

**Attention as Ecological Practice: AI Data Centers and the Limits of
the Anthropocene**

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Ecology in a Time of Planetary Crisis, Spring 2026

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I. What Looks Virtual Is Material: Defining the Ecological Problem of AI Data Centers

A building is being constructed on South Pine Street in Spartanburg, South Carolina, on the shell of a former Kohler manufacturing plant that closed in 2024 after 66 years of operation.

NorthMark Strategies, a multi-strategy investment firm, is transforming its 850,000-square-foot facility into what company officials describe as one of the most advanced high-performance computing facilities in the world.¹ The investment is \$2.8 billion. The jobs created will number two dozen.

A few miles away along Highway 290, the Tyger River Industrial Park was nearly the site of a different kind of facility. TigerDC, operating under the name Project Spero (named for South Carolina's state motto, *Dum Spiro Spero*, "While I breathe, I hope"), proposed a \$3 billion, 100 to 250 megawatt AI-focused data center in January 2026. Hundreds of residents packed County Council chambers in opposition. A Facebook group called "No Data Centers in Spartanburg" gathered nearly 3,000 members, and a petition gathered 4,000 signatures. In late February, TigerDC withdrew, citing a lack of stakeholder alignment.² The relief was short-lived.

¹ NorthMark Strategies press release, April 21, 2025, as reported in Jessica Holdman, "'Cutting-Edge' Supercomputing Facility, a \$2.8B Investment, Planned for Spartanburg County," *SC Daily Gazette*, April 22, 2025.

² "TigerDC Won't Build \$3B Data Center after Spartanburg Leaders Sour on Tax Break Offer," *Post and Courier*, February 27, 2026. TigerDC's withdrawal came two hours before a scheduled county council vote on the tax abatement. Community opposition had coalesced around a Facebook group, a petition with approximately four thousand signatures, and a website, stopprojectspero.com.

Within days, residents were asking questions about a third site at 300 Jones Road, a former paper plant, with an SEC filing suggesting rights to 60 megawatts of electrical service already secured.³

Spartanburg County, in roughly a year, had become a data center frontier, and a site of overlapping proposals, competing narratives, and a community trying to hold its attention on something it had been trained, by the very nature of digital infrastructure, to overlook.

AI data centers are not, as they are routinely characterized in economic development materials, immaterial or virtual. They are among the most materially intensive forms of infrastructure now being built at scale in the United States. A single large-scale facility can draw hundreds of megawatts of electricity continuously, consume millions of gallons of water annually for cooling, and require the mining and manufacturing of enormous quantities of rare-earth minerals, copper, and steel.⁴ Lawrence Berkeley National Laboratory projects that U.S. data center electricity consumption could reach 325–580 terawatt-hours annually by 2028, a potential doubling or tripling of current demand driven substantially by AI workloads.⁵ These are not abstract projections but load curves that utilities are already scrambling to accommodate, grid constraints that are already shaping siting decisions, and water withdrawals that are already pressing against regional hydrological limits.

The dominant public narrative renders this materiality almost entirely invisible. The rhetorical apparatus deployed in Spartanburg consistently foregrounds jobs, tax revenue, innovation, and American competitiveness while systematically backgrounding energy demand, water consumption, and grid stress. Project Spero's promotional materials emphasized \$249

³ "Hearing about Another Data Center in Spartanburg County? Here's What We Know," WSPA 7NEWS, March 2026. The 300 Jones Road site involves LightHouse Data Center, The Lightstone Group, and Wharton Digital.

⁴ Kate Crawford, *Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence* (New Haven: Yale University Press, 2021), 1–50.

⁵ Arman Shehabi et al., "2024 United States Data Center Energy Usage Report," Lawrence Berkeley National Laboratory, 2024.

million in projected property tax revenue over thirty years and fifty full-time positions averaging \$100,000 annually.⁶ NorthMark's announcement led with "one of the most advanced high-performance computing facilities in the world" and the assurance that the facility would generate its own power, minimizing impact on the power grid.⁷ Both framings share a common structure: planetary costs disappear, leaving only a story of growth, innovation, and local benefit.

This paper argues that this disappearance is not incidental. It is the product of what I will call, following Yves Citton's account of the politics of attention, an organized ecology of perception as a set of rhetorical, infrastructural, and institutional practices that actively train communities to experience the costs of digital expansion as distant, abstract, and therefore politically negotiable.⁸ The crisis of AI data center development is not only an energy and water concern. It is a crisis of *ecological perception*, a systemic failure to hold the material conditions of digital life in view. Addressing that failure requires not only better policy but a different kind of attention, a discipline of noticing that keeps energy, water, land, and creaturely life visibly present in the frame within which decisions are made.

