
RECLAIMING ENERGY ABUNDANCE: THE ROLE OF ENVIRONMENTAL LAWYERING, CLEAN ENERGY ADVOCACY, AND THE NEED TO BUILD RIGHT

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The emerging concept of “energy abundance” must be for all, not for the few, and premised on sound governance, robust community protections, and unwavering acceptance of the reality of climate change. Thus, energy abundance does not mean a free-for-all buildout of all energy projects—it means building the right projects, i.e., clean, affordable, and reliable energy infrastructure. True clean energy abundance requires rapidly and responsibly deploying clean energy infrastructure while simultaneously preventing the needless expansion of fossil-fuel infrastructure. Energy abundance advocates must understand this basic reality if we are to succeed. In other words, achieving a reliable, affordable, and clean power system demands both speed and restraint. The view that we must choose either to promulgate blanket deregulation to further the development of essential clean energy infrastructure, or else the deployment of said infrastructure will continue to falter, is a false choice. Instead, an integrated strategy can accelerate clean energy projects and the buildout of a modern grid while maintaining strong legal guardrails to limit or prevent harmful or unnecessary fossil projects.

Key elements of ‘true’ or ‘clean’ energy abundance include aligning supply with demand-side sustainability, responsibly streamlining permitting processes for clean infrastructure, and modernizing outdated regulations. Energy abundance should also not be misconstrued as limitless energy generation and consumption, as the adoption of such a framework will inevitably lead to scarcity. Efficiency and demand reduction are crucial components, so that “abundance” remains sustainable and does not lead to wasteful overbuilding. Legal and policy reforms must focus on removing unwarranted barriers to clean energy deployment without silencing community input or gutting environmental protections. At the same time, laws and policies that prop up outdated and harmful reliance on fossil fuel systems and infrastructure must be overhauled or repealed. Achieving these

* Senior Attorney of the Southern Environmental Law Center. I am especially grateful to Delaney King for her generous, thoughtful, and sustained engagement with this Essay. I also thank Matthew Appel, Johan Cavert, Geoffrey Gisler, Alexandra Klass, Nicole Pavia, and Steve Teles for valuable comments on earlier drafts. The views expressed in this Article are mine in my individual capacity and do not reflect the views of the Southern Environmental Law Center, the Niskanen Center, or any past or present employer.

aims will require institutional shifts at all levels of governance, and a new generation of lawyers must be well-trained and equipped to drive this transition within the legal profession.

This Article aims to ground the theoretical framework of the energy abundance movement in some of the realities of energy policy and deployment within the United States. It proceeds in four parts. Part I clarifies the concept of clean energy abundance and dispels common misconceptions—distinguishing true or clean energy abundance from the “all-of-the-above” approach and emphasizing the importance of demand-side measures, robust environmental review, and community engagement. Part II examines how archaic laws and regulatory capture in the fossil fuel sector impede clean energy abundance, using the example of the Natural Gas Act and Federal Energy Regulatory Commission’s pipeline approvals to illustrate why we still need lawyers in the abundance movement to “fight the dinosaurs”—i.e., outdated and harmful fossil-fuel infrastructure and well-funded industry supporters. This section then explores the flip side of the clean energy abundance coin: issues in accelerating clean energy deployment, including the urgent need for new transmission infrastructure, with a case study highlighting regulatory innovation (the Department of Energy’s coordinated permitting program) that can unblock transmission capacity and make way for clean, affordable generation. Finally, Part III outlines the beginnings of a bridge from theory to practice, or how the training and work to achieve clean energy abundance is, can be, and should be appearing in the real world for current and aspiring lawyers, in part through a discussion of existing programs. This last section discusses concrete legal and policy steps in addition to brainstorming how to cultivate a new wave of clean energy “abundance lawyers,” who can implement this dual agenda. This Article concludes by synthesizing these insights and charting a path forward toward a clean, energy-abundant future for all.

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INTRODUCTION

The concept of abundance has gained traction in a wide array of policy debates.¹ At its core, abundance theory seeks to promote strategies that make critical resources accessible for all—from affordable housing and efficient public transportation, to a robust,

¹ See, e.g., Ezra Klein, *What the Hell Happened to the California of the ‘50s and ‘60s?*, N.Y. TIMES (June 18, 2023), <https://www.nytimes.com/2023/06/18/opinion/newsom-california-building-permitting-procurement.html> [<https://perma.cc/L7GP-NCP8>] (discussing California state-level infrastructure buildout and permitting reform efforts); *News Release: Gov. Cox Signs Executive Order to Streamline Permitting and Empower Utahns to Build a Future of Abundance*, GOVERNOR OF UTAH SPENCER J. COX (Jan. 9, 2025), <https://governor.utah.gov/press/gov-cox-signs-executive-order-to-streamline-permitting-and-empower-utahns-to-build-a-future-of-abundance/> [<https://perma.cc/GDQ5-BXCU>] (Utah Governor Cox signed an executive order streamlining the permitting process to create “a future of freedom, opportunity, and abundance”); Clean Electricity and Transmission Acceleration Act of 2023, H.R. 6747, 118th Cong. (2023) (a smart, empirically grounded federal bill that takes seriously energy abundance and our nation’s urgent need for transmission capacity by seeking “[t]o speed up the deployment of electricity transmission and clean energy, with proper input from affected communities”).

educated workforce and improved state capacity.² Yet when applied to energy and climate issues, abundance frequently devolves into a false binary: either we deregulate and expedite all energy infrastructure (including fossil fuels), or preserve the status quo of stagnant, outdated systems that obstruct development, thereby stalling essential clean-energy projects.³ Practical experience exposes this false choice and shows how it overlooks a better path forward for clean energy abundance and its advocates. To be clear, this Article adopts the empirically grounded view that, to achieve clean energy abundance for all, we must not only expand supply but intentionally and dramatically “shift to zero-carbon energy because of the local and global environmental harms and socioeconomic costs associated with continuing to burn fossil fuels.”⁴ The transition towards clean energy is critical as the continued use and reliance on fossil fuels impose significant costs on society, our communities, our air, our waters, and our environment—undermining the broader goals of sustainability and abundance for all.⁵ Thus, for purposes of this Article, energy abundance is likely more aptly defined as the “clean energy abundance” articulated in Professor Alexandra B. Klass’s article on the subject.⁶

² See Julian E. Zelizer, *An “Abundance Agenda” for Government Is the Anti-DOGE*, NEW REPUBLIC (Mar. 4, 2025), <https://newrepublic.com/article/192061/ezra-klein-derek-thomson-abundance-agenda-government-anti-doge> [<https://perma.cc/L7DD-M8QF>] (describing abundance as “a government that is capable of building things, capable of innovation, and capable of implementation at scale”).

³ See JAMIE PLEUNE, ROOSEVELT INST., CHOOSING BETWEEN ENVIRONMENTAL STANDARDS AND A RAPID TRANSITION TO RENEWABLE ENERGY IS A FALSE DILEMMA 11–14 (2023) (discussing studies finding that permitting delays “can be summarized as: (1) agency capacity, (2) delays attributable to the operator, and (3) permitting coordination” and concluding: “These findings demonstrate that the choice between speed and environmental standards is a false dilemma. Each of the true sources of delay can be addressed without compromising environmental standards that protect safe, healthy, and clean communities”).

⁴ Alexandra B. Klass & Matthew Appel, *The Law of Energy Abundance*, 104 N.C. L. REV. 63, 71 (2025).

⁵ See *id.* at 71, 90–91 (defining and advocating for “clean energy abundance” that is centered on low-cost, carbon-free energy services for all citizens, rather than an “all-of-the-above” approach that includes unnecessary harmful fossil fuel resources).

⁶ See *id.* at 89–94.

For years, I have represented communities and organizations across the country, working to stop the unnecessary buildout of harmful fossil-fuel infrastructure impacting those underrepresented stakeholders. I have worked extensively on challenging proposed interstate methane gas pipelines⁷ and liquified natural gas (“LNG”) export projects.⁸ This work remains essential to help ensure that government decision-making is empirically sound and genuinely serves the public interest, rather than captured by corporate interests. At the same time, I am deeply committed to a vision of societal “abundance,” or the idea that we all deserve nice things and can and should create efficient systems to provide those things,⁹ including, most notably for this Article, reliable, affordable, and zero-carbon energy and transmission. At first glance, these two commitments—opposing fossil fuels and advocating for clean energy abundance for all—may not seem contradictory. Yet, in the eyes of many policy-makers and regulatory thinkers, these goals are cast as mutually exclusive, fueling a narrative in which abundance can be achieved only through deregulation and continued investment in fossil fuels—

⁷ See *N.J. Conservation Found. v. FERC*, 111 F.4th 42, 59 (D.C. Cir. 2024) (a case successfully litigated with colleagues) (finding FERC authorization of an interstate natural gas project unlawful where the Commission arbitrarily discredited evidence that undermined alleged market need, including study and formal finding from the New Jersey Board of Public Utilities that the state had sufficient gas capacity for many years) f).

⁸ See Megan Gibson, *FERC’s Rubber-Stamp Approach to LNG is Bad for Our Economy, Consumers and Environment*, UTILITY DIVE (Nov. 26, 2024), <https://www.utilitydive.com/news/fercs-rubber-stamp-lng-liquefied-natural-gas-export-price-volatility/733979/> [<https://perma.cc/J6EM-CJBJ>] (discussing in part a harmful LNG export project that we have been litigating against for years, CP2 LNG in Louisiana). See also Nick Cunningham, *‘It’s a Proud Day’: Oregon Landowners Celebrate Demise of LNG Project, Even as Legal Questions Go Unanswered*, DESMOG (Dec. 6, 2021), <https://www.desmog.com/2021/12/06/oregon-landowners-celebrate-cancel-jordan-cove-lng-project-legal-questions/> [<https://perma.cc/GKB5-8RZD>] (discussing the cancellation of the Jordan Cove LNG facility and Pacific Connector Pipeline. I represented many incredible Oregon landowners impacted by the proposed project).

⁹ See generally Rick Harrison, *Why We Can’t Have Nice Things: Nicholas Bagley on How the Law is Holding America Back*, INST. FOR SOC. & POL. STUD., YALE UNIV. (Dec. 13, 2024), <https://isps.yale.edu/news/blog/2024/12/why-we-cant-have-nice-things-nicholas-bagley-on-how-the-law-is-holding-america> [<https://perma.cc/LM5Z-UFTL>] (summarizing discussion among Professors Nicholas Bagley, Alan Gerber, Amy Kapczynski, David N. Schleicher, and Stephen Skowronek. on merits and drawbacks of legal proceduralism).

rather than through intentional, equitable policymaking and planning for a reliable, clean energy future.

My own skepticism toward the “abundance agenda” evolved during my tenure at the Niskanen Center, a think tank and advocacy organization.¹⁰ Initially, I considered the “abundance agenda” to be fairly niche—the sort of theory discussed among academics and think tanks that might be weaponized by other interested parties to weaken consumer, community, and environmental protections. Over time, however, I recognized the agenda’s practical value, particularly in addressing the urgent need to build new infrastructure for our aging electric grid. For example, despite widespread consensus that the United States must massively expand high-voltage transmission line capacity, real-world progress has been hampered by complex siting, permitting, and interconnection hurdles. Drawing on my experience litigating against harmful gas projects, I tried inverting some of the very strategies once used to highlight projects’ material and procedural flaws—leveraging those same strategies to identify and resolve issues that might hamper essential transmission projects. That transmission work excited and drew support from the growing cadre of energy abundance proponents.

Through these conversations and experiences, it became clear that some proponents of energy abundance have an oversimplified vision: in a deregulated environment, an everyone-can-build-what-ever framework will inherently favor clean energy because renewables are cheaper, and fossil fuel infrastructure will naturally phase out.¹¹ That assumption ignores reality. A deregulation-based

¹⁰ See *About the Niskanen Center*, NISKANEN CTR., <https://www.niskanen-center.org/about/> [https://perma.cc/3F65-CXXH] (last visited Feb. 10, 2026).

