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The Cost of Compute: Why Oregon is Pushing Back on Big Tech

AI * Ethics * Computing

Introduction - Oregon Compute Data Centers and Their Goals, History

The state of Oregon has historically operated as one of the premier global destinations for digital infrastructure. For over a decade, a confluence of favorable conditions -- including the absence of a state sales tax, generous property tax abatements for industrial development, an amenable climate, and access to relatively inexpensive hydroelectric power from the Columbia River Basin -- positioned the region as a highly attractive hub for hyperscale data centers[1]. By mid-2026, the state housed approximately 125 data centers, heavily clustered in the Portland metropolitan area (notably Hillsboro), the eastern reaches of the Columbia River Gorge (such as The Dalles), and the high deserts of Central Oregon[3].

However, the rapid and unchecked expansion of these facilities -- accelerated exponentially by the computational demands of generative artificial intelligence (AI) -- has catalyzed a profound shift in public and legislative sentiment. What was once universally heralded as a triumph of economic development is now the subject of intense regulatory scrutiny, grassroots backlash, and complex litigation[1]. The evolution of Oregon's data center industry serves as a critical microcosm for a global challenge: balancing the insatiable infrastructural demands of modern digital economies with local economic fairness, grid reliability, and hydrological sustainability.

This article provides a comprehensive, multi-disciplinary analysis of the data center landscape in Oregon. It examines recent public opinion polling that underscores a mandate for regulatory intervention, evaluates the complex macroeconomic trade-offs of industrial tax incentives, details the profound energy and water constraints facing the region, and explores the advanced thermodynamic engineering solutions required to mitigate these impacts.

Public Sentiment and the 2026 DHM Research Polling Data

For years, the political consensus in Oregon heavily favored the aggressive recruitment of technology firms. However, public opinion has shifted dramatically as the localized externalities of data centers -- ranging from construction traffic and substation expansion to immense water consumption -- have become more apparent to the electorate. In July 2026, the Portland-based polling firm DHM Research conducted a comprehensive survey of 600 registered Oregon voters to gauge sentiment regarding artificial intelligence and the specific physical data centers that power it[3].

The polling, conducted between July 23 and July 28 with a margin of error of plus or minus four percent, revealed a deep and broad-based skepticism toward the industry. This skepticism is heavily characterized by strong opposition to the tax incentives that historically fueled the sector's growth in the state[3]. Furthermore, the data

suggests that voters conflate their anxieties regarding the abstract software of artificial intelligence with the physical hardware facilities required to sustain it.

| Polling Metric || Aggregate Voter Sentiment || Key Demographic and Geographic Variances |

| Overall impression of data centers || 71 percent hold negative views || Consistent across the Portland metro, Willamette Valley, and rural regions. |

| Support for a temporary moratorium on new data centers || 66 percent support || 77 percent support among Democrats; 51 percent support among Republicans. |

| Providing tax breaks to attract data centers || 73 percent oppose || 83 percent opposition among Democrats; 54 percent opposition among Republicans. |

| Impression of artificial intelligence and chatbots || 60 to 61 percent hold negative views || Consistently high negative perception applied to specific models like ChatGPT, Claude, and Gemini. |

| Require safety tests and state monitoring for powerful AI || 89 percent support | Universally high support across all age brackets and political affiliations. |

| Require companies to notify consumers of chatbot interactions || 93 percent support || Universally high support, indicating a strong desire for algorithmic transparency. |

Table 1: Summary of July 2026 DHM Research polling data regarding Oregon voter sentiment toward data centers and artificial intelligence policies.

