



AMERICANS *for*  
RESPONSIBLE  
INNOVATION

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ADVOCACY PLAYBOOK

*Behind the Build:*

# Grid Mitigation & Data Centers

Federal, state, and local lawmakers have the power to ensure a responsible data center boom benefits communities and advances U.S. innovation.

**D**ata center developers often search for opportune project sites with available telecommunications and energy infrastructure; pre-zoned land; and skilled workers in construction and operational fields. Simultaneously, resource-constrained state and local governments race to entice these developers' buildouts in the hope of increasing their tax revenues and boosting local jobs. However, state and local incentives, such as tax exemptions, deprive localities of the very benefits data centers can bring.

Unmitigated data center buildouts can impose financial pressures on local communities, as these facilities often bring energy generation and transmission infrastructure upgrade costs that utilities socialize across all ratepayers. And if developers abandon their projects, local consumers could foot the bill for unnecessary, preemptive grid investments. Beyond energy costs, data center load types can destabilize power grids and bring industrial externalities, including noise and air pollution.

Despite these challenges, data centers can offer substantial economic benefits if managed responsibly. They can generate significant local tax revenue, which governments can use to reduce homeowner tax burdens and fund public schools. Additionally, the construction and operation of these facilities create short-term jobs and permanent, high-skilled positions in engineering and operations.

State and county policies often compound data center problems rather than maximizing their benefits. To attract developers, many state and local governments offer up to billions in tax exemptions and utility incentives that deprive communities of much-needed revenue. These deals are frequently shrouded in secrecy, leaving the public unable to weigh what community benefits governments secured against the incentives they gave away. Moreover, data center owners and operators are not subject to standardized federal energy reporting requirements, leaving citizens and regulators uninformed about the facilities' energy use and grid impacts.

In response, stakeholders, including residents, civil society organizations (CSOs), county officials, and state policymakers, are organizing and enacting policies to mitigate these impacts. Their efforts include assessing how data center energy costs are shifted onto households, banning non-disclosure agreements (NDAs), and securing local investments from hyperscalers. Federal, state, and local lawmakers have the power to ensure a responsible data center boom benefits communities and advances U.S. innovation.

*This Playbook equips stakeholders, including local, state, and federal policymakers; concerned citizens; and CSOs, with the tools they need to act. Inside, Americans for Responsible Innovation provides (1) an explainer and (2) stakeholder-oriented toolkits on transparency, balanced incentives, ratepayer protections, and enforceable community benefit agreements.*

## 01 INCENTIVES

# If you incentivize it, they will build.

Data centers can contribute to local revenues and employ short-term construction and long-term facility workers. This makes them attractive developments for resource-constrained local governments, which try to entice hyperscalers through tax exemptions, rezoning, and industry-centered agreements.

## Searching, Siting, Securing

Hyperscalers typically search for sites with accessible telecommunications infrastructure, as well as cheap and available electricity to reduce costs and shorten timelines for building new power and connecting to the internet.<sup>1</sup> They require skilled workers in construction, electrical, mechanical, and operational fields.<sup>2</sup> These facilities also cluster around metropolitan areas to provide population centers with reliable internet service via edge computing.<sup>3</sup> Therefore, areas with existing data center clusters are attractive real estate, as they often encompass all of the criteria above.<sup>4</sup>

Once a location is found, data centers take one to two years to construct, employing an average of 1,500 construction workers on site.<sup>5</sup> These 250,000 square foot facilities (that's 4 football fields' worth of space) then employ about 50 full-time workers, including technicians, engineers, operational managers, and security personnel.<sup>6</sup>

**1–2 yrs**

TO CONSTRUCT

**~1,500**

CONSTRUCTION WORKERS ON SITE

**250K ft<sup>2</sup>**

≈ FOUR FOOTBALL FIELDS

**~50**

FULL-TIME WORKERS

The economic promises can be significant: In 2023, the state of Virginia generated \$9.1 billion in GDP from data center construction, operations, and supporting services.<sup>7</sup> In Loudoun County, data center revenue is projected to make up nearly half the county's 2027 tax revenue,<sup>8</sup> funds that officials have used to reduce homeowner tax burdens and increase funding for county schools.<sup>9</sup> In Virginia, every job in the data center industry has brought an estimated 3.5 jobs in the surrounding economy.<sup>10</sup>

To attract more buildouts and unlock the promises they hold, local governments engage in race-to-the-bottom dynamics, negotiating deals that benefit hyperscalers and are less lucrative for host communities.<sup>11</sup> In fact, data centers have become one of the most subsidized industries in the country, with states forfeiting billions of dollars in tax abatements.<sup>12</sup> States and counties have offered data center owners the following incentives:

### **Sales and Use Tax Exemptions**

Exempt data centers from sales taxes on qualifying equipment, such as servers, cooling systems, and cables. The scope and the duration of the exemption can vary significantly from state to state, with some offering no end date.