¹¹ See, e.g., Andrew Dessler, *Clean Energy is the Future. Permitting Reform is How to Get There*, BULL. OF THE ATOMIC SCIENTISTS (Feb. 1, 2023), <https://thebulletin.org/2023/02/clean-energy-is-the-future-permitting-reform-is-how-to-get-there/#post-heading> [https://perma.cc/7X4L-SPCR] (“While some fossil fuel projects may get approved that would not have otherwise been approved, the market understands that solar and wind power will power the future. Because of this, permitting reform is essential for a clean energy future.”); AUSTIN VERNON & ELI DOURADO, CTR. FOR GROWTH & OPPORTUNITY AT UTAH STATE UNIV., ENERGY SUPERABUNDANCE: HOW CHEAP, ABUNDANT ENERGY WILL SHAPE OUR FUTURE (June 20, 2022), <https://www.thecgo.org/wp-content/uploads/2022/06/Energy-Superabundance-1.pdf> [https://perma.cc/Q9TX-YSTM] (“Policymakers have wrongly, in our view, focused on energy technologies narrowly from a pollution and carbon emissions perspective. Although pollution is

framework overlooks the industrial policy status quo that advantages fossil fuels; the legacy infrastructure that entrenches fossil assets; and the ways deregulation has historically been wielded to reinforce, rather than disrupt, fossil fuel dominance. In practice, a *laissez-faire* approach will not leave fossil fuels to simply die on the vine, especially in a system where incumbent companies continue to wield incredible regulatory power and which maintains structural incentives for their continued influence.¹² Deregulation alone does not create a level playing field without concerted, parallel efforts to dismantle the many policies that favor fossil fuels. Instead, unfettered deregulation would further enable the fossil industry to exploit gaps in regulation while clean energy continues to struggle with permitting, financing, and market structures designed for incumbent utility monopolies.¹³

We are at a pivotal moment for the future of our energy economy. Policy decisions in the next few years will shape not only the strength of our markets and grid but also the health and prosperity of communities across the country. Unfortunately, the Trump administration's return to power poses a significant threat to the feasibility of an inclusive and sustainable energy abundance agenda. For example, the administration declared a nationwide "energy emergency" with no factual basis.¹⁴ In fact, during the Biden administration, the United States ramped up its exports of natural gas,

damaging, the planet is warming, and these harms should be addressed, a better approach is to keep in mind energy technologies' true potential. Instead of working to simply replace current energy consumption with energy from cleaner sources, we should figure out how to use new and cleaner energy technologies to radically increase human prosperity. To achieve this level of energy abundance, we need to remove the obstacles to building in the physical world.”).

¹² See *infra* notes 117–125 and accompanying text.

¹³ See Ari Peskoe, *Is the Utility Transmission Syndicate Forever?*, 42 ENERGY L.J. 1, 65 (2021) (exploring investor-owned utilities (IOUs) as local monopolists that are “designed to thrive under the status quo, and are ill-suited and unmotivated to facilitate new market entrants and unleash the competitive forces that can allow the sector to realize its innovative potential”); Ari Peskoe, *Replacing the Utility Transmission Syndicate's Control*, 44 ENERGY L. J. 547, 554 (2023) (“With a conservative industry culture and lack of financial incentives, IOUs have little reason to deploy technologies or employ operational and planning practices that improve transmission efficiency or enhance energy trading, despite potential consumer benefits. Their incentives favor stagnation over innovation”).

¹⁴ See, e.g., Exec. Order No. 14,156, 90 Fed. Reg. 8433 (Jan. 20, 2025) (“declaring a national energy emergency”).

produced significant additional volumes for international markets, and became the largest LNG exporter in the world.¹⁵ Energy markets, particularly the gas market, were not under threat, yet the current administration seeks to buoy an oversupplied, fossil-dependent system by invoking an unfounded “emergency.”¹⁶ The evidence contradicts the narrative of fossil fuel or energy scarcity, showing that not only did U.S. gas production exceed domestic need during the Biden administration, but our reliance on fossil fuels and rapid expansion of export capacity have heightened our vulnerability to global energy price swings.¹⁷ The second Trump administration’s current focus is not on protecting our national security or energy independence; it is about propping up outdated fossil fuel industries at a moment when our economy and grid urgently need modernization and diversification.

The inherent contradiction between declaring an “energy emergency” and simultaneously attempting to exclude any non-fossil-fuel technologies and generation would be laughable if the potential consequences were not so grim. The Trump administration’s

¹⁵ See Victoria Zaretskaya, *The United States Became the World’s Largest LNG Exporter in the First Half of 2022*, U.S. ENERGY INFO. ADMIN. (July 25, 2022), <https://www.eia.gov/todayinenergy/detail.php?id=53159> [https://perma.cc/9DCX-WJPF] [hereinafter *U.S. LNG Exporter 2022*]; Katy Fleury, *The United States Exported a Record Volume of Natural Gas in 2023*, U.S. ENERGY INFO. ADMIN. (Apr. 15, 2024), <https://www.eia.gov/todayinenergy/detail.php?id=61823> [https://perma.cc/9Z2M-APMA]; Victoria Zaretskaya, *The United States Remained the World’s Largest Liquefied Natural Gas Exporter in 2024*, U.S. ENERGY INFO. ADMIN. (Mar. 27, 2025), <https://www.eia.gov/todayinenergy/detail.php?id=64844> [https://perma.cc/E625-27U2].

¹⁶ Exec. Order No. 14,156, 90 Fed. Reg. 8433 (Jan. 20, 2025) (“The policies of the previous administration have driven our Nation into a national emergency, where a precariously inadequate and intermittent energy supply, and an increasingly unreliable grid, require swift and decisive action.”).

¹⁷ See Julian Spector, *One big downside of LNG exports: Price swings for US gas consumers*, CANARY MEDIA (Mar. 6, 2024), <https://www.canarymedia.com/articles/liquefied-natural-gas/one-big-downside-of-lng-exports-price-swings-for-us-gas-consumers> [https://perma.cc/4ZSG-WBBY]; Clark Williams-Derry, *Gas Exports Cost U.S. Consumers More Than \$100 Billion over 16-Month Period*, INST. FOR ENERGY ECON. & FIN. ANALYSIS (Jan. 29, 2024), <https://ieefa.org/resources/gas-exports-cost-us-consumers-more-100-billion-over-16-month-period> [https://perma.cc/2EVX-NQKB].

definition of “energy” pointedly excludes most renewables¹⁸—all while trying to bring wind and solar generation development to a full stop¹⁹—signaling its intent to prioritize fossil fuels over clean, more innovative, and modern long-term solutions. Far from safeguarding energy security, this choice risks destabilizing our energy markets, tethering ratepayers to volatile fossil fuel prices,²⁰ and harming American businesses and consumers alike. Industry experts acknowledge that the constant swings in federal policy make it challenging—if not impossible—to plan and invest in the infrastructure we truly need: an energy system built for resilience, reliability, and longevity.²¹

¹⁸ See Exec. Order No. 14,156, 90 Fed. Reg. 8433, 8436 (Jan. 20, 2025) (announcing an “energy emergency” and defining “energy” or “energy resources” to mean “crude oil, natural gas, lease condensates, natural gas liquids, refined petroleum products, uranium, coal, biofuels, geothermal heat, the kinetic movement of flowing water, and critical minerals”).

¹⁹ See *infra* notes 21816–21918 (noting the January 2025 issuance of an Executive Order suspending approvals for new wind energy projects in federal lands and waters, and pausing projects that have already been permitted pending a review of federal wind leasing and permitting practices).

²⁰ See, e.g. Redacted Direct Testimony of R. Brent Alderfer and Ivan Urlaub on Behalf of Clean Energy Buyers Association, In the Matter of Biennial Consolidated Carbon Plan and Integrated Resources Plans of Duke Energy Carolinas, LLC, and Duke Energy Progress, LLC, Pursuant to N.C.G.S. § 62-110.9 and § 62-110.1(c), N.C. Utils. Comm’n, Dkt. No. E-100, Sub 190 (2024), <https://starw1.ncuc.gov/NCUC/ViewFile.aspx?Id=d537b230-ccb9-41a4-bee5-f432b4ad28d4> [<https://perma.cc/ZW9M-SRF7>] (discussing how natural gas prices are inherently volatile, with historical evidence showing “runups and spikes that are inherent parts of natural gas supply markets” leading to significant financial burdens on ratepayers).

²¹ See, e.g., AM. COUNCIL ON RENEWABLE ENERGY, TAX STABILITY FOR ENERGY DOMINANCE 36, 45 (2025), https://acore.org/wp-content/uploads/2025/03/ACORE_Tax-Stability-for-Energy-Dominance_Post_Final_V2.pdf [<https://perma.cc/7UX4-8R8Q>]; *Report: Solar and Storage Dominate New Power Additions in First Six Months of Trump Administration as Federal Policies Drive Up Energy Costs*, SOLAR ENERGY INDUS. ASS’N (Sept. 8, 2025), <https://seia.org/news/report-solar-and-storage-dominate-in-new-trump-administration-as-federal-policies-drive-up-energy-costs/> [<https://perma.cc/2ELG-D3ME>] (summarizing results from clean energy industry quarterly report finding recent federal actions “put the United States at risk of losing 44 GW of solar deployment by 2030, an 18% decline”). See also Jennifer McDermott, *States and Developer Sue the Trump Administration for Halting Work on New England Offshore Farm*, AP NEWS (Sept. 4, 2025, at 17:26 ET), <https://apnews.com/article/trump-renewable-energy-offshore-wind-revolution-wind->

The economic well-being of American families and businesses is at stake. So is our position as leaders in a rapidly changing global energy market. Rather than channeling investments into a fading, archaic fossil-fuel industry, our policies should be fostering innovation and opportunity in renewable energy and energy efficiency—sectors that offer lasting jobs, long-term economic growth, and clean energy abundance.²²

Legal advocacy inspired by a clean abundance agenda is not about greenlighting everything in a “let ‘er rip” frenzy of deregulation coupled with a reduction in overall governmental regulatory capacity.²³ Rather, it warrants a scalpel that can carefully remove outdated or misguided regulatory obstacles, allowing beneficial projects to advance while ensuring robust guardrails remain for protecting communities and ecosystems. This approach to legal advocacy represents a central shift in the environmental lawyering perspective: it’s no longer only about challenging harmful projects (though this remains incredibly urgent and valid, especially for fossil fuel projects); lawyers must also develop the capacity to facilitate the infrastructure and innovation we urgently need. This dual skill set—being both an effective “defender” against unnecessary fossil-

356d6be1f0967302cd8414b2fb881308 [https://perma.cc/QQ44-VFAN] (describing litigation filed in response to the administration’s stop work order blocking offshore wind projects already in deployment).

²² See Klass & Appel, *supra* note 4, at 88, 94 .

²³ See generally Leah C. Stokes & Hanna L. Breetz, *Politics in the U.S. Energy Transition: Case Studies of Solar, Wind, Biofuels and Electric Vehicles Policy*, 113 ENERGY POL’Y 76 (2018) (emphasizing that “barriers to the energy transition are primarily political, not technological or economic,” reinforcing the idea that policy interventions—rather than blanket deregulation—are needed to enable a successful transition away from fossil fuels). For examples of how blunt deregulatory downsizing erodes governmental capacity, see, e.g., Rachel Treisman, *After Mass Layoffs, Some Federal Agencies Are Trying To Bring Employees Back*, NPR (Feb. 21, 2025, at 13:38 ET), <https://www.npr.org/2025/02/21/nx-s1-5304152/federal-government-layoffs-reversed> [https://perma.cc/W4Y2-FDGR] (“To add to the confusion, some employees have received termination notices only to have their firings reversed within days or even hours.”); Christopher Ward, *Trump’s Push for Deregulation a Double-Edged Sword for Construction*, CONSTRUCTION DIVE (Dec. 5, 2024), <https://www.constructiondive.com/news/trump-deregulation-downsides-construction/734697/> [https://perma.cc/BRM5-98DH] (arguing that while deregulation may reduce costs and streamline infrastructure projects, it also heightens risks of fraud, mismanagement, and legal challenges due to weakened oversight).

fuel expansion and an “accelerant” for clean energy—is the hallmark of a new generation of abundance-oriented lawyers.