[cite: 3, 6]

The data suggests several profound underlying trends in the sociology of digital infrastructure. First, opposition to data centers is no longer a fringe or highly localized phenomenon isolated to communities directly bordering industrial parks; it has solidified into a statewide consensus. While Democrats demonstrate higher baseline hostility toward corporate tax breaks and infrastructure expansion, majorities of Republican voters also support moratoriums and oppose financial incentives for the sector, indicating that the issue transcends traditional partisan divides[3]. Geographic location within the state also failed to heavily fracture opinions. Opposition to tax breaks hovered at 75 percent in the Portland metropolitan region, 72 percent in the Willamette Valley, and 73 percent in the remainder of Oregon, proving that the sentiment is not merely an urban-rural division[3].

Consequently, elected officials are now operating in an environment where providing concessions to technology conglomerates is perceived as a significant political liability. This shift in public attitude has been felt acutely in municipalities like Hillsboro -- the epicenter of the state's data center boom -- where community members have routinely crowded civic center meetings to push for change, citing concerns that span from massive energy consumption to purported woeful returns on municipal investment[5].

The Macroeconomics of Data Centers: Capital Intensity Versus Job Creation

The core conflict driving Oregon's policy shift is an economic paradox inherent to hyperscale data centers: they are characterized by massive capital investment but relatively negligible direct human employment, particularly when compared to traditional manufacturing or resource extraction industries. The fundamental debate centers on whether the indirect economic benefits of these facilities justify the immense property tax revenues forgone by local governments.

The Mechanisms of the Enterprise Zone Program

Oregon's primary mechanism for attracting data centers has been the Standard Enterprise Zone program, alongside the Strategic Investment Program and the Long-Term Rural Enterprise Zone program. These statutory tools were designed to exempt businesses from local property taxes on new investments for a specified period -- ranging from three to five years under standard agreements, or up to fifteen years for long-term rural investments -- in exchange for community investment, job creation, and economic stimulation in urban or suburban areas[7].

However, data centers represent a unique asset class. The capital investment is staggering; a modeled exascale data center campus comprising 16 buildings and supporting a one-gigawatt load requires an estimated capital investment of roughly eight billion dollars for land, infrastructure, and hardware[10]. Yet, data centers generate approximately one hundred times fewer direct jobs per megawatt of power installed than traditional manufacturing[11]. Job creation costs in the data center sector, when accounting for lost tax revenue, can reach up to 2.6 million dollars per permanent job, heavily skewing the traditional return on investment calculation for host municipalities[12]. The modeled eight-billion-dollar gigawatt facility, for instance, supports only an estimated 560 full-time equivalent operational employees upon completion, primarily in security, maintenance, and facility management[10].

The Industry Counter-Narrative and Multiplier Effects

Proponents of the industry fiercely contest the narrative that data centers fail to provide an adequate economic return. Advocacy groups such as Oregon Connects -- an arm of the Data Center Coalition whose members include Microsoft, Google, and Meta -- have launched extensive campaigns emphasizing the broader macroeconomic impacts of digital infrastructure[13]. According to industry-sponsored studies, the data center sector contributes over 10.4 billion dollars to Oregon's total gross domestic product annually[14]. This includes 3.5 billion dollars in annual operational expenditures flowing to local businesses, utilities, and service providers, alongside hundreds of millions in capital investments funding facility construction[14].

The industry emphasizes the "multiplier effect" of direct employment. While direct operational headcounts may appear low relative to facility size, economic impact analyses suggest that each direct data center position supports up to six additional jobs throughout Oregon's economy, spanning construction trades, professional services, and supporting industries[14]. A 2024 impact study by Amazon Web Services regarding its operations in eastern Oregon's Morrow and Umatilla counties indicated

that its data centers support an estimated 7,400 full-time equivalent jobs annually in the local economy when factoring in direct, indirect, and induced employment[16]. Similarly, Meta's operations in Prineville (Crook County) have resulted in over 5.3 million dollars in direct funding to local schools and nonprofits, while driving significant construction employment over its phased buildouts[17].