II. Planetary Boundaries as Hard Limits: Where Data Centers Press the Earth System

The Tyger River runs through the northwestern corner of Spartanburg County before joining the Broad River and eventually the Congaree, draining a watershed shaped by textile mills, agricultural runoff, and suburban expansion over two centuries of Piedmont development. It is a living system under pressure, and the watershed into which Spartanburg County's data center

⁶ Project Spero promotional materials, projectspero.ai, accessed February 2026.

⁷ NorthMark Strategies press release, April 21, 2025. The phrase "minimal impact on the power grid" appears in both the company's own announcement and in Governor McMaster's endorsing statement, suggesting coordinated rhetorical framing.

⁸ Yves Citton, *The Ecology of Attention* (Cambridge: Polity Press, 2017). Citton's account of attention as a distributed, politically structured field provides the theoretical grounding for treating infrastructural invisibility not as a natural condition but as a produced and organized one.

buildout would insert itself, drawing on regional water and energy resources already operating near their limits.

Katherine Richardson and colleagues' 2023 update to the planetary boundaries framework found that six of nine boundaries have now been transgressed, including climate change, biosphere integrity, land-system change, freshwater change, novel entities, and biogeochemical flows.⁹ AI data center expansion presses against at least three of those boundaries simultaneously, in ways systematically obscured by the rhetorical framing that accompanies siting and permitting processes.

The most direct pressure is climate forcing through energy demand. These are structural loads that will shape investment decisions, delay retirement of fossil fuel generation, and lock in carbon-intensive electricity supply for decades. Project Spero's proposed 250 megawatts would have drawn on Lockhart Power's service territory (a small local cooperative in a rapidly growing rural residential area). NorthMark's facility trades grid stress for direct carbon emissions by generating its own power through a natural gas pipeline connection in a residential corridor of the county.¹⁰ Neither resolves the underlying climate boundary pressure.

The second pressure is freshwater change. Data centers require cooling, and cooling requires water, either directly through evaporative cooling towers or indirectly through the thermoelectric generation supplying their electricity. David Mytton's 2021 analysis documents significant underreporting in industry disclosures: many facilities report only direct water use

⁹ Katherine Richardson et al., "Earth Beyond Six of Nine Planetary Boundaries," *Science Advances* 9 (2023): eadh2458. The authors note that the boundaries interact in ways that can accelerate transgression across multiple systems simultaneously and expand the argument about perception.

¹⁰ NorthMark Strategies press release, April 21, 2025; County Councilman David Britt, as reported in Holdman, *SC Daily Gazette*, April 22, 2025. The natural gas pipeline connection represents a direct emissions source whose long-term carbon accounting will depend heavily on methane leakage rates upstream in the supply chain.

while obscuring the substantially larger withdrawals associated with their electricity supply.¹¹ TigerDC's promotional materials emphasized a *closed-loop cooling* design with negligible water impact, a characterization that does not account for the water embedded in the power generation that would have served the facility.¹² Lee and colleagues' 2020 regional analysis identifies the Southeast as facing compounding seasonal and climatic pressures, with summer heat and drought cycles constraining thermoelectric cooling capacity precisely when electricity demand peaks.¹³ Ganguli and colleagues demonstrate that water stress and grid stress are coupled risks: climate-driven reductions in water availability directly translate into reduced generation capacity at the moments of highest demand.¹⁴

The third pressure is biosphere integrity, operating through land-system change and the grid expansion required to serve new large loads. The Tyger River Industrial Park is adjacent to mixed agricultural and residential land uses that support the species assemblages of the Carolina Piedmont, a region of high biodiversity significance whose forests, wetlands, and riparian corridors have been under pressure from suburban development for decades. Large industrial loads at 100–250 megawatts accelerate that fragmentation by requiring grid infrastructure upgrades that span the landscape with new wires and towers.¹⁵

¹¹ David Mytton, "Data Centre Water Consumption," *npj Clean Water* 4 (2021). Mytton's analysis documents the gap between direct and indirect water consumption, which is systematically exploited in industry communications to minimize apparent water footprint.

¹² Nicola Jones, "How to Stop Data Centres from Gobbling Up the World's Electricity," *Nature* 561 (2018): 163–166.

¹³ Uisun Lee et al., "Regional and Seasonal Water Stress Analysis of United States Power Production," *Journal of Cleaner Production* 252 (2020): 119–127.

¹⁴ P. Ganguli et al., "US Power Production at Risk from Water Stress in a Changing Climate," *Scientific Reports* 7 (2017).

¹⁵ This argument draws on the broader literature on infrastructure-driven land use change and habitat fragmentation in the Southeastern U.S. While site-specific impact assessments for the Spartanburg facilities are not publicly available at the time of writing, the general pattern is well documented in the regional planning literature.