These evolving demands raise important questions. How do we get abundance advocates to ground their ambitions in the realities of the U.S. energy landscape to develop an informed, durable foundation to successfully build upon? How do we successfully train the next cohort of lawyers to navigate the dual mandate of accelerating clean energy while safeguarding democratic and environmental safeguards? What legal tools, strategic mindsets, and collaborative approaches do they need? This Article aims, in part, to lay some factual and practical groundwork to help build a more collective understanding of the realities of energy governance to answer the first question. It also begins to explore some answers to the second and third, drawing from budding legal clinics and evolving thinking among environmental lawyers. My own trajectory provides a window into some answers as well. Mastery of administrative procedures, fluency of federal and state permitting processes, meaningfully engaging diverse stakeholders, and leveraging the power of community advocacy are all part of a new, integrated toolkit for working toward clean energy abundance.

Developing that foundational knowledge and an accompanying toolkit are critical to realizing energy abundance. Clean energy abundance is possible only if we halt further entrenchment and expansion of fossil fuels and simultaneously expedite a modern, reliable, and affordable clean-energy grid. These two goals are not merely compatible—they are mutually necessary.

Drawing in part on my direct experience, I hope to illustrate why reconciling these two aims is an essential first step toward ensuring clean energy abundance and, subsequently, to offer some suggestions on how the next wave of legal and policy leaders, equipped with this mindset, can stand at the forefront of securing that future. As later sections of this Article show, pursuing energy abundance through a dual strategy will require concrete actions in law and governance, but it can be done. It is precisely in these times—when the political winds seem misdirected—that the work of lawyering becomes most urgent. The battle is not over, and the path forward is clear: through strategic legal advocacy, policy innovation, and a commitment to long-term, sustainable goals, we can achieve a clean energy future for all.

I. DEFINING THE CLEAN ENERGY ABUNDANCE AGENDA & COMMON MISINTERPRETATIONS

A. Energy Abundance: A Primer

The abundance agenda²⁴ is a synthesis of ideas that you have likely already encountered, rather than a novel concept. At its core, the abundance agenda asks and answers a fundamental question: *Why can't we have nice things in the United States?* This question arises from the recognition that many places worldwide boast infrastructure that is more efficient, affordable, and accessible than in the United States—be it housing,²⁵ public transportation,²⁶ or clean and reliable energy.²⁷ In popular liberal discourse, these ideas align with concepts like “supply-side progressivism”²⁸ and “new

²⁴ See Derek Thompson, *A Simple Plan to Solve All of America's Problems*, ATLANTIC (Jan. 12, 2022), <https://www.theatlantic.com/ideas/archive/2022/01/scarcity-crisis-college-housing-health-care/621221/> [<https://perma.cc/6W3Q-YE6S>].

²⁵ E.g., Philip Oltermann, *The Social Housing Secret: How Vienna Became the World's Most Livable City*, GUARDIAN (Jan. 10, 2024), <https://www.theguardian.com/lifeandstyle/2024/jan/10/the-social-housing-secret-how-vienna-became-the-worlds-most-livable-city> [<https://perma.cc/3UQ7-YA7M>]; Whitney Airgood-Obrycki, Alexander Hermann & Sophia Wedeen, “*The Rent Eats First*”: *Housing Unaffordability in the United States*, 33 HOUS. POL'Y DEBATE 1272, 1272 (2023), <https://www.tandfonline.com/doi/full/10.1080/10511482.2021.2020866>;

²⁶ E.g., Jon Glasco, *A World-Class Leader in Public Transit: Here Is the Hong Kong Model*, INFRA (Sept. 2023), <https://www.infrajournal.com/en/w/hong-kong-public-transit> [<https://perma.cc/TU7V-SPGN>]; Ralph Buehler, *Determinants of Transport Mode Choice: A Comparison of Germany and the USA*, 19 J. TRANSP. GEO. 644, 654 (2011), <https://www.sciencedirect.com/science/article/abs/pii/S0966692310001171>.

²⁷ E.g., Cynthia Elliott et al., *A Sustained Portfolio of Policies Have Transformed Denmark's Power Sector*, WORLD RES. INST. (Mar. 6, 2024), <https://www.wri.org/update/sustained-portfolio-policies-have-transformed-denmarks-power-sector> [<https://perma.cc/DL6Y-LLQQ>]; Aidan Duffy et al., *Land-Based Wind Energy Cost Trends in Germany, Denmark, Ireland, Norway, Sweden and the United States*, 277 APPLIED ENERGY 1, 8 (2020), <https://www.sciencedirect.com/science/article/pii/S0306261920302890#s0025> (detailing up to 3 MW growth in offshore wind nameplate capacity in five of six countries studied, with the United States as the only exception “where growth was more muted”).

²⁸ “Supply-side progressivism” is an approach first articulated by Ezra Klein, emphasizing policies that increase the supply of goods and services rather than relying predominantly on consumer-side subsidies. It seeks to avoid “artificially raising prices and holding back growth throughout the economy” by removing

industrialism.”²⁹ Ezra Klein, a thought leader in supply-side progressivism,³⁰ recently co-authored a book with Derek Thompson, aptly titled *Abundance*, that illustrates how those themes have permeated broader policy thinking.³¹

In the energy and climate context, the abundance agenda more specifically asks, *why can't we have a reliable, affordable, and clean electricity grid?* The answers vary widely, but the United States must, at a minimum, improve the siting, permitting, and interconnection processes of renewable energy and transmission infrastructure to achieve this goal.³² Adherents to the abundance agenda generally agree that securing the required approvals and deploying the clean energy infrastructure we already know how to build simply takes too much time.³³ Consequently, a central pillar of the abundance agenda is deregulation, but that proposal merits nuanced and context-specific support, alongside serious critique,

regulatory and legislative “bottlenecks” or “choke points” that limit supply. Klass & Appel, *supra* note 4, at 73, 74–75.

²⁹ New industrialism is a term coined by Noah Smith to describe supply-side strategies seeking to confront domestic economic shocks, including the shift of manufacturing overseas and COVID-19, and promote domestic industrial growth without employing the traditional tools of deregulation and tax cuts. *Id.* at 73–74 (citing Noah Smith, *A New Industrialist Roundup*, NOAHPINION (Feb. 3, 2022), <https://www.noahpinion.blog/p/a-new-industrialist-roundup> [<https://perma.cc/XFW3-DW7P>]).

³⁰ See Ezra Klein, *The Economic Mistake the Left is Finally Confronting*, N.Y. TIMES (Sept. 19, 2021), <https://www.nytimes.com/2021/09/19/opinion/supply-side-progressivism.html> [<https://perma.cc/3JF4-3CNQ>]. *But see* Reihan Salam, *Supply-Side Progressivism Has a Fatal Flaw*, ATLANTIC (Apr. 12, 2023), <https://www.theatlantic.com/ideas/archive/2023/04/supply-side-progressivism-unions-metropolitan-donors-voters-democrats/673695/> [<https://perma.cc/W4EK-PEUV>] (critiquing supply-side progressivism).

³¹ EZRA KLEIN & DEREK THOMPSON, *ABUNDANCE* (2025). *See also infra* Part I.B (discussing common misconceptions in energy abundance); David Brooks, *We Can Achieve Great Things*, N.Y. TIMES (Feb. 27, 2025), <https://www.nytimes.com/2025/02/27/opinion/government-great-progressive-abundance.html> [<https://perma.cc/KK9D-S5DW>] (discussing the March 2025 release of Derek Thompson and Ezra Klein’s *Abundance* as well as the recent publications of Yoni Appelbaum’s *Stuck* and Marc J. Dunkelman’s *Why Nothing Works*).

³² See ERIC LARSON ET AL., PRINCETON UNIV., *NET-ZERO AMERICA: POTENTIAL PATHWAYS, INFRASTRUCTURE, AND IMPACTS*, 339, 342 (Oct. 29, 2021), <https://netzeroamerica.princeton.edu/the-report> [<https://perma.cc/C4MR-XTLM>].

³³ See Klass & Appel, *supra* note 4, at 65–66.

given the deeply uneven and frequently captured regulatory landscape in the United States.

For the purposes of this Article, we refer to “clean energy abundance” to differentiate from—and emphasize the pitfalls of adopting—an “all-of-the-above” approach that is indifferent to the type of energy-generating resource.³⁴ The terms “true energy abundance” or “clean energy abundance” herein refers to an agenda that “should be centered on low-cost and abundant energy services for all U.S. citizens built on the foundation of a carbon-free electric grid that can support electrification of the transportation, heating, commercial, and industrial sectors of the economy.”³⁵ That definition is “true” insofar as it is the only energy abundance agenda that can ensure a durable and abundant supply of energy for our planet and its inhabitants.

The Sunzia Southwest Transmission Project (“Sunzia”) high-voltage direct current transmission project highlights the systemic inefficiencies at play under today’s status quo. Sunzia illustrates the notoriously glacial pace at which the siting, permitting, and construction of new interstate high-voltage direct current (“HVDC”) transmission lines move through the required regulatory regime.³⁶ The approximate 550-mile, bi-directional HVDC line designed to transport over 3,500 megawatts of primarily renewable energy from New Mexico to Arizona and California markets took *fourteen years*

³⁴ See *id.* at 90–91.

³⁵ *Id.* at 94. See also Klein & Thompson, *supra* note 31, at 66 (“It is possible to power a modern economy with clean energy. It is possible to develop an economy with clean energy. And it will be possible to go beyond where any economy is today with clean energy.”).

³⁶ See Notice of Intent to Prepare an Environmental Impact Statement and Possible Resource Management Plan Amendments for the SunZia Southwest Transmission Project in Arizona and New Mexico, 74 Fed. Reg. 25764 (May 29, 2009) (estimating project completion four years following notice issuance in 2009). See also TED BOLING ET AL., NISKANEN CTR., EVIDENCE-BASED RECOMMENDATIONS FOR OVERCOMING BARRIERS TO FEDERAL TRANSMISSION PERMITTING 69–71 (2024) [hereinafter EVIDENCE-BASED RECOMMENDATIONS REPORT], <https://www.niskanencenter.org/evidence-based-recommendations-for-overcoming-barriers-to-federal-transmission-permitting/> [https://perma.cc/KA2J-447W] (chronicling federal delays and lack of coordination among federal agencies for the permitting of the SunZia Southwest Transmission Project, including after the 2016 presidential election and construction not beginning until September 2023).

from the initial federal right-of-way application until the start of construction in 2023.³⁷

There is little disagreement among experts, including this author, that more innovative and efficient siting, permitting, and interconnection approval processes are urgently needed to achieve clean energy abundance. But that consensus prompts two questions. First, why are these delays occurring in the first place? Second, and relatedly, what solutions can we implement to improve the system? Answering those questions is where the conversation becomes contentious.

B. *Common Misunderstandings in Energy Abundance*

Discussions about “energy abundance” among climate and clean energy advocates can, and often do, end in misunderstanding, disagreement, and division. One cause is the lingering perception that fossil-fuel opposition or “traditional environmentalist” work (slowing down the bad stuff) is somehow at direct odds with the “abundance agenda” (speeding up the good stuff) altogether.³⁸ Another dangerous misperception is that “abundance” necessitates broad-brush deregulation—effectively, “build, build, build,” even if it includes fossil-fuel infrastructure.³⁹

³⁷ See Fact Sheet, Pattern Energy, SunZia Wind & Transmission (Nov. 2022), https://patternenergy.com/wp-content/uploads/2022/11/20221121-v4_SunZia-PROJECTS-Factsheet.pdf; BUREAU OF LAND MGMT., U.S. DEP’T OF INTERIOR, RECORD OF DECISION FOR THE SUNZIA SOUTHWEST TRANSMISSION PROJECT (2015), [https://eplanning.blm.gov/public_projects/2013584/200486954/20040619/250046814/SunZia%20ROD%20with%20Appendices%20\(January%202015\).pdf](https://eplanning.blm.gov/public_projects/2013584/200486954/20040619/250046814/SunZia%20ROD%20with%20Appendices%20(January%202015).pdf) [https://perma.cc/KSV2-TQVR]; *Biden-Harris Administration Celebrates Groundbreaking of New SunZia Transmission Line That Will Deliver Clean, Reliable, Affordable Energy to Millions of Americans*, U.S. DEP’T OF INTERIOR (Sept. 1, 2023), <https://www.doi.gov/pressreleases/biden-harris-administration-celebrates-groundbreaking-new-sunzia-transmission-line> [https://perma.cc/8JG5-S49L].