| Economic Metric | | Industry-Reported Impact (Oregon) | | Contextual Caveats |

| Total GDP Contribution | | \$10.4 billion annually | | Heavily weighted by initial, temporary construction capital rather than sustained operational output. |

| Job Multiplier | | 1 direct job supports ~4.5 to 6 indirect/induced jobs | | Multipliers are highest during the construction phase; operational multipliers are significantly lower. |

| Labor Income Supported | | \$5.6 billion annually | | Direct operational jobs pay well (often over \$100,000/year), but represent a small fraction of the total labor pool. |

| Tax Contributions | | \$727 million generated in 2022 | | Must be weighed against hundreds of millions in property taxes explicitly abated through Enterprise Zones. |

Table 2: Analysis of the economic arguments supporting data center development in Oregon, contrasting industry claims with critical macroeconomic realities.

[cite: 10, 14, 15, 18, 19]

Legal Backlash and the Hillsboro Enterprise Zone Controversy

Despite the macroeconomic arguments presented by the industry, local governments and public services, particularly school districts, rely overwhelmingly on local property taxes. The abatements granted to technology companies result in massive foregone revenues for these entities. A 2024 report by the economic subsidy watchdog group Good Jobs First found that 191 school districts and education service districts in Oregon collectively lost an estimated 275 million dollars to property tax abatements in a single year[7].

This tension culminated in intense litigation in mid-2026. Anticipating a statewide legislative pause on data center tax incentives, municipal officials in Hillsboro and Washington County hurriedly approved seventeen Standard Enterprise Zone applications during March and April of 2026[7]. These agreements granted technology conglomerates -- including Adobe, Nvidia, and DropBox -- decades of waived property taxes, with some agreements locking in back-to-back waivers through the year 2051[7].

In response, a coalition comprising local politicians, the nonprofit government watchdog group Tax Fairness Oregon, and the Oregon Education Association (the state's largest teachers' union) filed a lawsuit against the municipalities[1]. The plaintiffs alleged that city and county officials operated outside the legal intention of the statewide tax program, effectively depriving the State School Fund of vital revenue without following proper public notice procedures[7]. The litigation underscores a growing consensus that tax incentive structures designed in the late twentieth century for labor-intensive manufacturing are fundamentally mismatched for the highly automated, capital-intensive realities of modern cloud

computing.

Grid Infrastructure, Transmission Bottlenecks, and the POWER Act

Beyond municipal economics, data centers represent a unique class of energy consumer. They require uninterrupted, massive baseload power operating at all hours of the day and night. As the industry scales to meet the intensive training requirements of generative artificial intelligence, the energy requirements of individual campuses have escalated from tens of megawatts to gigawatt-scale operations[10]. This extraordinary demand places immense strain on the Pacific Northwest's electrical grid, specifically the transmission infrastructure managed by the Bonneville Power Administration.

Grid Congestion and Capacity Markets

The influx of high-energy facilities creates immediate physical and financial challenges for local utilities such as Portland General Electric and PacifiCorp. To serve these new hyperscale loads, utilities must undertake vast infrastructure upgrades, building new substations, laying transmission lines, and procuring additional baseload generation. Historically, the costs of these generalized grid upgrades were socialized across all utility ratepayers. This paradigm effectively meant that residential and small commercial customers subsidized the massive infrastructure expansions necessitated by multinational technology corporations[21]. The rapid addition of data center demand to regional grids has been shown to drastically inflate capacity market clearing prices, pushing added costs onto consumer bills[12].

To rectify this imbalance, the Oregon legislature passed the POWER Act (House Bill 3546) in 2025. Under this regulatory framework, the state codified the requirement that large energy users served by investor-owned utilities must "pay their own way"[21]. Consequently, the Oregon Public Utility Commission approved a new large-load tariff class for developments consuming more than twenty megawatts of electricity -- a threshold that easily captures modern hyperscale data centers while excluding most traditional commercial enterprises[21]. This restructuring resulted in an approximate thirty percent rate increase for data centers and cryptocurrency mining operations, while simultaneously enabling a modest 1.3 percent reduction in residential electricity costs[21].