What is most significant about these three vectors of planetary boundary pressure is not their individual magnitude but their simultaneity and their invisibility. The promotional materials treat energy, water, and land as essentially solved problems rather than as living systems under stress with their own claims on attention and protection. That invisibility is the product of a growth paradigm that has organized our perceptual habits as thoroughly as it has organized our economic institutions.

III. From Infrastructure to Imagination: Technocratic Paradigm, Contact Zones, and the Politics of Perception

In October 2023, Pope Francis released *Laudate Deum*, an apostolic exhortation on the climate crisis whose central argument is not about carbon emissions or climate policy but about perception. Francis names this the *technocratic paradigm* and a way of thinking that treats reality, goodness, and truth as automatically flowing from technological and economic power, making it easy to accept infinite or unlimited growth as not only desirable but natural.¹⁶ It's a perceptual condition that renders the nonhuman world as a resource rather than a relation, as background rather than a companion. When he writes that we have stopped seeing creatures of this world as companions along the way and begun treating them as objects of exploitation, he is making a phenomenological claim as much as a moral one.¹⁷

This diagnosis maps with uncomfortable precision onto the Spartanburg data center proposals. Neither Project Spero nor NorthMark's materials acknowledged the Tyger River

¹⁶ Francis, *Laudate Deum: To All People of Good Will on the Climate Crisis* (Vatican City: Dicastery for Communication, 2023), §§20–22. Francis draws directly on his earlier treatment of the technocratic paradigm in *Laudato Si'* (2015).

¹⁷ Francis, *Laudate Deum*, §15: "Some effects of the climate crisis are already irreversible... This is one of the many signs that the other creatures of this world have stopped being our companions along the way and have become instead our victims."

watershed, the regional grid's carbon intensity, the water stress accumulating in the Broad River basin, or the creaturely communities whose habitat would be reorganized by the infrastructure required to serve these facilities. The world those promotional materials address is a world of human projects and economic flows. The rest of creation is simply not in the frame.

Donna Haraway, who was cited in a footnote of *Laudate Deum* to her considerable surprise, offers both an appreciation and a sharp correction of Francis's diagnosis.¹⁸ She appreciates the fundamental move: the insistence that the technocratic paradigm has trained us to see the world as object rather than relation. But she objects to the universalizing. Francis's phrase "technocratic paradigm" misidentifies the problem as something residing in human nature as such. The more precise diagnosis, for Haraway, is technocratic capitalism, not humanity's relationship to technology in the abstract but specific, historically situated formations of capital, nation, and corporate power that have organized the exploitation of both human and nonhuman life for profit.¹⁹

The data center buildout is not the expression of a universal human drive toward technological expansion. It is the expression of a specific political economy from tax incentive structures that reward large capital investment regardless of ecological cost to utility regulatory frameworks that pass infrastructure upgrade costs to ratepayers while privatizing the profits of industrial customers, and state economic development strategies that measure success in investment dollars while externalizing the costs of grid stress, water withdrawal, and habitat fragmentation onto communities and ecosystems with no seat at the negotiating table.

¹⁸ Camille Bromley, "Feminist Scholar Donna Haraway Reacts to Inclusion in Pope Francis' Climate Letter," *National Catholic Reporter*, November 3, 2023. Haraway's response: "Some baby Jesuit who's into animal studies and science studies and feminist theory for some weird reason has been reading me." The citation appears in *Laudate Deum*, footnote 41.

¹⁹ Bromley, "Feminist Scholar Donna Haraway." Haraway's specific objection is to framing the problem in terms of something in human nature rather than "very situated formations of nations and peoples and businesses."

Wainwright and Mann's analysis in *Climate Leviathan* is directly relevant here, with the response to the planetary crisis currently being assembled not a departure from the growth paradigm but its continuation under new technological conditions, with AI infrastructure playing the role that fossil fuel infrastructure played in earlier phases of capitalist development.²⁰

Haraway's most generative contribution here is not the corrective but the concept of the contact zone, which Francis borrowed from her 2008 book *When Species Meet* and deployed to describe the entire world.²¹ For Haraway, contact zones are the sites of encounter between different species and different ways of being, fraught with the histories of conquest and asymmetrical power but also places of possibility, of what she calls "working with" to achieve something that neither party could accomplish alone. She developed the concept through the specific, embodied practice of training her dog, Cayenne, which is a discipline that requires genuine attention to another creature's experience.