³⁸ See e.g., Ted Nordhaus, *Environmentalism Is Antithetical to Abundance, From the Death of Environmentalism to the Abundance Movement*, THE BREAKTHROUGH INST. (Oct. 10, 2024), <https://thebreakthrough.org/journal/no-20-spring-2024/environmentalism-is-antithetical-to-abundance> [https://perma.cc/85R7-VS8J].

³⁹ See, e.g., KEVIN DAYARATNA, KATIE TUBB & DAVID KREUTZER, HERITAGE FOUND., TRADING AN ENERGY-SCARCITY AGENDA FOR ENERGY ABUNDANCE PAYS DIVIDENDS 4 (2022), <https://www.heritage.org/climate/report/trading-energy-scarcity-agenda-energy-abundance-pays-dividends> [https://perma.cc/DTX2-

Proponents of a reliable grid and clean energy future overwhelmingly reject this false binary and understand that we need to enable the buildout of the *right* things and refrain from rubber-stamping projects that further entrench an unsustainable and inevitably unaffordable fossil-fuel economy. Solar and wind are the cheapest forms of electricity generation and the fastest to deploy,⁴⁰ whereas coal is the dirtiest and least economic.⁴¹ The fact that

ZXCW] (“A policy of energy abundance would restore the freedom of Americans to invest in, explore and produce, build and operate the necessary infrastructure for, and use the types of energy that meet their needs. This freedom requires immediately withdrawing proposed regulations and rescinding finalized regulations that inhibit access or increase costs of producing and distributing conventional energy in service of Executive Orders 14008 and 13990 undergirding President Biden’s unilateral commitment to the costly and ineffective Paris Agreement.”).

⁴⁰ See, e.g., NEXTERA ENERGY, FOURTH QUARTER AND FULL YEAR 2024 EARNINGS CONFERENCE CALL 6 (Jan. 24, 2025), <https://www.investor.nexteraenergy.com/~media/Files/N/NEE-IR/news-and-events/events-and-presentations/2025/4Q%202024%20Slides%20vFinal/4Q%202024%20Slides%20vFinal.pdf> [<https://perma.cc/J4L8-BHZ3>] (earnings slides of NextEra Energy demonstrating renewables being the cheapest for energy and storage and quickest to deploy). Notably, NextEra Energy is the largest electric utility holding company by market valuation in the world. *Largest Utility Companies by Market Cap* (Mar. 2026), <https://companiesmarketcap.com/utility-companies/largest-companies-by-market-cap/> [<https://perma.cc/BNN3-JRA4>]; *Cheapest Form of Power*, UNITED NATIONS CLIMATE ACTION (July 19, 2022), <https://www.un.org/en/climatechange/renewables-cheapest-form-power> [<https://perma.cc/K885-JLFH>] (describing renewables as “the cheapest form of power”); KINGSMILL BOND ET AL., X-CHANGE: ELECTRICITY—ON TRACK FOR NET ZERO 5–6 (2023), https://rmi.org/wp-content/uploads/dlm_uploads/2023/07/rmi_x_change_electricity_2023.pdf [<https://perma.cc/2D4J-F9V7>] (describing solar and wind as “the cheapest electricity sources in history”).

⁴¹ See, e.g., MICHELLE SOLOMON ET AL., ENERGY INNOVATION POL’Y & TECH. LLC, COAL COST CROSSOVER 3.0: LOCAL RENEWABLES PLUS STORAGE CREATE NEW OPPORTUNITIES FOR CUSTOMER SAVINGS AND COMMUNITY REINVESTMENT 8 (Jan. 2023), <https://energyinnovation.org/wp-content/uploads/Coal-Cost-Crossover-3.0-2.pdf> [<https://perma.cc/LG8D-RUY9>] (“Displacement by cheaper gas and renewables means baseload operation is increasingly unprofitable for existing coal—operating at high output when plentiful clean energy resources operate at zero marginal cost is a waste of fuel.”); Gabriella Tosado et al., *Improving Energy Affordability Through Economic Dispatch*, ROCKY MOUNTAIN INST. (Apr. 2, 2024), <https://rmi.org/improving-energy-affordability-through-economic-dispatch/> [<https://perma.cc/WBK4-JUCC>] (“Customers of utilities that own extremely uneconomic coal plants can see bill impacts as high as \$200 a year.”); *Coal Has an Enormous Environmental Footprint*, ENV’T INTEGRITY PROJECT,

interconnection queues⁴² are deeply stacked with solar and wind facilities also indicates the ever-increasing market demand for these technologies.⁴³

Still, the rapid growth and demand for renewables is, of course, only part of the story. Our energy system continues to be dominated by fossil fuels—including fracked methane gas—the economic and environmental costs of which is indisputably unsustainable and undermines progress toward a livable future.⁴⁴ Natural gas, predominantly made up of methane, is a fossil fuel typically extracted through hydraulic fracturing, or “fracking.” When burned in power plants, methane produces carbon dioxide (“CO₂”), the principal greenhouse gas driving climate change. However, methane is a significantly more potent greenhouse gas than CO₂, with more than eighty times the global warming potential over a twenty-year period.⁴⁵ Human-caused methane emissions alone are responsible for approximately one-third of global warming experienced to date.⁴⁶ The natural gas supply system—including wells, pipelines, and power plants—has documented leakage issues; if leakage rates reach approximately 2%, natural gas can have a climate impact

<https://environmentalintegrity.org/what-we-do/coal/> [https://perma.cc/88S5-8LX2] (last visited Mar. 28, 2025).

⁴² The “interconnection queue” refers to the line of projects seeking interconnection to the electric power grid. See JOSEPH RAND ET AL., BERKELEY LAB ENERGY MKTS. & POL’Y DEP’T, QUEUED UP: CHARACTERISTICS OF POWER PLANTS SEEKING TRANSMISSION INTERCONNECTION 3 (2025), <https://emp.lbl.gov/sites/default/files/2025-12/Queued%20Up%202025%20Edition%20-%2015.2025.pdf> [https://perma.cc/JWV4-XC4J].

⁴³ See *id.* at 4.

⁴⁴ See, e.g., *Fossil Fuels*, UNION OF CONCERNED SCIENTISTS, <https://www.ucs.org/energy/fossil-fuels> [https://perma.cc/JK9F-29N5] (last visited Feb. 13, 2026) (explaining how fossil fuels, which supply most of our energy needs in the United States, harm human health and climate stability); Adam Mayer, *Fossil Fuel Dependence and Energy Insecurity*, 12 ENERGY, SUSTAINABILITY & SOC’Y, at 1, 7 (2022) (“Our models imply that, across multiple indicators of energy insecurity, the production of fossil fuels did not appear to consistently increase or improve energy security within nations under study.”).

⁴⁵ See Deborah Gordon & Shannon Hughes, *Reality Check: Natural Gas’s True Climate Risk*, ROCKY MOUNTAIN INST. (July 13, 2023), <https://rmi.org/reality-check-natural-gas-true-climate-risk/> [https://perma.cc/E7K5-2E3P].

⁴⁶ See *Methane and Climate Change*, INT’L ENERGY AGENCY, <https://www.iea.org/reports/global-methane-tracker-2022/methane-and-climate-change> [https://perma.cc/PQE7-D2J3] (last visited Feb. 14, 2026).

equivalent to coal.⁴⁷ More recent research from 2023 suggests an even stricter equivalence point, concluding that a mere 0.2% leakage rate renders natural gas as harmful to the climate as coal.⁴⁸ Contrary to industry claims, those findings underscore that using methane for electricity generation is not a viable solution in the face of climate change.

Simultaneously, many of our energy regulatory bodies are captured by fossil fuel interests.⁴⁹ This foundational point is often misunderstood, unknown, willfully ignored, or perhaps some combination thereof. For example, Klein and Thompson's recent book, *Abundance*, is peppered with false equivalencies in the energy context that ignore or disregard the fundamental truth of this capture, exemplified by a reference to a hypothetical scenario of two presidential candidates proposing starkly contrasting energy infrastructure plans—one relying on fossil fuels and pipelines, the other emphasizing clean energy and a modernized grid.⁵⁰ Despite these fundamentally divergent agendas, the hypothetical concludes that both plans would inevitably become “an environmental impact assessment and project permitting nightmare.”⁵¹

The presentation of this false narrative obscures critical distinctions between the regulatory and practical challenges faced by renewable versus fossil-fuel infrastructure projects within the United

⁴⁷ See Gordon & Hughes, *supra* note 45.

⁴⁸ See *id.*

⁴⁹ See *infra* Part II.A (discussing in part captured nature of various energy regulatory bodies in the United States); Chris Martinez, Laura Kilbury & Joel Martinez, *These Fossil Fuel Industry Tactics Are Fueling Democratic Backsliding*, CTR. FOR AM. PROGRESS (Dec. 5, 2023), <https://www.americanprogress.org/article/these-fossil-fuel-industry-tactics-are-fueling-democratic-backsliding/> [<https://perma.cc/ALV8-66HW>]; Leah Stokes, *How Interest Groups Shape U.S. Clean Energy Policy*, KLEINMAN CTR. FOR ENERGY POL'Y (Apr. 28, 2020), <https://kleinmanenergy.upenn.edu/commentary/podcast/how-interest-groups-shape-u-s-clean-energy-policy/> [<https://perma.cc/8N2H-VKSS>]; *BP and Other Companies Exploited a Regulatory Agency to Continue Negligent Offshore Drilling*, UNION OF CONCERNED SCIENTISTS (Oct. 12, 2017), <https://www.ucsusa.org/resources/bp-and-other-companies-exploited-regulatory-agency-continue-negligent-offshore-drilling> [<https://perma.cc/3NSM-E8EB>].

⁵⁰ See KLEIN & THOMPSON, *supra* note 31, at 95 (citing J. B. Ruhl & James Salzman, *What Happens When the Green New Deal Meets the Old Green Laws?*, 44 VT. L. REV. 693, 694 (2020)).

⁵¹ *Id.* (quoting Ruhl & Salzman, *supra* note 50, at 694).

States—*i.e.*, the hypothetical ignores reality. The authors continue, “[t]he problem with the laws we have is that they are indiscriminate. It is as easy to obstruct an oil refinery as a wind farm.”⁵² As discussed in more detail below,⁵³ proposals for new gas pipeline projects regularly sail through permitting processes, with approximately 99% of such projects receiving federal approval.⁵⁴ In contrast, renewable energy projects face a host of unique challenges, including captured regulatory agencies,⁵⁵ entrenched utility monopolies,⁵⁶ interconnection backlogs that are increasingly designed to favor fossil fuels,⁵⁷ and financing complexities that fossil fuel projects largely avoid due to entrenched political and economic interests.⁵⁸ Suggesting equivalence between these two overly simplistic policy scenarios dangerously obscures the inherently uneven regulatory landscape. This is not a level playing field, and failing to acknowledge the imbalance perpetuates policies that disproportionately favor fossil fuels and actively hinder the equitable and rapid expansion of clean energy infrastructure.⁵⁹

Lacking a basic understanding of the warped regulatory landscape, some have reached the erroneous conclusion that if we just “deregulate” and reduce public awareness and input (*i.e.*, make processes less democratic), then the market will work itself out, and

⁵² *Id.* at 96.

⁵³ *See infra* Part II.A (discussing regulatory capture).

⁵⁴ *See infra* note 144 and accompanying text.

⁵⁵ *See infra* Part II.A.

⁵⁶ *See infra* Part II.A.1.