House Bill 2021 and the Renewable Energy Certificate Dilemma

Compounding the physical strain on the grid are Oregon's stringent, legally binding climate goals. Under House Bill 2021, adopted in 2021, the state mandated that electricity sold to Oregon consumers must achieve aggressive decarbonization milestones: 80 percent below baseline greenhouse gas emissions by 2030, 90 percent by 2035, and 100 percent by 2040[2].

Data centers complicate this transition immensely. While the Columbia River Basin features an abundant supply of hydropower, and wind and solar are increasingly cost-competitive, the sheer volume of continuous, firm power required by data centers often exceeds the availability of local, intermittent renewable resources[2]. This forces utilities to either delay the retirement of aging thermal

plants (such as natural gas or coal) or purchase non-renewable market power to maintain grid stability and meet the hyperscale demand[2]. Furthermore, transmitting new renewable energy generated in the expansive areas east of the Cascade Mountains to the dense data center hubs in the Portland metropolitan area creates severe transmission bottlenecks, acting much like a funnel where generated power backs up due to insufficient high-voltage transmission capacity[2].

A critical vulnerability within House Bill 2021 has also sparked controversy regarding corporate sustainability claims and carbon accounting. Renewable Energy Certificates represent the environmental attributes associated with one megawatt-hour of renewable electricity. Because electricity on a shared grid cannot be physically directed to a specific user, Renewable Energy Certificates serve as the standard mechanism for tracking clean energy generation and delivery[25].

However, House Bill 2021 initially contained a flaw: it lacked a strict, explicit requirement for utilities to retire Renewable Energy Certificates alongside the renewable energy they reported to the state for compliance[25]. This created an opportunity for double-counting. A utility could theoretically report the output of a solar farm as zero-emissions electricity for Oregon consumers to satisfy state law, while simultaneously severing and selling the associated Renewable Energy Certificates to an out-of-state entity or a voluntary corporate buyer, who would then claim those exact same environmental attributes[25].

Recognizing this threat to the integrity of regional decarbonization efforts, the Oregon Public Utility Commission and certification bodies like the Center for Resource Solutions (which manages the Green-e program) intervened. In early 2024, regulations were updated to mandate that any generation reported to the Oregon Department of Environmental Quality for compliance with House Bill 2021 could no longer have its associated certificates sold into the voluntary market as a certified product[26]. This strict accounting ensures that tech companies and utilities cannot falsely inflate their net-zero carbon claims at the expense of regional transparency.

| Oregon Energy Legislation | | Primary Objective | | Impact on Data Center Industry |

| House Bill 2021 (2021) | | Mandates 100% clean energy for retail electricity providers by 2040. | | Forces data centers and their utilities to procure massive amounts of verified renewable energy, constraining grid supply. |

| HB 2021 REC Ruling (2024) | | Eliminates double-counting of Renewable Energy Certificates. | | Prevents data centers from buying unbundled RECs if the underlying power was already used for state utility compliance. |

| POWER Act / HB 3546 (2025) | | Ensures large energy users pay the full cost of their grid impacts. | | Places data centers (>20 MW) in a higher tariff class, raising their electricity rates by nearly 30% to protect residential ratepayers. |

| House Bill 2816 (Proposed) | | Applies emission standards directly to high-energy use facilities in non-IOU territories. | | Aims to force facilities to reduce emissions independently, utilizing fines and the revocation of Enterprise Zone benefits for non-compliance. |

Table 3: Overview of pivotal energy legislation in Oregon and its regulatory impact on hyperscale data center operations and grid management.

[cite: 2, 21, 23, 24, 26]

Hydrological Footprints and the Thermodynamics of Cooling

While energy consumption garners primary headline attention, the most acute ecological conflict generated by data centers in the Pacific Northwest involves hydrology. Data center servers generate immense amounts of thermal energy, requiring sophisticated cooling mechanisms to prevent catastrophic hardware failure and maintain computational efficiency. Historically, the most cost-effective and energy-efficient method for heat rejection has been evaporative water cooling.