The data center is the anti-contact zone. It is infrastructure engineered specifically to recede from view, to make encounter impossible, to prevent the kind of attentive presence to place and creature that Haraway's concept describes. The server farms are climate-controlled, access-restricted, windowless. The energy flows are invisible on the bill. The water withdrawals are buried in utility filings. These systems are engineered to recede from view, and the engineering of invisibility is itself a political act.²²

²⁰ Joel Wainwright and Geoff Mann, *Climate Leviathan: A Political Theory of Our Planetary Future* (London: Verso, 2018), 1–35.

²¹ Donna Haraway, *When Species Meet* (Minneapolis: University of Minnesota Press, 2008), 205–249. The chapter cited by Francis develops the contact zone concept through Haraway's practice of agility training with her dog Cayenne, drawing on Mary Louise Pratt's original formulation.

²² This formulation draws on Salana Adhikari's peer review of an earlier draft of the abstract of this paper, in which she noted the importance of analyzing "the aesthetic politics of infrastructure... showing how systems are engineered to recede from view."

What Francis and Haraway share is the conviction that the crisis requires a transformation of perception before it can be addressed at the level of policy. Francis calls this a spiritual awakening, a recovery of the sense that the world is not ours to use but a gift in which we are included.²³ Haraway calls it staying with the trouble: refusing the consolations of techno-optimism or apocalypticism, remaining present to the damaged world, learning to make kin across the lines of species difference that the technocratic paradigm has treated as mere resource gradients.²⁴ Both suggest that the first requirement is *attention*: a disciplined, embodied, place-specific practice of keeping the material conditions of digital life in view.

IV. Attention, Invisibility, and Moral Distance: A Spiritual-Phenomenological Reading of Infrastructure

At the February 2026 Spartanburg County Council meeting, council member Paul Abbott, one of two who voted against Project Spero, said: “I’m not an electrician, and I don’t understand the grid. But I do understand when the power goes off.”²⁵ Abbott was making a perceptual argument. He was describing the limit of what the dominant framing had made visible to him, and the moment at which something broke through: a Duke Energy notice during a recent ice storm urging customers to reduce heat usage to avoid straining the grid. The infrastructure became present. The grid suddenly had weight.

That moment of breakdown is precisely what Yves Citton means by the ecology of attention. For Citton, attention is not a neutral cognitive capacity that individuals either exercise or neglect. It is a distributed field, shaped and organized by the infrastructures, media systems,

²³ Francis, *Laudate Deum*, §§66–68.

²⁴ Donna Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham: Duke University Press, 2016), 1–35.

²⁵ “Data Center One Step Closer to Reality after Spartanburg County Council Approval,” FOX Carolina, February 17, 2026.

and political economies within which it operates.²⁶ The attention available to Spartanburg residents for evaluating the data center proposals was actively structured by a promotional apparatus that organized what was visible and what was relegated to the background. The jobs were visible. The Tyger River watershed was not.

This structuring of attention is, in the terms Francis develops in *Laudate Deum*, a spiritual and moral condition. When Francis writes that the world has stopped being a gift for which we should be thankful and has become a slave, prey to any whim of the human mind, he is describing not just an economic arrangement but a perceptual one.²⁷ The world rendered as resource is also a world rendered as background, as the silent, assumed context for human projects rather than as a community of beings with their own duration and their own claims on our notice.

Maurice Merleau-Ponty's account of embodied perception illuminates this condition. For Merleau-Ponty, perception is not a mental act performed by a disembodied subject on a world of objects. It is a bodily engagement with a field of significance, a way of being already in the world, already implicated in its textures and rhythms before any explicit act of attention or reflection.²⁸ The quality of that relation, whether characterized by genuine presence or by habituated abstraction, shapes what we are capable of noticing, caring about, and acting to protect. The data center reorganizes that perceptual field as a system designed to make the

²⁶ Yves Citton, *The Ecology of Attention* (Cambridge: Polity Press, 2017), 1–40. Citton's central argument is that attention is a commons, a shared resource currently being enclosed and exploited by media and infrastructural systems in ways that parallel the enclosure of physical commons in earlier phases of capitalist development.

²⁷ Francis, *Laudate Deum*, §22: "Everything that exists ceases to be a gift for which we should be thankful, esteem and cherish, and instead becomes a slave, prey to any whim of the human mind and its capacities."

²⁸ Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. Donald Landes (London: Routledge, 2012), lxx–lxxxiv.

planetary costs of digital life recede from the foreground of attention into the background of assumption.²⁹ These absences are not oversights. They are features.