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### **Property Tax Abatements and Reductions**

Reduce or eliminate taxes on real and personal property owned by data center operators.

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### **Corporate Income Tax Exemptions or Credit**

Reduce corporate income taxes. Some states offer full exemptions, while others offer investment tax credits.

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### **Utility and Cost Incentives**

Offer discounted electricity rates or tax exemptions on energy consumed by data centers.<sup>13</sup>

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### **Job Creation and Wage-Based Tax Credits**

Tie incentives to employment quotas and other wage thresholds.

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### **Enterprise Zone and Location Incentives<sup>14</sup>**

Offer financial incentives for data centers built in designated geographic areas, such as enterprise zones or rural areas.<sup>15</sup>

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## **36**

U.S. STATES EXEMPT  
HYPERSCALERS FROM SALES AND  
USE TAXES ON BUILDING  
MATERIALS AND EQUIPMENT

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## **9**

STATES OFFER PROPERTY TAX  
EXEMPTIONS FOR DATA CENTERS

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## **\$1.6B**

VIRGINIA'S DATA CENTER RETAIL  
SALES AND USE TAX EXEMPTIONS,  
FY2025

The structure of all these exemptions attracts hyperscalers with high negotiating power.<sup>16</sup> These companies leverage that power to secure favorable terms, while localities sacrifice community benefits by chasing economic promises.<sup>17</sup> Moreover, tax incentives in areas that are already attractive to hyperscalers may deprive localities of revenue they would have otherwise received. The scale of these giveaways is significant: about 36 U.S. states exempt hyperscalers from sales and use taxes on building materials and specialized equipment; many extend utility tax breaks; and nine states offer property tax exemptions for data centers.<sup>18</sup> In fiscal year 2025, Virginia's data center retail sales and use tax exemptions reached \$1.6 billion.<sup>19</sup>

Tax incentives impose a double burden on residents. First, state budgets draw on overall tax revenue to subsidize data center buildouts in only a handful of counties, so all state residents indirectly fund concentrated developments.<sup>20</sup> The benefits flowing back to host communities (local jobs, reduced homeowner taxes, and school funding) represent an uneven return on a statewide investment. Second, without enforceable community benefit agreements (CBAs), even the data center host communities cannot recover these costs. Property taxes, for instance, can fund K-12 education, yet local governments routinely offer developers property tax exemptions, directly undermining public service budgets. If incentives are granted without enforceable standards, the promise of community gains will not materialize.<sup>21</sup>

## **Public Costs Through Private Deals**

The subsidies that hyperscalers secure are only part of the problem; equally troubling is how those deals are secured. Local and state governments routinely sign opaque agreements, while companies obscure their identities through limited liability companies (LLCs).<sup>22</sup> Moreover, data centers face no federal obligation to uniformly disclose their energy consumption in detail. The result is a system where communities bear real costs with little ability to understand, question, or challenge secured deals.

Local and state officials often enter into non-disclosure agreements (NDAs),<sup>23</sup> which prohibit officials from publicly disclosing business plans, potential community impacts, stakeholder identities, facility size, company names,<sup>24</sup> predicted energy consumption, and granted tax breaks.<sup>25</sup> Hyperscalers' use of LLCs to secure land and infrastructure further obscures public knowledge of which companies actually plan to lease the compute being built.<sup>26</sup>

#### VIRGINIA

In Virginia, of the 31 localities where data centers were proposed (2024-2025), a researcher discovered that 80 percent of the governments had signed NDAs with the developers; this figure is likely an undercount given the agreements' secretive nature.<sup>27</sup>

#### KENTUCKY

In Kentucky, a farmer was offered \$10 million for a 250-acre plot of land to be used for industrial development without being told the type of industrial activity planned, the company name, or the names of the people negotiating the deal.<sup>28</sup>

Outside of specific environmental permits and utility reporting, there is no comprehensive, standardized requirement for data center owners to publicly report energy use or emissions, leaving major gaps in transparency.<sup>29</sup> What little data does exist is voluntarily disclosed and buried in aggregate figures that make it impossible for communities to understand the real footprint of these facilities. The industry's go-to measuring stick, power usage effectiveness (PUE), is a two-decade-old snapshot that hyperscalers, cloud providers, and colocation facilities continue to rely on despite its failure to capture the full, disaggregated stack of what is actually driving data center energy use.<sup>30</sup> Consumption reporting should include the energy used by IT equipment, AI model factors (e.g., size and query types), facility size, power sources and delivery systems, cooling infrastructure, backup capacity (e.g., batteries and generators), and miscellaneous loads such as lighting.<sup>31</sup>