Evaporative Cooling and the The Dalles Case Study

In a traditional evaporative cooling setup, warm air from the server floor is passed through a heat exchanger where water is evaporated. This process absorbs the latent heat of vaporization, significantly cooling the air before it is recirculated into the server hall[27]. While highly efficient from an electrical perspective -- drastically reducing power demand on the grid during peak summer months compared to mechanical dry cooling -- this process consumes staggering volumes of highly purified, potable water[27]. A single large data center can consume between one and five million gallons of water daily, rivaling the footprint of agricultural irrigation or small municipalities[29].

The tension over water rights reached a boiling point in The Dalles, a rural city along the Columbia River Gorge. Google established its first data center there in 2006. By 2012, the facility was consuming approximately 104 million gallons annually, representing 12 percent of the municipality's total water supply[31]. As Google expanded its campus, its water draw grew exponentially, quintupling to nearly 550 million gallons annually by the mid-2020s[33]. By 2024, Google's consumption accounted for up to 40 percent of the entire city's water supply, frequently exceeding one million gallons per day[31].

When Google sought approval to build additional facilities in 2021, local residents raised acute alarms over the potential depletion of natural water tables, particularly as the city simultaneously explored expanding its reservoir in the Mount Hood National Forest to meet future industrial demand[31]. Investigative journalists at The Oregonian requested access to the company's water usage records using public records laws to assess the ecological impact. In an unprecedented move, the City of The Dalles, heavily backed and funded by Google's legal resources, sued the newspaper to block the release of the data. The municipality and the tech giant argued that exact water consumption metrics constituted a "trade secret," claiming that rivals could reverse-engineer proprietary cooling efficiencies if the numbers were published[29].

Following a thirteen-month legal battle, the district attorney ruled against the tech conglomerate, stating that the public's fundamental right to understand the utilization of municipal water superseded corporate secrecy[29]. Google subsequently abandoned the lawsuit and agreed to publish site-level water usage numbers globally, fundamentally altering the standard for environmental transparency in the

industry[33].

Despite these disclosures, hydrological anxiety persists in the region. The Dalles had previously been designated a "critical groundwater area" by state regulators due to severe aquifer strain caused by a twentieth-century aluminum smelter[31]. Google holds the transferred water rights from that defunct smelter, theoretically granting the corporation the legal right to pump nearly 3.88 million gallons a day from underground -- an amount that approaches the total daily residential use of the entire city[31].

Analyzing the Scientific Metrics: PUE, WUE, and WSUE

To fully understand the data center cooling challenge, one must look beyond localized water withdrawal and examine the holistic thermodynamic coupling of the infrastructure. The industry relies on several standardized metrics to evaluate infrastructural efficiency, the most prominent being Power Usage Effectiveness. This metric is calculated as the ratio of total facility power consumption to the power consumed strictly by the IT equipment. A perfectly efficient facility would score a 1.0, indicating zero power is wasted on overhead operations like cooling, lighting, or power distribution losses[30]. Historically, data centers operated at a Power Usage Effectiveness of 2.0 or higher. Today, extensive operational optimizations have brought the global average down to between 1.5 and 1.6, while state-of-the-art hyperscale facilities can achieve levels as low as 1.1, nearing thermodynamic practical limits[30].

However, optimizing solely for electrical power often triggers a thermodynamic "seesaw effect." Achieving a highly efficient power score frequently necessitates the use of vast amounts of evaporative water cooling, thereby trading electrical efficiency for hydrological strain[37]. To quantify this, the industry utilizes Water Usage Effectiveness, defined as the volume of water consumed directly on-site per kilowatt-hour of IT energy consumed[38].