What attention as ecological practice proposes, against this engineered invisibility, is a discipline of presence with a sustained, embodied, place-specific practice of keeping the material conditions of digital life visibly in view. Citton describes this kind of counter-attentional practice as an ecology of attention in the normative sense, a proposal for organizing attention differently, in ways that make the full costs of our infrastructural choices visible and therefore politically accountable.³⁰ The Abu Dhabi Interfaith Statement for COP28 similarly honors the threads of interconnectedness and interdependence that weave us into the intricate fabric of life.³¹ That language risks sentimentality if it floats free of the specific conditions interconnectedness actually names: the Tyger River, the Broad River basin, the Piedmont hardwood forest. Grounded in those specifics, it names something real.

The answer to Abbott's perceptual breakthrough is not to be found in individual spiritual practice alone. It requires the kind of structural and political transformation that Wainwright and Mann insist upon with changes in tax incentive structures, utility regulatory frameworks, and community consent processes that make the full ecological costs of data center development visible before decisions are made rather than after. But it also requires something that structural changes cannot by themselves generate in the perceptual and moral formations that makes people want to know those costs, and willing to act on what they learn. Attention as an ecological practice is the name for that formation.

²⁹ This concept draws on the broader literature in infrastructure studies on the deliberate design of invisibility, including Susan Leigh Star's foundational work on infrastructure as that which becomes visible only upon breakdown. The application to data centers is developed in Crawford, *Atlas of AI*.

³⁰ Citton, *The Ecology of Attention*, 180.

³¹ Global Faith Leaders Summit, *Interfaith Statement for COP28* (Abu Dhabi, 2023).

V. Case Anchor: Spartanburg and the Southeast as a Data Center Frontier

Spartanburg County is not, by the usual metrics of the data center industry, an obvious location for large-scale digital infrastructure investment. What it has is land, relatively low power costs through cooperative utilities, a political culture receptive to large capital investment, and a geographic position in the Piedmont placing it within easy reach of both the Charlotte and Atlanta metro markets. It has, in the language of site selection consultants, strategic advantages, a phrase that NorthMark's president used verbatim in the company's April 2025 announcement, without specifying what those advantages were or what they would cost the county's living systems to provide.³²

The Southeast has emerged as a particularly active frontier for AI infrastructure expansion, as developers seek alternatives to saturated markets in Northern Virginia and the Pacific Northwest. Google has committed nine billion dollars to data center expansion in South Carolina. Meta is constructing large-scale facilities across the region. The U.S. Department of Energy has solicited proposals for data center development at the Savannah River Site.³³ Spartanburg County is not an outlier but a leading indicator.

Project Spero arrived first in public consciousness, announced by TigerDC in January 2026 as a \$3 billion, 100 to 250 megawatt AI-focused facility at the Tyger River Industrial Park along Highway 290.³⁴ Its name performed a particular kind of rhetorical work: *Dum Spiro Spero*, while I breathe, I hope, claimed the county's identity, its aspirations, its very breath, as the brand of an extractive infrastructure project. The promotional website deployed the language of

³² NorthMark Strategies press release, April 21, 2025. The phrase "strategic advantages" appears without elaboration in both the company announcement and in Governor McMaster's endorsing statement.

³³ "Proposal for \$3bn Data Center Faces Opposition in Spartanburg County, South Carolina," *Data Center Dynamics*, January 13, 2026.

³⁴ "TigerDC Announces \$3 Billion Data Center, New Jobs in Spartanburg County," FOX Carolina, January 27, 2026. TigerDC described Project Spero as its second major investment in Spartanburg County, following the opening of a Bitcoin mining facility at the Tyger River Industrial Park in 2022.

community investment, responsible growth, and American innovation, emphasizing \$249 million in projected property tax revenue over thirty years while burying the facility's energy and water demands in technical appendices that most residents would never read.

The community did read. Enough residents organized to generate a response the promotional apparatus had not anticipated: a Facebook group with nearly three thousand members, a petition with four thousand signatures, a website called stopprojectspero.com, and hundreds of people willing to stand in line around the outside of a county council building to say, in the language of Council member Abbott, that they understood when the power went off.³⁵ TigerDC withdrew on February 27, 2026, two hours before a council vote that would have denied their tax abatement request. The community's attention, briefly and collectively organized, had made the contact zone visible.

NorthMark's facility presents a more difficult case for the attention argument. Located at the former Kohler manufacturing plant, announced in April 2025 before the Spero controversy had fully developed, it moved through the approval process with substantially less opposition.³⁶ It was framed as a continuation of the county's manufacturing tradition rather than a departure from it. The Kohler plant had employed hundreds of workers for sixty-six years before closing in 2024. NorthMark's facility will employ just over two dozen. That disparity, \$2.8 billion in investment generating two dozen jobs, represents the ratio of capital to labor that characterizes AI infrastructure development across the sector. The distributional impacts fall unevenly on ratepayers who absorb grid upgrade costs, on downstream water users, and on communities adjacent to transmission corridors whose land-use patterns are reorganized by infrastructure they did not choose.

