plant	New	2031	8,160	45,880,400	10,605	720.88
WV	Tucker County	Ridgeline Power Plant	New	2027	1,656	9,609,795	330	14.45
WY	Laramie County	BFC Power and Cheyenne Power Hub	New	2027	2,200	10,464,682	2,691	38.04
WY	Natrona County	Casper Campus Power Station	New	Unknown	1,500	8,704,525	2,017	25.28
WY	Uinta County	Evanston Power Station	New	2026	1,200	6,963,620	1,614	20.22
WY	Carbon County	Miller Generating Station	New	2028	2,089	6,006,487	1,272	7.69

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