⁵⁷ *See infra* Part II.A.2 (discussing FERC’s recent approval of a PJM proposal that effectively allows large gas generators to ‘queue jump’ or bypass interconnection procedures); *see also, e.g.*, JOSEPH RAND ET AL., LAWRENCE BERKELEY NAT’L LAB’Y, QUEUED UP: 2024 EDITION: CHARACTERISTICS OF POWER PLANTS SEEKING TRANSMISSION INTERCONNECTION AS OF THE END OF 2023, at 3, 8–11, 45 (April 2024), https://eta-publications.lbl.gov/sites/default/files/queued_up_2024_edition_r2.pdf [<https://perma.cc/73BK-2X5L>].

⁵⁸ *See infra* Part II.A.1; *see also* Peskoe, *Replacing the Utility Transmission Syndicate’s Control*, *supra* note 13, at 554.

⁵⁹ *See infra* notes 111–116 and accompanying text for an introduction to the patchwork of energy policies creating this imbalance. *See also* The Federal Energy Regulatory Commission’s approval of a proposal from RTO PJM Interconnection, LLC, discussed *infra* in Part II.B.2 and notes 129–131, which provides an example of the imbalance at play.

somehow renewable generation and transmission capacity will increasingly be deployed. Instead, that approach hinders our path toward true clean energy abundance.

1. Exponential Growth Cannot Be the Goal

A flawed assumption among some energy abundance enthusiasts is that more energy consumption is inherently good—that abundance means we should simply build as much as possible, as fast as possible, to fuel an ever-expanding grid.⁶⁰ However, the goal should not be to generate an infinite amount of energy, but instead to ensure we generate the right amount of energy in the right way, while maximizing efficiency and minimizing waste. An oversupplied generation sector risks building too many huge, expensive, and ultimately stranded assets, for which ratepayers (including everyday consumers) remain on the hook for decades into the future. In this way, clean energy abundance becomes about innovative, efficient, and sustainable energy use rather than limitless consumption.

Right now, much of the national discussion around abundance focuses on supply-side solutions—how to site and build more renewable energy, transmission, and storage facilities. That work is essential, but if abundance is to be sustainable, we must also prioritize reducing energy demand. The Southeast United States, for example, holds an untapped energy resource as vast as any oil field. Just as Texas has become a national leader in wind energy, the Southeast could do the same with energy efficiency gains—play host to an abundant, but largely undeveloped, resource that could dramatically lower energy costs, reduce emissions, and improve grid reliability, without the same risks threatened by overbuilding unnecessary generation.⁶¹

⁶⁰ See, e.g., Benjamin Reinhardt, *Making Energy Too Cheap to Meter*, WORKS IN PROGRESS (Oct. 12, 2022), <https://worksinprogress.co/issue/making-energy-too-cheap-to-meter/> [<https://perma.cc/PJ2P-QHCL>].

⁶¹ See *Energy is Good for Texas*, TEXAS COMPTROLLER OF PUB. ACCOUNTS (2023), <https://comptroller.texas.gov/economy/economic-data/energy/2023/wind-snap.php> [<https://perma.cc/4XGC-LVVS>]; HEATHER POHNAN ET AL., ENERGY EFFICIENCY IN THE SOUTHEAST 6 (6th ed. Jan. 2025), <https://cleanenergy.org/wp-content/uploads/Energy-Efficiency-in-the-Southeast-Sixth-Edition-January-2025.pdf> [<https://perma.cc/3WB4-8PCX>] (“[H]istoric underinvestment in efficiency in the Southeast means that utilities in the region still have abundant, low-cost efficiency resources available now.”); C. HOLMES, S. MULLEN-TRENTO & M. SWEENEY, ELECTRIC POWER RSCH. INST., U.S. ENERGY EFFICIENCY POTENTIAL

Virginia's Clean Economy Act provides a useful model for integrating demand reduction into an abundance-oriented framework.⁶² Under the Act, in-state public utilities Dominion Energy and Appalachian Power Company must meet legally mandated energy efficiency targets before they can justify building new fossil fuel infrastructure.⁶³ This kind of policy recognizes a fundamental reality: "the cheapest and cleanest energy is the energy we don't use."⁶⁴ Yet, vertically integrated utilities face structural disincentives in much of the Southeast to pursue efficiency, preferring to expand gas generation instead.⁶⁵

If the abundance movement focuses only on supply without addressing demand-side solutions, we risk overbuilding infrastructure, driving up costs for consumers, and entrenching inefficiencies.

THROUGH 2040 SUMMARY REPORT 1-18 (2019), <https://www.epri.com/research/products/000000003002014926> [<https://perma.cc/EF82-HVCS>] ("Electricity consumption is highest in the South region, which is projected to grow at the highest rate of 1% on average per year. Correspondingly, the South has the highest potential savings of the four regions, which can be attributed to the high penetration of air-conditioning and heat pumps in this region.").

⁶² See Virginia Clean Economy Act, 2020 Va. Acts Ch. 1193.

⁶³ See VA. CODE ANN. §§ 56-585.1(A)(5)(c), 56-596.2 (2020).

⁶⁴ HELEN CLARK ET AL., UNA-UK, CLIMATE 2020: FACING THE FUTURE 131 (2020), <https://unesdoc.unesco.org/ark:/48223/pf0000235251> [<https://perma.cc/LD5V-R4KW>].

⁶⁵ See CATHY KUNKEL, INST. FOR ENERGY ECON. & FIN. ANALYSIS, DATA CENTERS DRIVE BUILDOUT OF GAS POWER PLANTS AND PIPELINES IN THE SOUTHEAST 2-3, 13, 23 (2025), <https://ieefa.org/sites/default/files/2025-01/UPDATED-REVIEWED-Southeast%20Gas%20Infrastructure%20and%20Data%20Cente.pdf> [<https://perma.cc/NAX2-GP7G>] (detailing 20,000-megawatt buildout of gas-fired generation across four Southeastern states); HEATHER POHMAN, S. ALLIANCE FOR CLEAN ENERGY, ENERGY EFFICIENCY IN THE SOUTHEAST: SIXTH EDITION REPORT 2 (2025), <https://www.cleanenergy.org/wp-content/uploads/Energy-Efficiency-in-the-Southeast-Sixth-Edition-January-2025.pdf> [<https://perma.cc/8UGT-XB75>] ("Energy efficiency is a proven low-cost clean energy resource, but Southeastern Utilities and regulators continue to underinvest and deprioritize it. As a result, the region lags behind the rest of the country in utility energy efficiency."); Robert Zullo, *In the Southeast, Where Big Utilities Rule, Calls for a Real Power Market Persist*, COLO. NEWSLINE (May 8, 2023), <https://coloradonewsline.com/2023/05/08/southeast-big-utilities-power-market/> [<https://perma.cc/R5WM-LQK4>] (describing wholesale electricity market trends in various regions of the country, noting the Southeast "remains dominated by a handful of large utility companies").

Policymakers in partnership with technical experts must integrate demand reduction policies, energy efficiency mandates, and strategic electrification programs into any credible energy abundance strategy. Otherwise, we risk creating a grid that is not only overbuilt but also structurally wasteful, prompting ever-expanding fossil fuel capacity to meet projected load growth that could instead have been materially reduced, reshaped, or deferred. Instead, a grid designed around efficiency and strategic energy use is more affordable, more reliable, and less susceptible to unnecessary fossil fuel expansion.

2. NEPA is Not the Boogeyman in Energy Abundance's Closet

Some policymakers and analysts conflate legitimate environmental reviews and public participation—most referenced under the National Environmental Policy Act (“NEPA”)—with “obstruction,” misidentifying those processes as the leading barriers to renewable energy deployment.⁶⁶ But many of the popularized arguments against NEPA distract us from working on real solutions to achieve energy abundance. Professor David Adleman found that proposed reforms to NEPA aimed at streamlining the buildout of clean energy presented a “false choice,” because, among other reasons, “less than 5 percent of renewables projects required an [environmental impact statement] or a project-specific permit,” and because federal challenges to renewable projects grounded in NEPA were exceedingly rare.⁶⁷ In other words, the instances where NEPA is at play at all—leaving to the side whether it was even an impediment—are uncommon.

As many may already understand, NEPA is *not* a siting and permitting statute or process. NEPA's purposes include “promot[ing] efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man,” and ensuring that agencies incorporate environmental quality concerns and analysis into the decision-making processes.⁶⁸ The NEPA process is, in part, designed to address shortcomings in how government and industry failed to consider human activities' environmental impacts and external costs fully before the law was

⁶⁶ See David E. Adelman, *Permitting Reform's False Choice*, 51 *ECOLOGY L. Q.* 129, 129, 158–59, 175 (2024).

⁶⁷ *Id.* at 134.

⁶⁸ 42 U.S.C. §§ 4321, 4331(a)–(b).

enacted. NEPA has two core aims. First, it requires federal agencies to take a “hard look”⁶⁹ at a proposed action and consider alternatives to that proposed action,⁷⁰ and second, it requires federal agencies to inform the public of potential environmental impacts of its proposal and give the public a meaningful opportunity to engage in the decision-making process.⁷¹

Put simply, NEPA requires that we “look before we leap”⁷² and engage with impacted communities when the federal government is considering project proposals. A thorough environmental review is necessary for responsible development, as it informs decision-makers and the public about the potentially significant effects of a proposed action on the environment and whether mitigation strategies could effectively prevent or reduce any adverse impacts. At its best, developers can utilize NEPA to build public support for proposed projects, which in return benefit from community input and buy-in.

Nonetheless, many advocates for “streamlining” permitting have zeroed in on rescinding NEPA as being the primary answer to all of our nation’s energy infrastructure problems.⁷³ The fact that

⁶⁹ See *Sierra Club v. FERC*, 867 F.3d 1357, 1367 (D.C. Cir. 2017) (citing 42 U.S.C. § 4332(2)(C)(iii); *Balt. Gas & Elec. Co. v. Nat. Res. Def. Couns.*, 462 U.S. 87, 97 (1983)).

⁷⁰ See 42 U.S.C. § 4332(C)(iii).

⁷¹ See, e.g., *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349–50 (1989) (draft and final EIS provide a “springboard for public comment”); *Balt. Gas & Elec. Co.*, 462 U.S. at 97 (NEPA documents give the public the assurance that the agency “has indeed considered environmental concerns in its decisionmaking process”); 42 U.S.C. § 4336a(c) (“Each notice of intent to prepare an environmental impact statement under section 4332 of this title shall include a request for public comment on alternatives or impacts and on relevant information, studies or analyses with respect to the proposed agency action.”).

⁷² See *Laclede Gas Co. v. FERC*, 873 F.2d 1494, 1499 (D.C. Cir. 1989) (“When so much depends upon the agency having a sure footing, it is not too much for us to demand that it look first, and then leap if it likes.”).

⁷³ For example, in September 2024, the House Committee on Natural Resources convened a legislative hearing entitled “Modernizing NEPA Through Permitting Reform.” See *Modernizing NEPA Through Permitting Reform: Hearing on H.R. ___, H.J. Res. 168 and H.R. 6129 Before the H. Comm. on Nat. Res.*, 118th Cong. (2024). After the hearing, Chairman Bruce Westerman stated that his committee “ha[s] the incredible opportunity to solve some of the most pressing issues facing our communities by streamlining permitting for crucial infrastructure projects” currently obstructed by the regulatory process. *Modernizing NEPA Through Permitting Reform*, HOUSE COMM. ON NAT. RES. (Sept. 11, 2024),

gutting NEPA directly serves the fossil-fuel industry's interests and is an overly simplistic solution to a very complex problem should give one reason to pause. It all quite simply is a solution in search of a problem.

The Supreme Court's recent decision in *Seven County Infrastructure Coalition v. Eagle County* echoed the common misconception that the eradication of NEPA can and will inevitably equate to lower costs and lead to more projects and jobs that are in the public's interest, including examples such as "wind turbines, transmission lines, dams, housing developments, highways, bridges, subways, stadiums, arenas, data centers, and the like," though markedly without any corresponding citations in support of this conclusion.⁷⁴ That narrative, however, primarily serves fossil fuel interests, often at significant cost to communities and even to project proponents themselves, reinforcing regulatory capture rather than fostering "abundance."