³⁵ "Community Pushing Back on \$3B Spartanburg County Data Center," WSPA 7NEWS, February 25, 2026.

³⁶ Holdman, "'Cutting-Edge' Supercomputing Facility," *SC Daily Gazette*, April 22, 2025.

The 300 Jones Road situation remains deliberately obscure. The 152-acre former paper plant site was sold under a purchase and sale agreement that included rights to sixty megawatts of electrical service, with LightHouse Data Center, The Lightstone Group, and Wharton Digital identified as parties through SEC filings.³⁷ Unlike Project Spero, which was announced with a promotional campaign, this development has proceeded through the quiet machinery of real estate transactions and utility agreements, visible only to those with the time and expertise to read SEC filings and track county permitting records.

These three cases illuminate a pattern that extends well beyond Spartanburg County. Data center development in the current AI buildout cycle proceeds through a variety of institutional channels simultaneously: some highly visible and politically contested, others operating in the background of regulatory and financial processes that the attention ecology of most communities is simply not organized to track. Spartanburg County Council announced a pause on data center tax incentive decisions until state regulations are established, and the South Carolina General Assembly is considering legislation to temporarily halt new data center approvals until 2028.³⁸ These are incomplete responses to the ecological perception crisis the buildout has exposed. But they represent a community that paid attention, briefly and collectively, to what was being proposed for its living systems, and that used that attention to create at least a partial pause in the machinery of growth.

VI. Counterarguments: Efficiency, Innovation, and the Promise of Clean Growth

³⁷ “Hearing about Another Data Center in Spartanburg County? Here’s What We Know,” WSPA 7NEWS, March 2026.

³⁸ “Could Another Data Center Come to Spartanburg County? Documents Leave Answer Unclear,” FOX Carolina, March 2026.

The most persistent counterargument contains a partial truth that needs to be considered. AI, the argument runs, will ultimately reduce energy consumption. Machine learning systems are already being deployed to optimize grid operations, improve building efficiency, and accelerate materials discovery for next-generation solar and battery technologies. The computational costs of today's training runs are necessary investments in tools that will pay ecological dividends for decades. To resist AI infrastructure development on environmental grounds is, in this framing, to let the present cost be the enemy of the future benefit.

Project Spero's website described the facility as part of America's AI leadership infrastructure.³⁹ NorthMark's announcement gestured toward a portfolio of innovative uses without specifying which might deliver ecological returns.⁴⁰ The Drawdown framework includes several AI-enabled interventions in its ranked list of emissions reduction strategies.⁴¹ The problem with this argument is not that it is wrong about AI's potential to contribute to climate solutions. It is wrong about the temporal, distributional, and structural relationship between that potential and the infrastructure being built today.

The first problem is the rebound effect, sometimes called the Jevons paradox. Essentially, it describes improvements in efficiency that tend to increase total demand rather than reduce it, as cheaper operation expands use.⁴² The efficiency gains in data center power usage that Jones documented in her 2018 *Nature* analysis were genuine and significant, yet almost entirely

³⁹ Project Spero promotional materials, projectspero.ai, accessed February 2026.

⁴⁰ NorthMark Strategies press release, April 21, 2025.

⁴¹ Paul Hawken, ed., *Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming* (New York: Penguin Books, 2017).

⁴² The Jevons paradox, first described in William Stanley Jevons's 1865 work *The Coal Question*, has been extensively documented in contemporary energy economics. For a recent treatment relevant to computing, see Shehabi et al., "2024 United States Data Center Energy Usage Report."

consumed by the growth in demand they helped to enable.⁴³ The AI buildout is following the same pattern on a larger scale and at higher velocity.

The second problem is temporal mismatch. The NorthMark facility will be operational in Q3 2026 and will generate its own power through natural gas combustion for the foreseeable future. The renewable energy transition that might eventually power that facility depends on grid investments, storage technology, and regulatory frameworks currently moving more slowly than the data center buildout they are supposed to serve. Lawrence Berkeley National Laboratory's projections show the AI-driven demand surge outpacing renewable capacity additions in most regional grids: the near-term effect of the buildout is to increase, not decrease, fossil fuel generation.⁴⁴ The future benefits are speculative. The present carbon lock-in is structural.

The third problem is distributional. The efficiency and innovation argument is made overwhelmingly from the perspective of those who will capture the benefits of AI development. It is made much less frequently from the perspective of Spartanburg County ratepayers who will absorb grid upgrade costs, downstream water users managing the cumulative effects of increased withdrawal from the Broad River basin, or communities adjacent to transmission corridors whose land-use patterns will be reorganized by infrastructure they did not choose. The distributional silence of the efficiency argument is the point at which its partial truth becomes a political instrument, a way of making the interests of capital appear as the interests of the climate.