Yet, looking solely at direct, on-site water consumption paints an incomplete picture. According to the Lawrence Berkeley National Laboratory, while U.S. data centers consumed an estimated 17 billion gallons of water directly for cooling in 2023, they consumed an additional 211 billion gallons indirectly through the water required to generate the electricity that powered them (e.g., cooling towers at thermal power plants or evaporation from hydroelectric reservoirs)[33].

To address this, researchers have introduced an advanced, holistic metric: Water Scarcity Usage Effectiveness. This metric contextualizes raw water volume by factoring in the regional hydrological stress of the specific geographic location using specialized factors like the Available Water Remaining (AWARE) characterization factor and the Source Water Intensity factor[38].

Water Scarcity Usage Effectiveness reveals a critical insight for facility siting: a data center utilizing heavy evaporative cooling (high on-site water use) in a water-abundant region powered by wind energy may actually have a lower overall hydrological impact than a facility utilizing dry cooling (zero on-site water use) in an arid region if that dry-cooled facility is powered by water-intensive fossil fuel plants[38]. This advanced metric demonstrates that a facility's geographic

location and its specific power grid profile play a more significant role in its true environmental footprint than the internal cooling system alone.

Efficiency Metric	Focus Area	Description and Relevance
Power Usage Effectiveness	Electrical Efficiency	The ratio of total facility power to IT equipment power. Lower values indicate highly optimized cooling and power delivery. The industry gold standard is approaching 1.1.
Water Usage Effectiveness	Direct Hydrological Impact	The volume of water consumed directly on-site per unit of IT energy. Fails to account for off-site water use at power generation plants.
Water Scarcity Usage Effectiveness	Holistic Hydrological Impact	A composite metric integrating direct and indirect water use, weighted by regional water scarcity (AWARE factors) and source water intensity. Crucial for advanced site selection.
Carbon Usage Effectiveness	Greenhouse Gas Impact	The ratio of total CO2 emissions caused by the facility to the IT energy consumed. Heavily dependent on the local grid's renewable energy mix.

Table 4: Standard and advanced scientific metrics utilized to evaluate the environmental and thermodynamic efficiency of data center operations.

[cite: 30, 37, 38, 40, 41]

Advanced Engineering Mitigations: Liquid Cooling Architectures

The dual pressures of electrical grid constraints and regional water scarcity have forced the data center industry to innovate beyond traditional air-based cooling paradigms. Liquid possesses a significantly higher specific heat capacity and thermal conductivity than air, making it far more efficient at capturing and transporting thermal energy away from high-density server racks[41].

Two specific technologies are at the forefront of this architectural transition:

The first is Direct-to-Chip Liquid Cooling. Unlike ambient air cooling that attempts to lower the temperature of an entire server hall by blowing cold air through the aisles, direct-to-chip technology circulates a liquid coolant via micro-tubes directly to cold plates mounted atop the highest heat-generating components, primarily Central Processing Units and Graphics Processing Units[42]. By targeting the thermal energy plume at its precise source, the system removes 70 to 80 percent of the heat load immediately, dramatically reducing the reliance on facility-level compressor cooling and heavy fan operation, leading to vastly improved Power Usage Effectiveness[42].

The second, more radical architectural departure is Two-Phase Immersion Cooling. In this setup, entire server motherboards are physically submerged in specialized, non-conductive dielectric fluids[42]. The "two-phase" terminology refers to the fluid's state change. When the processors generate heat, the dielectric fluid reaches its low boiling point and vaporizes. This phase change absorbs immense amounts of thermal energy through the latent heat of vaporization without raising the baseline temperature of the liquid bath[41]. The vapor naturally rises to a

condenser coil at the top of the sealed tank, where it is cooled back into a liquid and drips down to repeat the continuous thermodynamic cycle[44].