Without mandatory, standardized reporting requirements, citizens, regulators, and lawmakers are all left flying blind—unable to advocate for stronger efficiency standards or build the evidentiary foundation needed for smarter policy.<sup>32</sup>

## 02 ENERGY IMPACTS

# Data Center Energy Impacts

Due to the trends above, unmitigated data center buildouts are coming to a neighborhood near you, and it's not pretty. Aside from their windowless, industrial design, these facilities require massive amounts of regional power, which can raise residential electricity rates and increase volatility in power lines.

## Who Pays?

Understanding who bears the costs of the energy infrastructure buildouts for data centers requires examining three interconnected problems: (1) how grid upgrade costs are socialized, (2) how data centers' novel demand patterns threaten reliability, and (3) how speculative overbuilding can leave everyday consumers on the hook for project costs.

First, even though data centers are usually private entities, the physical infrastructure required to meet their energy demands is often implicitly treated as a public good and, therefore, subsidized by all ratepayers (including residential consumers).<sup>33</sup> Before new data centers connect to the grid, utilities often have to invest in new power lines and other infrastructure upgrades to ensure that everyone on the grid can still keep their lights on. The problem? While these upgrades disproportionately benefit new loads, utilities typically socialize the costs across all grid users.<sup>34</sup>

Infrastructure costs are just one part of the affordability problem. Wholesale electricity markets determine the prices utilities pay for energy, so when demand from new buildouts increases without matched supply,<sup>35</sup> prices can rise for everyone.<sup>36</sup> Now, some facilities are co-locating with existing power plants to secure continuous electricity, which curtails the supply available to other customers and increases costs.<sup>37</sup> Others are establishing on-site, behind the meter generation, but still relying on the grid's capacity to meet their total demand.<sup>38</sup>

Second, data centers' unprecedented power demand, combined with fluctuating AI workloads, can strain electric grids, degrading power reliability in nearby neighborhoods.<sup>39</sup> AI data centers use lots of power, yes. But they also use that power through intermittent consumption.<sup>40</sup> This means that AI data center demand looks more like a spiky EKG chart than the flat demand line that is more common across other industrial loads.<sup>41</sup>

Data center loads can suddenly exceed the available grid capacity (supply), leading to parts of the grid automatically disconnecting ("tripping") to prevent equipment damage.<sup>42</sup> Or they can instantly cut their demand. These disconnections can bring about cascading failures and blackouts, disrupting power delivery to other loads and damaging equipment that can cost thousands to millions of dollars to repair.<sup>43</sup>

In 2024, a routine wire failure (transmission line fault) caused ~1,500 MW of data centers to simultaneously and unexpectedly disconnect from the Bulk Electric System (the "interstate highway" of the grid).<sup>44</sup> This is equivalent to a nuclear plant suddenly appearing without warning.<sup>45</sup> Such events can contribute to cascading failures under stressed conditions if system protections and reserves are not designed for this behavior.

The facilities' rapid fluctuations pose reliability risks in real-time and distort long-term energy forecasts. Without greater transparency into how AI data center loads behave, system operators cannot effectively monitor the grid, increasing the likelihood of under- or over-scheduling power

delivery to the data center. If operators underschedule, there won't be enough power to meet a sudden AI surge, risking a blackout. If they overschedule, they waste money and fuel on power plants that weren't needed in the first place.<sup>46</sup>

Third, many AI data centers operate as “inflexible loads,” meaning they cannot automatically adjust their power consumption in response to grid conditions without affecting their own operations. This is a problem during periods of peak demand, such as hot summer days, when grid operators need to balance supply and demand quickly. Unlike more flexible loads, data centers cannot curtail demand without degrading their own operations, making them a liability precisely when the grid is stressed.<sup>47</sup>

Fourth, if a hyperscaler abandons a promised project, the local utility must recuperate the cost of preemptive electricity infrastructure upgrades by passing it off to other ratepayers.<sup>48</sup> This risk is not hypothetical. Hyperscalers and utilities are already incentivized to inflate energy forecasts—the former to secure priority infrastructure access, the latter to increase revenue. This speculative “location shopping” drives overinvestment in grid upgrades that may not be necessary.<sup>49</sup> Moreover, regional operators are seeing double-counted sites across the country.<sup>50</sup> If a project unravels after upgrades are built, the hyperscalers, which typically lease data centers, may face little financial consequences, leaving stranded assets and higher bills for everyday consumers.<sup>51</sup>

#### OHIO

American Electric Power (AEP) Ohio reported that its interconnection requests fell from 30 to 13 gigawatts (GW) after a new data center tariff required data centers to pay for 85 percent of their requested energy over a 12-year period.