⁴³ Jones, "How to Stop Data Centres from Gobbling Up the World's Electricity," *Nature* 561 (2018): 163–166. Jones documented genuine efficiency improvements between 2010 and 2018, but noted that total electricity consumption had remained relatively flat only because efficiency gains had absorbed demand growth. The AI-driven demand surge since 2022 represents a structural break from this pattern.

⁴⁴ Shehabi et al., "2024 United States Data Center Energy Usage Report." Renewable capacity additions are lagging behind demand growth in most regional grids in the Southeast.

Naomi Klein's analysis in *This Changes Everything* is directly relevant here with the insight that the dominant responses to the climate crisis has been structured to protect the growth paradigm rather than challenge it, finding market-compatible solutions that allow capital accumulation to continue while the ecological conditions that make accumulation possible are progressively degraded.⁴⁵ Amitav Ghosh's account of the climate crisis as a crisis of imagination is equally relevant as the efficiency and innovation counterargument presents the data center as inevitable, foreclosing imagination rather than opening it.⁴⁶ The weighing requires visibility with costs made present, distributional impacts made explicit, temporal mismatches acknowledged, and rebound dynamics built into the accounting. That is what attention as an ecological practice demands: not a categorical rejection of digital infrastructure, but a refusal to accept the invisibility of its costs as the price of admission to the conversation about its benefits.

VII. What Would an Ecological "Yes" or "No" Look Like? Criteria for Decision Under Planetary Constraint

The question is not whether Spartanburg County should have data centers. It is what it would mean to make that decision within ecological limits rather than beyond them, with planetary costs visible rather than engineered into invisibility, and with the full community of affected beings, human and more-than-human, present in the conversation.

Attention is a necessary, not a sufficient, condition for that decision. The community opposition to Project Spero demonstrated that organized civic attention can interrupt the machinery of growth, at least temporarily. It did not produce the institutional frameworks that

⁴⁵ Naomi Klein, *This Changes Everything: Capitalism vs. the Climate* (New York: Simon and Schuster, 2014), 1–63.

⁴⁶ Amitav Ghosh, *The Great Derangement: Climate Change and the Unthinkable* (Chicago: University of Chicago Press, 2016), 1–60.

would make ecological accountability a structural feature of data center development rather than a contingent outcome of unusually well-organized opposition. Building those frameworks requires the kind of political and regulatory transformation that Wainwright and Mann insist upon: changes that restructure the incentive landscape within which developers, utilities, and local governments operate.

The first criterion is energy transparency and grid additionality. Any large-scale data center proposal should provide a full accounting of its energy demand across its operational lifetime, including both direct consumption and the upstream emissions associated with its electricity supply. That accounting should include a specific analysis of whether the facility's load will require new fossil-fuel generation capacity, delay the retirement of existing capacity, or be demonstrably served by new renewable generation that would not otherwise be built. Neither NorthMark's natural gas generation strategy nor Project Spero's proposed reliance on Lockhart Power's existing capacity provided this kind of accounting in their public-facing materials.⁴⁷

The second criterion is water budgeting within watershed limits. Data center proposals should account for both direct and indirect water consumption, given the regional watershed's current stress level and projected climate trajectory. The Broad River basin is subject to the compounding seasonal and climatic pressures documented in the Lee and Ganguli studies reviewed in Section II. A water budget accounting for cumulative impacts across multiple facilities simultaneously, rather than evaluating each project in isolation, would represent a meaningful advance over current practice.⁴⁸

⁴⁷ This criterion draws on the concept of grid additionality developed in the renewable energy procurement literature, where additionality refers to whether a clean energy purchase generates new renewable capacity or simply claims credit for existing generation.

⁴⁸ Richardson et al., "Earth Beyond Six of Nine Planetary Boundaries," eadh2458. The freshwater boundary is defined at the watershed and regional scale, meaning that project-by-project evaluation systematically underestimates cumulative boundary pressure.