It is this line of thinking and related policy proposals which now effectively transfigures "permitting reform" into "delete NEPA" and makes impacted communities, consumers, policymakers, and environmentalists distrust the abundance movement.⁷⁵

Addressing the unfounded attacks on NEPA is vital to advancing clean energy abundance, because this law helps to ensure more informed and sustainable decision-making for major projects. To be sure, NEPA (first enacted in 1969) can be improved and modernized—like any process, it has inefficiencies—but it is not a fundamental obstacle to achieving energy abundance,⁷⁶ and it is a pillar of sound and informed decision-making at the federal level.

<https://naturalresources.house.gov/news/documentsingle.aspx?DocumentID=416501> [<https://perma.cc/EE3T-JSYT>].

⁷⁴ *Seven Cnty. Infrastructure Coal. v. Eagle Cnty.*, 605 U.S. 168, 184 (2025).

⁷⁵ See Raúl Grijalva & Melanie Stansbury, *Gutting the National Environmental Policy Act is a Political Vendetta, Not Permitting Reform*, THE HILL (May 12, 2023, at 2:00 ET), <https://thehill.com/opinion/congress-blog/4001923-gutting-the-national-environmental-policy-act-is-a-political-vendetta-not-permitting-reform/> [<https://perma.cc/DTR6-J6D5>].

⁷⁶ See David E. Adelman, *Permitting Reform's False Choice*, 51 *ECOLOGY L. Q.* 129, at 139-140 (2024); see also Johan Calvert, Federico Holm & Nicole Pavia, NISKANEN CTR, *Beyond NEPA: Understanding the Complexities of Slow Infrastructure Buildout*, (Aug. 1, 2024), <https://www.niskanencenter.org/beyond-nepa-understanding-the-complexities-of-slow-transmission-buildout/> [<https://perma.cc/YD96-CXAP>],

Again, however, there is a budding consensus that NEPA and permitting processes are imperfect and should be improved, especially for urgently needed clean energy infrastructure development.⁷⁷ As discussed in Part III.B.2. below, serious agency efforts were underway to do exactly that,⁷⁸ and such efforts throughout the federal government yielded notable results. Between 2019 and 2024, agencies slashed timelines to complete environmental impact statements (“EISs”) required by NEPA from a median of 3.6 years to 2.2 years and increased the percentage of EISs completed in less than two years from 24% to 41%.⁷⁹ While these improvements cannot be attributed to any one factor, increased staff and resources owing to Inflation Reduction Act funds likely helped dramatically.⁸⁰ Attempts to gut federal staffing, expertise,⁸¹ and NEPA will

⁷⁷ See Klass & Appel, *supra* note 4, at 98 (suggesting “targeted NEPA and permitting reforms for clean energy projects without supporting similar reforms for fossil fuel projects” while noting that “[p]rocedural protections enshrined in NEPA and federal and state permitting laws should continue to serve as an important check on fossil fuel projects that, if built, will contribute to climate change and harm human health and the environment”).

⁷⁸ See *infra* Part III.B.2 (discussing DOE’s CITAP as an example of meaningful efforts to increase interagency NEPA efficiency).

⁷⁹ See COUNCIL ON ENV’T QUALITY, ENVIRONMENTAL IMPACT STATEMENT TIMELINES (2010-2024), at 2, https://ceq.doe.gov/docs/nepa-practice/CEQ_EIS_Timeline_Report_2025-1-13.pdf [<https://perma.cc/TEC6-GZUJ>].

⁸⁰ See White House, *Building a Clean Energy Economy: A Guidebook to the Inflation Reduction Act’s Investments in Clean Energy and Climate Action*, 182 (Jan. 2023), <https://bidenwhitehouse.archives.gov/wp-content/uploads/2022/12/Inflation-Reduction-Act-Guidebook.pdf> [<https://perma.cc/9GXX-JH3S>] (announcing “\$625 million to multiple federal agencies to support efficient environmental [and] funds to hire and train personnel and develop tools, techniques, and guidance to improve transparency, accountability, and public engagement”); but see Ian M. Stevenson, *Interior Wants to do NEPA Reviews in 28 Days. Is That Even Possible?*, ENERGYWIRE (May 15, 2025), <https://www.eenews.net/articles/interior-wants-to-do-nepa-reviews-in-28-days-is-that-even-possible/> (discussing federal staffing cuts during Trump administration and one agency’s subsequently diminished permitting capacity).

⁸¹ See Annette Choi, Danya Gainor & Kate Carroll, *Tracking Trump’s Overhaul of the Federal Workforce*, CNN POLITICS, <https://www.cnn.com/politics/tracking-federal-workforce-firings-dg/index.html> [<https://perma.cc/AXX2-CWAV>] (last visited February 1 2026); Julia Reinstein, *Here Are All the Federal Agencies Where Workers Are Being Fired*, ABC NEWS (Feb. 24, 2025), <https://abcnews.go.com/US/agencies-federal-workers-fired/story?id=118901289> [<https://perma.cc/72ZS-33GB>].

inevitably reverse those gains, making development more harmful and less transparent.⁸²

Moreover, there is little credible evidence that NEPA is the main culprit for slowing down the clean energy transition. Interconnection delays, state-level permitting barriers, and financing risks are far greater obstacles to the clean energy buildout than NEPA reviews.⁸³ Even those who argue that NEPA is the fundamental problem acknowledge that transmission siting challenges stem from issues beyond NEPA's realm—including state regulatory conflicts and utility opposition.⁸⁴

⁸² See, e.g., Megan P. Caldwell & Leah Kaiser, *Trump Administration Moves to Dismantle NEPA*, HUSCH BLACKWELL (Feb. 26, 2025), <https://www.husch-blackwell.com/newsandinsights/trump-administration-moves-to-dismantle-nepa> [<https://perma.cc/GYG2-2UYL>]; Samuel B. Boxerman et al., *President Trump's Executive Order Seeks to Reduce Federal Regulation*, SIDLEY (Feb. 7, 2025), <https://environmentalenergybrief.sidley.com/2025/02/07/president-trumps-executive-order-seeks-to-reduce-federal-regulation/> [<https://perma.cc/W4VK-CY5R>]; Edward Boling, Laura G. Zagar & Thomas C. Jensen, *CEQ Regulations Replaced by Guidance for a Year of Living in Uncertainty*, PERKINS COIE (Feb. 20, 2025), <https://perkinscoie.com/insights/blog/ceq-regulations-replaced-guidance-year-living-uncertainty> [<https://perma.cc/7DG4-VXR5>]; Hannah Northey & Robin Bravender, *Trump's CEQ Has No Nominee as It Tears Down NEPA Rules*, E&E NEWS (Feb. 21, 2025), <https://www.eenews.net/articles/trumps-ceq-has-no-nominee-as-it-tears-down-nepa-rules/> [<https://perma.cc/FJ7S-U6MT>]. See generally Exec. Order No. 14,154, 90 Fed. Reg. 8353 (Jan. 29, 2025).

⁸³ See, e.g., Lauren Bauer et al., *Eight Facts About Permitting and the Clean Energy Transition*, BROOKINGS INST. (May 22, 2024), <https://www.brookings.edu/articles/eight-facts-about-permitting-and-the-clean-energy-transition/> [<https://perma.cc/V6NN-JGBR>] (identifying local ordinances or zoning, grid interconnection, and community opposition as the top three leading causes of cancellation for wind and solar projects from 2016 to 2023); see also David Golembeski, *Persistent Interconnection Challenges Risk DC's Clean Energy Goals*, INTERSTATE RENEWABLE ENERGY COUNCIL (Sept. 20, 2024), <https://irecusa.org/blog/irec-news/persistent-interconnection-challenges-risk-dcs-clean-energy-goals/> [<https://perma.cc/M5R4-UNVR>] (“The recent cost increases and lack of cost transparency have resulted in significant financial uncertainty for interconnection applicants and have a real impact on clean energy adoption.”).

⁸⁴ See, e.g., Aidan Mackenzie & Santi Ruiz, *No, NEPA Really Is a Problem for Clean Energy*, INST. FOR PROGRESS (Aug. 17, 2023), <https://ifp.org/no-nepa-really-is-a-problem-for-clean-energy/> [<https://perma.cc/977Z-NSHT>] (“It's true that reforming how we site and permit new transmission lines is complementary to NEPA reform. Siting interregional transmission lines bottlenecks connecting new clean energy to the grid—the full process takes 10 years, on average—and substantial clean energy is waiting to be connected.”).

Empirical evidence suggests that NEPA's impact on project delays, particularly through litigation, may be overstated. A 2023 report from the Roosevelt Institute noted that only an estimated 0.22% of NEPA decisions are litigated.⁸⁵ In our *Evidence-Based Recommendations Report*, my colleagues and I at the Niskanen Center, together with lawyers and colleagues from the nonprofit Clean Air Task Force ("CATF") and the law firm Perkins Coie, conducted a comprehensive analysis examining thirty-seven high-capacity transmission line projects to assess the correlation between litigation, opposition, and project delays or cancellations.⁸⁶ We found that the majority of projects faced neither litigation nor substantial non-litigation opposition.⁸⁷ Of all projects reviewed, around a quarter were met with litigation or significant non-litigation opposition and were either delayed or canceled.⁸⁸ However, litigation alone rarely determined a project's fate.⁸⁹ Out of eighteen identified lawsuits against transmission projects, only two were decided in opponents' favor—and notably, both cases involved a single project that was ultimately constructed anyway.⁹⁰

⁸⁵ See JAMIE PLEUNE, ROOSEVELT INST., CHOOSING BETWEEN ENVIRONMENTAL STANDARDS AND A RAPID TRANSITION TO RENEWABLE ENERGY IS A FALSE DILEMMA 10 (May 2023), https://rooseveltinstitute.org/wp-content/uploads/2023/05/RI_Choosing-between-Environmental-Standards-and-a-Rapid-Transition-to-Renewable-Energy-Is-a-False-Dilemma_Brief_202305-1.pdf [<https://perma.cc/7Z4R-K5NJ>] (citing John C. Ruple & Kayla M. Race, *Measuring the NEPA Litigation Burden: A Review of 1,499 Federal Court Cases*, 50 ENV'T. L. 479, 497-99 (2020) (other citations omitted)).

⁸⁶ See EVIDENCE-BASED RECOMMENDATIONS REPORT, *supra* note 36, at 19.

⁸⁷ See *id.*

⁸⁸ See *id.*

⁸⁹ See *id.*

⁹⁰ See *id.* at 19–20. The fact that projects were constructed anyway despite litigation may be explained in part (as many environmental lawyers well know) by the overly high threshold required at times to obtain relief from a court, including preliminary injunctions. *Id.* at 20. See also *Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 9 (2008) (holding that a preliminary injunction is an extraordinary remedy requiring a plaintiff to establish a likelihood of success on the merits, a likelihood of irreparable injury in the absence of preliminary relief, that the balance of equities tips in its favor, and that an injunction is in the public interest); Kevin J. Lynch, *The Lock-in Effect of Preliminary Injunctions*, 66 FLA. L. REV. 779, 781–82 (2015), <https://scholarship.law.ufl.edu/flr/vol66/iss2/5/> [<https://perma.cc/253B-96G8>] (noting the difficulty plaintiffs face in satisfying the test for preliminary injunctions in environmental cases); Nat'l Parks Conservation

The bottom line is that while NEPA litigation undeniably occurs and sometimes delays individual projects, it is simply inaccurate to frame it as the predominant or even principal barrier to transmission or clean energy development.