These advanced liquid systems drastically lower power usage and virtually eliminate the need for evaporative potable water cooling. Furthermore, they capture thermal energy in a highly concentrated, high-temperature form. This concentrated heated fluid opens the door for waste-heat reuse, wherein data centers can export their thermal exhaust to nearby municipal district heating networks or agricultural facilities, effectively transforming a waste byproduct into a secondary public utility and improving the holistic sustainability of the infrastructure[46].

Regulatory Horizons: Moratoriums and the Statewide Advisory Committee

As advanced technological solutions slowly filter into commercial deployment, Oregon's legislative and municipal leaders are increasingly utilizing statutory tools to slow the pace of development until comprehensive frameworks can be established.

The strategy of enacting localized pauses on development has gained significant momentum. In mid-2026, following intense community backlash regarding the fast-tracking of tax abatements, the Hillsboro City Council enacted a sudden 120-day moratorium on new data center approvals. The council provided just 24 hours of public notice before the policy move, reflecting the acute political pressure surrounding the issue[1].

On a broader scale, progressive members of the Oregon state legislature -- including State Senators Jeff Golden and Courtney Neron Misslin, alongside Representatives Lesly Mu oz and Farrah Chaichi -- announced their intention to introduce a bill in the 2027 legislative session demanding a sweeping three-year statewide moratorium on all new large-scale data centers[1]. This legislative push, backed by conservation nonprofits, labor unions, and agricultural stakeholders concerned with farmland loss, mirrors actions taken in other jurisdictions; notably, New York successfully passed a one-year moratorium on all new data centers consuming twenty or more megawatts of electricity to assess grid impacts[1].

Recognizing the acute need for a unified, rather than piecemeal, statewide strategy, Governor Tina Kotek directly intervened in several municipal disputes -- including actively blocking the sale of state-owned land in Salem to a data center developer -- and established the Oregon Data Center Advisory Committee in early 2026[1].

This multi-disciplinary committee was tasked with comprehensively auditing the industry's holistic footprint[4]. Through a series of public listening sessions and expert panels spanning land use, workforce development, energy affordability, and hydrological modeling, the committee aimed to produce a balanced regulatory framework[49]. Scheduled for delivery in the fall of 2026, the committee's findings are expected to serve as the foundational architecture for the 2027 legislative session[4].

Key areas of policy evolution likely to emerge from the committee's deliberations include the decoupling of tax incentives from simple capital investment, instead requiring strict environmental performance and job-creation thresholds.

Additionally, the codification of resource transparency -- building on the precedent set by The Dalles lawsuit -- will likely mandate that all power and water consumption figures for hyperscale facilities be classified as public records. Finally, the committee is expected to recommend standardizing community impact fees, ensuring that data centers proactively fund the expansion of municipal water treatment facilities and electrical substations, rather than socializing those costs onto the existing ratepayer base.

Conclusion

The discourse surrounding data centers in Oregon has irrevocably shifted from uncritical economic enthusiasm to rigorous, multi-disciplinary skepticism. Driven by stark polling data that reflects a deeply anxious electorate, policymakers are no longer willing to trade critical tax revenues and finite natural resources for the prestige of housing multinational technology campuses.

The state's multifaceted response -- ranging from the strict rate adjustments of the POWER Act and the closure of REC loopholes under House Bill 2021, to the formation of the Data Center Advisory Committee and the implementation of localized moratoriums -- illustrates a necessary maturation in civic and infrastructural planning. Moving forward, the viability of the digital infrastructure sector in Oregon will depend not merely on its ability to execute advanced thermodynamic engineering like direct-to-chip or immersion cooling, but on its willingness to operate transparently, pay equitably for infrastructural upgrades, and align its operational footprint with the ecological and macroeconomic realities of its host communities.

Oregon's ongoing regulatory recalibration provides a vital, globally relevant blueprint for how modern societies can harness the computational benefits of artificial intelligence and cloud infrastructure without sacrificing the fundamental sustainability of the physical world that supports them.

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