The third criterion is distributional impact assessment. Standard economic development accounting, jobs created, tax revenue generated, and investment totals announced systematically obscure who actually bears the costs. A genuine distributional impact assessment would identify which households bear grid upgrade charges, which communities are adjacent to transmission corridors, and which downstream water users absorb the cumulative effects of increased industrial withdrawal. The NorthMark case, \$2.8 billion in investment and two dozen jobs powered by on-site natural gas combustion in a residential corridor, would look substantially different under this kind of accounting than it does in the Governor's press release.⁴⁹

The fourth criterion combines community consent with genuine standing and temporal accountability. The 300 Jones Road development has proceeded through channels requiring no public engagement whatsoever, while developers simultaneously make aspirational statements about long-term sustainability goals while building facilities powered by fossil fuel generation. A community consent framework with genuine standing would require any data center development above a specified energy threshold to trigger a formal public engagement process with binding authority over approval conditions, including binding commitments to specific renewable energy transition timelines with meaningful penalties for non-compliance.⁵⁰

These criteria are not a comprehensive regulatory framework. They are the minimum that attention as an ecological practice would require: the institutional translation of perceptual discipline into the procedural architecture of land use and energy regulation. They would make

⁴⁹ The ratio of capital investment to direct employment in the NorthMark case, approximately \$103 million per job, is not unusual in the data center industry but is rarely presented in this form in economic development announcements.

⁵⁰ The Project Spero controversy demonstrated the limits of advisory engagement and community opposition was heard, but the council's 5-2 vote to approve the second reading proceeded regardless, and TigerDC's withdrawal was driven by the tax abatement denial rather than by any formal community consent process.

the contact zone, in Haraway's sense, the actual encounter between the proposed infrastructure and the living systems it will inhabit, visible before decisions are made rather than after.

The South Carolina General Assembly's proposed legislation to pause new data center approvals until 2028 is a blunt but not unreasonable response to the speed at which the buildout has outpaced the regulatory capacity to evaluate it.⁵¹ A pause is not a framework, but it creates the space within which a framework might be built, if the attention that generated the pause can be sustained long enough to produce something more durable than a moratorium.

Conclusion: While We Breathe

Project Spero was named after South Carolina's state motto, *Dum Spiro Spero*: while I breathe, I hope. Breath is not abstract. It is the most intimate and continuous form of our participation in the atmosphere that we share with every living being on the planet, the rhythmic exchange of gases that connects human bodies to the bodies of trees, of soil organisms, of the Tyger River's aquatic communities, of the Carolina wren outside the window. To breathe is to be in relation. It is the most basic form of what Francis calls communion with creation and what Haraway calls being in a contact zone: the ongoing, involuntary, life-sustaining encounter with a world that is not ours but in which we are included.

The data center, as this paper has argued, is an infrastructure organized around the systematic forgetting of that breath, around the engineering of distance between human projects and the living systems that sustain them, around the rendering of planetary costs as abstract, distant, and therefore negotiable. Project Spero's invocation of the state motto was either a profound irony or a genuine aspiration that the facility's design would have betrayed. The

⁵¹ "Could Another Data Center Come to Spartanburg County? Documents Leave Answer Unclear," FOX Carolina, March 2026.

community that showed up to oppose it was, in the most literal sense, defending the conditions of breath.

That defense was temporary and incomplete. The NorthMark facility is proceeding. The 300 Jones Road situation remains unresolved. The broader Southeast buildout continues at a pace that no single community's organized attention can match. The planetary boundaries documented by the IPCC with such careful, restrained precision continue to be transgressed, and the AI infrastructure expansion now accelerating will press against at least three of those boundaries simultaneously in the coming years. The window for meaningful response, as the IPCC's 2023 Synthesis Report concludes with high confidence, is narrowing.

And yet something happened in Spartanburg County in February 2026 that is worth noting and examining in this framework of attention. A community organized, through in-person presence and online communication, against a promotional apparatus designed to prevent exactly that kind of noticing. The grid and watershed became present. The contact zone became, however briefly, visible in the County Council chambers, in chats over coffee at local establishments, and in online conversations with community members.

That visibility is what attention as an ecological practice is for. Not as a substitute for structural and political transformation, and Wainwright and Mann are right that the machinery of Climate Leviathan will absorb and reorganize even genuine community resistance if it does not produce durable institutional change. But as the necessary condition for wanting that transformation, and for sustaining the collective will to pursue it past the moment of immediate crisis. You cannot protect what you cannot see. You cannot grieve what you have never noticed. You cannot make kin, in Haraway's phrase, with a creature whose existence you have been organized to overlook.

The building going up on South Pine Street will generate its own power, employ a few people, and process computational tasks for a portfolio of investment clients whose names and purposes are not publicly disclosed. The Tyger River will continue its way toward the Broad and the Congaree. The watershed will absorb what it absorbs. The wren will sing from whatever tree remains near the fence line of the industrial park. Both of these things, the facility and the wren, the server rack and the river, are happening simultaneously, in the same county, under the same atmosphere. What we choose to notice, and what institutional structures we build to make noticing possible and consequential, is the question that attention as an ecological practice puts before us.

Dum spiro spero. While I breathe, I hope. The breath is shared. The hope depends on what we are willing to see.

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