## Industrial Externalities

Beyond electricity bills and reliability risks, data centers can impose other invisible costs on the communities that host them, including diesel exhaust emissions and industrial noise in residential areas.

First, AI data centers depend on 24/7 power reliability to train their AI models and respond to our LLM queries. This round-the-clock demand means AI data centers need backup power, typically in the form of diesel generators,<sup>52</sup> which emit hazardous air pollutants and particulates. On-site equipment, such as generators and HVAC systems, can reach levels above 85 dBA at close range,<sup>53</sup> a level the National Institute for Occupational Safety and Health considers harmful over an eight-hour period for occupational safety.<sup>54</sup> Data centers, in general, can surpass this threshold, leading to noisy industrial facilities near residents.<sup>55</sup>

## TENNESSEE

Researchers found that the xAI Colossus data center campus in Tennessee increased peak nitrogen dioxide concentration levels by 79% in nearby areas. These spiked high pollutant concentrations can have adverse health impacts on individuals.<sup>56</sup>

### 03 IDENTIFYING KEY STAKEHOLDERS

## How to Advocate Successfully.

Effective advocacy requires transparency. NDAs and race-to-the-bottom tax incentives leave citizens uninformed and push local lawmakers to forfeit community benefits. Front-end transparency and cost-benefit analyses can mitigate these pressures, but only if stakeholders are equipped to demand them. The most successful advocacy maximizes the authorities and resources of residents, civil society organizations (CSOs), county officials, state lawmakers, and federal authorities:

I

### Citizens & local communities

Citizens and local communities can vote, organize, and speak out to show elected officials how data center buildouts affect them, and decide whether those politicians deserve another term.

II

### Civil society organizations

CSOs can fill the technical, legal, and informational gaps that communities and policymakers lack. Focused on specific issue areas, CSOs have the resources to conduct research, organize, and advocate on behalf of citizens, intervene in legal proceedings, and negotiate CBAs with data center developers.

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### III

## County officials

County officials are the key decision-makers for data center siting. They hold immediate authority over local zoning, rezoning, and permitting. They can issue ordinances requiring data centers to meet energy use, noise, and workforce standards. They maintain a direct line of communication with constituents through county board meetings, town halls, and public hearings that surface local concerns.

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### IV

## State lawmakers

State lawmakers can often regulate and protect ratepayers' energy costs (through public utility commissions (PUCs)), design tax incentives that attract hyperscalers, and make permitting decisions that affect agricultural and residential areas. They can strengthen or restrict local decision-making authority and establish permanent reforms that set baseline standards for future data center projects.

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### V

## Federal authorities

Federal authorities provide the regulatory floor and technical oversight necessary to standardize the fragmented energy landscape. While energy remains largely a local issue, federal agencies address the opacity gap through specialized tools, such as energy consumption data collection, grid reliability standards, and regulations governing power plant use and pollution.

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*When citizens, CSOs, county officials, state lawmakers, and federal agencies act in concert, they can shift the terms of data center developments to maximize local gains and mitigate local harms.*

## Conclusion

Hyperscalers are proposing data center buildouts at an unprecedented gigawatt scale, with local communities often caught off guard by the facilities' energy demands and industrial externalities. New data center loads are straining the grid, and utilities' socialized cost allocation models are increasing residential consumers' electricity prices. Moreover, if companies abandon these projects, utilities may pass data center-related energy upgrades onto other local and regional consumers.

All the while, states are losing up to billions of dollars in tax revenue through exemptions, rather than maximizing their tax base.<sup>57</sup> Status quo policies are also allowing data center owners to secure sweetheart deals at the cost of U.S. families' bills and democratic participation in benefit-maximizing development decisions. Data center owners and operators are not required to report their energy use in any standardized form, meaning these facilities can pick and choose what they disclose to the public and lawmakers. NDAs obscure the tradeoffs, preventing residents from accurately assessing whether the promised benefits, such as local jobs, grid upgrades, and tax revenues, justify these industrial buildouts.

*Yet communities are not powerless.* Local and state actors are already demonstrating that responsible data center development is achievable. Citizens are attending public hearings, CSOs are intervening in PUC proceedings, and state lawmakers are introducing legislation that shifts costs back onto developers and mandates transparency. The tools for change are in people's hands. With the right information and coordination across stakeholders, communities can ensure that the data center boom works for *them*.

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