3. Public Engagement Is Not a Hindrance to Development

Meaningful community engagement and planning demonstrably decrease the likelihood of opposition as well as the risk of delay; indeed, authentic engagement has been linked to improved overall project outcomes.⁹¹ My own experience confirms that finding, and empirical research reinforces this point.⁹² One case study on point is the Great Northern Transmission Line. The project developer held seventy-five public meetings over five years to collaboratively adjust the route; this intensive upfront engagement secured endorsements from county governments and a Tribal Nation, yielded a “comparably quick” federal approval timeline of about two years, and avoided protracted battles that could have plagued less inclusive project developments.⁹³ Robin Allen of the Niskanen Center noted that recent transmission deals “point to a reimagined role for stakeholders—not merely as alleged barriers but as proactive participants and potential catalysts” in advancing infrastructure expansion.⁹⁴ In other words, local communities, landowners, and Tribes can

Ass’n v. Semonite, 282 F. Supp. 3d 284, 288–89 (D.D.C. 2017) (“The standard is not that irreparable harm will occur at some point in the future, but that plaintiffs suffer irreparable harm before a decision on the merits can be reached”).

⁹¹ See EVIDENCE-BASED RECOMMENDATIONS REPORT, *supra* note 36, at 32–33 (recommending early, sustained, and meaningful stakeholder outreach for, among other things, improved permitting processes and outcomes); BEN BUTTERWORTH ET AL., CLEAN AIR TASK FORCE & ACADIA CTR., THE ENERGY IS ABOUT TO SHIFT: PATHWAYS TO A COMMUNITY-CENTERED, RESILIENT, AND DECARBONIZED GRID FOR NEW ENGLAND 5–6 (2024), <https://cdn.catf.us/wp-content/uploads/2024/11/24202357/energy-shift-report.pdf> [<https://perma.cc/N4MQ-UWWK>] (describing how a lack of community engagement can “increase[] development times and costs while poisoning the water for future development in neighboring communities”).

⁹² See EVIDENCE-BASED RECOMMENDATIONS REPORT, *supra* note 36, at 32–33.

⁹³ EVIDENCE-BASED RECOMMENDATIONS REPORT, *supra* note 36, at 32.

⁹⁴ Robin Allen, *Let’s Make a Deal: High-Capacity Transmission Edition*, NISKANEN CTR., (2024), <https://www.niskanencenter.org/lets-make-a-deal-high-capacity-transmission-edition/> [<https://perma.cc/FQ5D-M5B4>].

become partners who actively help move projects forward when developers pursue collaborative, benefit-sharing approaches.

Developers and their lawyers have affirmed that engagement with impacted communities and negotiations with Tribes as sovereign nations, as well as innovation, can drive a project across the finish line. For example, the Morongo Tribe became the “First Native American Tribe to be Approved as a Participating Transmission Owner in Nation,”⁹⁵ and the developer was quite happy with the deal. Speaking at an Americans for a Clean Energy Grid webinar, Rebecca Furman, Director and Managing Attorney for the project developer, Southern California Edison, stated that while they do consider their shareholders’ interests, they are also very aware of affordability issues and pushing costs onto ratepayers.⁹⁶ Furman went on to deem the entire process “a benefit to everyone all around,” and one that garnered “unprecedented” support for a transmission line project.⁹⁷

These findings underscore a growing consensus: far from being a hindrance, robust public engagement is an essential ingredient for efficient and durable energy infrastructure development. And in fact, ensuring the systems for participation remain in place is key, from project-level examples, all the way up to our country’s basic structure of government.

4. Democratic Governance is Fundamental to Energy Abundance

Democracies are uniquely equipped to balance competing interests, helping ensure that energy development benefits all rather

⁹⁵ *Morongo Becomes First Native American Tribe to be Approved as a Participating Transmission Owner in Nation*, MORONGO NATION (July 21, 2021), <https://morongonation.org/news/morongo-becomes-first-native-american-tribe-to-be-approved-as-a-participating-transmission-owner-in-nation/> [https://perma.cc/P3J8-FQHH].

⁹⁶ See ELISABETH BLAUG & NILS NICHOLS, AMS. FOR A CLEAN ENERGY GRID, RECOMMENDED SITING PRACTICES FOR ELECTRIC TRANSMISSION DEVELOPERS 26 (2023), <https://cleanenergygrid.org/wp-content/uploads/2023/02/Recommended-Siting-Practices-for-Electric-Transmission-Developers-ACEG-February-2023.pdf> [https://perma.cc/CZV8-JAAD] (citing *Transmission Time: Innovative Partnership for Accelerating Transmission Buildout*, AMS. FOR A CLEAN ENERGY GRID (Sept. 29, 2022), <https://cleanenergygrid.org/event/transmission-time-innovative-partnerships-for-accelerating-transmission-buildout/> [https://perma.cc/L3CH-H3UG]).

⁹⁷ *Id.*

than a select few. Democratic systems can also provide critical safeguards against corruption and regulatory capture, including transparent and free information flows, accountability, and enforcement mechanisms. Thus, clean energy abundance requires not just technological innovation and responsible infrastructure expansion, but also a steadfast commitment to democratic principles.

Costa Rica provides a compelling example of how democratic governance can foster clean energy abundance. This small nation has become a global leader in renewable energy:⁹⁸ Costa Rica generates more than 98% of its electricity from renewables, relying primarily on hydropower, while it continues to expand wind, geothermal, and solar.⁹⁹ At the same time, grassroots participation has shaped domestic policy: community movements pushed the country to diversify its energy mix, helping ensure that the national energy plan incorporated community consultation, sustainability, and new, affordable technologies like wind and solar, rather than relying on the construction of yet more harmful mega-dams.¹⁰⁰ Additionally, Costa Rica pioneered a Payments for Environmental Services (“PES”) program, which incentivizes landowners to protect forests and watersheds essential for renewable energy production.¹⁰¹ This policy not only reversed deforestation but also demonstrated how

⁹⁸ See Carlos H. Viquez, *Costa Rica’s Path to Success: Five Key Policies*, HARV. REV. OF LATIN AMERICA (Apr. 21, 2024), <https://revista.drclas.harvard.edu/costa-ricas-path-to-success-five-key-policies/> [<https://perma.cc/R84X-VNUE>].

⁹⁹ See *OECD Environmental Performance Reviews: Costa Rica*, ORG. FOR ECON. CO-OPERATION & DEV. 61 (2023), https://www.oecd.org/content/dam/oecd/en/publications/reports/2023/10/oecd-environmental-performance-reviews-costa-rica-2023_b60596af/ec94fd4e-en.pdf [<https://perma.cc/5Z39-H666>].

¹⁰⁰ See Pablo Messina & Martín Sanguinetti, *Public Energy and the Popular Struggle for Democracy in Costa Rica*, TRANSNATIONAL INST. (Dec. 5, 2024), <https://www.tni.org/en/article/public-energy-and-the-popular-struggle-for-democracy-in-costa-rica> [<https://perma.cc/3KQE-ACG4>] (citing Ludovico Feoli, *Social Movements and a Policy Shift Towards a Diversified Electricity Matrix*, THE EXTRACTIVE INDUS. & SOC’Y, Apr. 3, 2023, <https://doi.org/10.1016/j.exis.2023.101249>).

¹⁰¹ See ANNA SKOWRON, ROB VAN RIET & ADRIÁN MARTINEZ, WORLD FUTURE COUNCIL & LA RUTA DEL CLIMA, POLICY ROADMAP FOR 100% RENEWABLE ENERGY IN COSTA RICA 8 (2020), https://www.worldfuturecouncil.org/wp-content/uploads/2020/06/wfc_costarica-100-re-roadmap_FINAL1.pdf [<https://perma.cc/EJ93-TD76>].

democratic governance can align environmental sustainability with economic incentives.¹⁰² Costa Rica's trajectory shows how democratic systems can successfully deliver concrete pathways toward clean energy abundance, also highlighting a critical shortcoming in the United States: a failure to convert popular support for clean, affordable energy into binding and enduring federal policy commitments.¹⁰³

In the United States, the current public interest reflects a preference toward renewable energy and away from fossil fuels, in stark contrast with the historical state of play and the Trump administration's agenda favoring fossil-fuel expansion. In a May 2025 survey, nearly two-thirds of respondents thought "developing sources of clean energy should be a high or very high priority" for the federal government, and 67% supported a transition to 100% clean energy.¹⁰⁴ In a working democracy, those public opinions have an established means of translating into public policies, which the United States started to do via the Inflation Reduction Act and other such laws.¹⁰⁵

In contrast, centralizing power threatens to derail, rather than expedite, clean energy abundance. Fossil-fuel dependent petrostates such as Venezuela and Russia illustrate how autocratic control over energy resources fuels corruption, inequality, and economic

¹⁰² *See id.*

¹⁰³ *See infra* note 105 and accompanying text.

¹⁰⁴ ANTHONY LEISEROWITZ ET AL., CLIMATE CHANGE IN THE AMERICAN MIND: POLITICS & POLICY 4 (2025), <https://climatecommunication.yale.edu/wp-content/uploads/2025/06/climate-change-american-mind-politics-policy-spring-2025c.pdf> [<https://perma.cc/FZ38-M345>].

¹⁰⁵ *See e.g.*, Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429 (2021); Inflation Reduction Act of 2022, Pub. L. No. 117-169, 136 Stat. 1818 (2022); CHIPS and Science Act, Pub. L. No. 117-167, 136 Stat. 1366 (2022); *see also* Laura Feiveson & Matthew Ashenfarb, *The Inflation Reduction Act: Saving American Households Money While Reducing Climate Change and Air Pollution*, U.S. DEP'T OF THE TREAS. (Aug. 7, 2024), <https://home.treasury.gov/news/featured-stories/the-inflation-reduction-act-saving-american-households-money-while-reducing-climate-change-and-air-pollution> [<https://perma.cc/2DE2-5YQD>]; *but see, e.g.*, Abby Husselbee, *Executive and Congressional Control Mechanisms over IRA and IJJA Funding*, ENV'T & ENERGY L. PROGRAM 1-2, 9 (updated Mar. 6, 2025), <https://eelp.law.harvard.edu/executive-and-congressional-control-mechanisms-over-ira-and-ijja-funding/> [<https://perma.cc/NHY8-KBV7>].

instability rather than abundance.¹⁰⁶ One author attributed China's status as "the world's biggest polluter" to its authoritarian form of government.¹⁰⁷ Adoption of an overly simplistic tyrannical approach could easily lead to dirtier, toxic air, filthy and polluted water, and an unsustainable and frightening future for our children and grandchildren, without democratic processes in place to slow or stop these harms. Indeed, the future of our country grows more frightening with each step this current administration attempts to take.¹⁰⁸

¹⁰⁶ See Diana Roy & Amelia Cheatham, *Venezuela: The Rise and Fall of a Petrostate*, COUNCIL ON FOREIGN REL. (July 31, 2024), <https://www.cfr.org/backgrounder/venezuela-crisis#chapter-title-0-2> [<https://perma.cc/2PGJ-EZPF>] (defining a petrostate as a country characterized by government income that is deeply reliant on the export of oil and natural gas, economic and political power highly concentrated in an elite minority, and weak, unaccountable political institutions with widespread corruption); Sarah Peck & Sarah Chayes, *The Oil Curse: A Remedial Role for the Oil Industry*, CARNEGIE ENDOWMENT FOR INT'L PEACE 5 (Sept. 2015), https://carnegie-production-assets.s3.amazonaws.com/static/files/CP_250_Peck_Chayes_Oil_Curse_Final.pdf [<https://perma.cc/LF7R-UHS9>] ("Too often, oil-rich countries with weak institutions and little public accountability may succumb to systemic corruption"); Emma Ashford, *The Problem With Being a Petrostate*, FOREIGN POL'Y (June 19, 2022), <https://foreignpolicy.com/2022/06/19/petrostates-oil-production-weapon-foreign-policy-war-economy/> [<https://perma.cc/EGS8-L9W5>] (noting that high levels of corruption and underdeveloped institutions are common features of oil-wealthy states).

¹⁰⁷ CHARLES DUNST, *DEFEATING THE DICTATORS: HOW DEMOCRACY CAN PREVAIL IN THE AGE OF THE STRONGMAN* 27 (2023) (rejecting the argument that a climate-friendly autocracy could combat climate change because "autocracy very clearly does not inexorably lead to the kind of good government necessary to combat climate change").

¹⁰⁸ See, e.g., Exec. Order No. 14,148, Initial Rescissions of Harmful Executive Orders and Actions, 90 Fed. Reg. 8237 (Jan. 20, 2025) (revokes dozens of President Biden's Executive Orders related to a wide range of topics including the climate crisis, equity, public health, and immigration); Exec. Order No. 14,162, Putting America First in International Environmental Agreements, 90 Fed. Reg. 8455 (Jan. 20, 2025) (withdraws the United States from the Paris Agreement all other commitments made under the United Nations Framework Convention on Climate Change); Exec. Order 14,151, Ending Radical and Wasteful Government DEI Programs and Preferencing, 90 Fed. Reg. 8339 (Jan. 20, 2025) (directs federal agencies to eliminate policies and programs related to diversity, equity, and inclusion); Exec. Order No. 14,155, Withdrawing the United States From the World Health Organization, 90 Fed. Reg. 8361 (Jan. 20, 2025) (withdraws the United States from the World Health Organization (WHO) and pauses all transfers of funds, support, and resources to the WHO); Exec. Order No. 14,156, Declaring a National Energy

While regulatory improvements are needed, they must happen without discarding core community, environmental, and *democratic* safeguards.

But here is the twist—if the abundance agenda is wielded strategically, *it can help us do just that.*

Energy abundance is not a rallying cry to abandon environmental regulations, local community input, or foundational democratic processes. Instead, it is a demand to update and streamline those processes to effectively protect what they were *designed* to safeguard—human and environmental well-being—while rapidly scaling up renewables and other clean technologies. By accelerating the clean energy buildout, we can focus on projects that provide lasting public benefits. That future requires us to accelerate the infrastructure needed for a modern, reliable, and clean grid;¹⁰⁹ it also requires us to actively prevent further fossil-fuel entrenchment.

In sum, energy and climate experts advocating for the abundance agenda need to keep in mind the manifold benefits of a system that allows for competing interests and participatory processes. Any adoption of borderline or full-blown autocratic “all-of-the-above” policy approaches¹¹⁰ threatens clean energy abundance in the United States. Democratic systems—which prioritize public engagement—can and do serve as the best model to make a clean energy future possible.

II. CLEAN ENERGY ABUNDANCE THRIVES IN TENSION: SLOWING THE

Emergency, 90 Fed. Reg. 8433 (Jan. 20, 2025); Exec. Order 14,154, Unleashing American Energy, 90 Fed. Reg. 8,353, 8,357-58 (Jan. 29, 2025).

¹⁰⁹ See Scott Moore, *Grid Expansion Will Accelerate Renewable Energy Adoption*, N. AM. CLEAN ENERGY (Nov. 15, 2024), <https://www.nacleanenergy.com/energy-storage/grid-expansion-will-accelerate-renewable-energy-adoption> [<https://perma.cc/T983-7CN4>]; see also INT’L ENERGY AGENCY, *ELECTRICITY GRIDS AND SECURE ENERGY TRANSITIONS 7* (2023), <https://iea.blob.core.windows.net/assets/ea2ff609-8180-4312-8de9-494bcf21696d/ElectricityGridsandSecureEnergyTransitions.pdf> (reaching national energy and climate goals worldwide will require adding or refurbishing more than 80 million kilometers of grids by 2040); ERIC LARSON ET AL., *supra* note 32, at 342.

¹¹⁰ See, e.g., Nico Portuondo & Andres Picon, ‘*All of the Above, Except Wind*’: *GOP Retools Energy Philosophy*, E&E NEWS (Jan. 23, 2025), <https://www.ee-news.net/articles/all-the-above-except-wind-gop-retools-energy-philosophy-2/> [<https://perma.cc/ER3J-HD2Z>].

BAD AND SPEEDING THE GOOD

A. *One Side of the Coin: Captured Regulatory Work Is Clean Energy Abundance Work (Slowing the Bad)*

A tangled web of successful corporate rent-seeking, captured regulatory systems—at nearly every level of governance—and overly burdensome rules and regulations in all the wrong places have stymied our progress toward a clean, affordable, and reliable grid.¹¹¹ Rather than some neat and tidy conflict where local project opponents (“NIMBYs,” for “Not in My Backyard”) wield environmental rules and regulations against new energy infrastructure, the real reasons why we are not further along cannot be reduced to any single policy point and have much to do with regulatory capture—which is when “private industries co-opt governmental power for their own competitive benefit.”¹¹²

We already have, in effect, an industrial policy for dirty energy: a patchwork of subsidies, legacy rules, and market structures that coddle fossil fuels while throwing procedural roadblocks in front of cleaner alternatives. This dynamic creates an uneven playing field, where fossil-fuel projects enjoy streamlined approvals¹¹³ and generous returns,¹¹⁴ while renewable energy developers must navigate a

¹¹¹ See, e.g., Peskoe, *Is the Utility Transmission Syndicate Forever?*, *supra* note 13, at 2–4 (explaining how investor-owned utilities leveraged their state-sanctioned monopolies to dominate interstate transmission development, obstruct competition, and resist FERC’s efforts to foster an open and modernized electric grid); Peskoe, *Replacing the Utility Transmission Syndicate’s Control*, *supra* note 13, at 591 (describing RTOs as “a complex dance between transmission owners, market participants, states, and the FERC” (quoting Michael H. Dworkin & Rachel Aslin Goldwasser, *Ensuring Consideration of the Public Interest in the Governance and Accountability of Regional Transmission Organizations*, 28 ENERGY L.J. 543, 558 (2007))); see also *id.* at 592–602 (discussing how entrenched power players exert influence on RTO boards, explaining that regulated entities “form coalitions, negotiate backroom deals, and reach compromises” within the “corporatist democracies” of RTOs and noting “the ‘conventional wisdom’ about corporate boards has been that they are ‘captured by senior management’”).

¹¹² BRINK LINDSEY & STEVEN M. TELES, *THE CAPTURE ECONOMY: HOW THE POWERFUL ENRICH THEMSELVES, SLOW DOWN GROWTH, AND INCREASE INEQUALITY* 11 (2017).

¹¹³ See discussion *infra* at Parts II.A.1 & 2.

¹¹⁴ The federal government subsidizes fossil fuel development through a range of means too extensive to exhaust here. Broadly, here are some examples of those subsidies: providing tax credits for oil and gas extraction; subjecting royalties from

labyrinth of state and federal requirements, interconnection queues, local opposition, and misinformation¹¹⁵—including anti-renewable “local” campaigns supported by fossil fuel interests.¹¹⁶

Renewable energy developers also face more structural financial barriers—independent power producers do not get a guaranteed return, are subject to competition rather than regulated market area control that favors incumbent utilities, and confront state-sanctioned monopoly utilities that are predominantly betting on gas. While it is nearly impossible to capture all the complex reasons why and how we ended up with a captured industrial policy favoring dirty energy, this section outlines some concrete examples at the state and federal levels to help clarify (and hopefully leave little doubt on) this issue. The bottom line is that the proposed massive build-out of more fossil

coal extraction at lower, long-term capital gains tax rates; exempting specific types of fossil fuels from excise taxes levied at the point of extraction; investing in research and development for natural gas and petroleum; and collecting below-market royalties on oil and gas extracted from public lands. See Molly Brind’Amour, *Fact Sheet: Proposals to Reduce Fossil Fuel Subsidies* (Jan. 30, 2024), <https://www.eesi.org/papers/view/fact-sheet-proposals-to-reduce-fossil-fuel-subsidies-january-2024#2> [<https://perma.cc/TV23-9EKG>]; see also, e.g., Peter Erickson et al., *Effect of Subsidies to Fossil Fuel Companies on United States Crude Oil Production*, 2 NATURE ENERGY 891, 891, 895 (2017) (estimating that an additional 17 billion barrels of U.S. crude oil not otherwise profitable would come online through 2050 due to tax incentives and other subsidies). States contribute with subsidies of their own, such as exemptions from property taxes for LNG export facilities in Louisiana and Texas. See CLAIRE DORNER ET AL., SIERRA CLUB, THE PEOPLE ALWAYS PAY: TAX BREAKS FORCE GULF COMMUNITIES TO SUBSIDIES THE LNG INDUSTRY 3–4, 12–13 (Dec. 2024), https://www.sierraclub.org/sites/default/files/2025-01/lng_taxabatment_report-1.pdf [<https://perma.cc/5CJ3-64Z8>].

¹¹⁵ Even in states with ambitious renewable energy targets like Virginia, utility-scale solar projects have faced significant local backlash. These reactions are due in part to anti-renewable energy campaigns that have spread misinformation. See Miranda Green, et al., *An Activist Group is Spreading Misinformation to Stop Solar Projects in Rural America*, NPR (Feb. 18, 2023), <https://www.npr.org/2023/02/18/1154867064/solar-power-misinformation-activists-rural-america> [<https://perma.cc/4J5X-LYU3>].

¹¹⁶ See *Against the Wind: A Map of the Anti-Offshore Wind Network in the Eastern United States*, CLIMATE DEVEL. LAB (Dec. 12, 2023), <https://www.climatedevlab.brown.edu/post/against-the-wind-a-map-of-the-anti-offshore-wind-network-in-the-eastern-united-states> [<https://perma.cc/2TD3-ULYS>] (showing “how think tanks in the anti-offshore wind movement have received donations from six fossil fuel-interested donors between 2017 and 2021. Of these donations, \$16,278,401 has gone to members of a grassroots-appearing coalition at the center of the movement.”).

fuel infrastructure is fundamentally incompatible with a clean energy abundance agenda. Only by saying “no” to more fossil fuels and “yes” to clean energy can the abundance agenda deliver on its vision of shared prosperity and a livable planet for generations to come.

1. Fighting State Regulatory Capture is Clean Energy Abundance Work

Investor-owned utilities (“IOUs”), essentially state-sanctioned monopolies, obstruct progress toward energy abundance by prioritizing their financial interests over the public interest. At the state level, IOUs wield outsized influence through regulatory capture of state public utility commissions (“PUCs”), which are nominally authorized to oversee IOUs and hold them accountable. However, PUCs are often captured by these monopoly utilities, leading to regulatory decisions that prioritize IOUs’ financial interests over market competition and clean energy integration.¹¹⁷ Professor Ari Peskoe’s work underscores how IOUs leverage their control over transmission planning to entrench market power, suppress competition, and resist efficient, lower-cost alternatives such as utility-scale or distributed solar, storage, and energy efficiency projects.¹¹⁸ As Peskoe explains, “[t]he industry is in the early phase of a technological revolution, but the commercial interests and individual entities that held formal power and informal influence in regional decisionmaking processes are largely the same today as they were twenty-five years ago.”¹¹⁹ IOUs exploit their state-sanctioned monopolies and regulatory structures that ensure returns on capital-intensive projects while obstructing interregional transmission and smaller-scale clean energy developments that could accelerate energy abundance.¹²⁰

¹¹⁷ See Peskoe, *Replacing the Utility Transmission Syndicate’s Control*, *supra* note 13, at 554. See also Alexandra Klass et al., *Grid Reliability Through Clean Energy*, 74 STAN. L. REV. 969, 990–91 (2022).

¹¹⁸ See Peskoe, *Replacing the Utility Transmission Syndicate’s Control*, *supra* note 13, at 554; Peskoe, *Is the Utility Transmission Syndicate Forever?*, *supra* note 13, at 1.

¹¹⁹ Peskoe, *Replacing the Utility Transmission Syndicate’s Control*, *supra* note 13, at 547; Peskoe, *Is the Utility Transmission Syndicate Forever?*, *supra* note 13, at 9.

¹²⁰ See *id.*

Similar to how PUCs purport to oversee IOUs, Regional Transmission Organizations (“RTOs”) were created to manage and coordinate the grid between states. Advanced by FERC and envisioned to eventually proliferate across the country, “the foundational purpose of an RTO [wa]s to prevent for-profit transmission-owners from providing discriminatory service that favors their own interests over their competitors and consumers.”¹²¹ Yet again, IOUs have circumvented these efforts through regional governance structures that allow them to dictate transmission expansion policies and restrict new entrants.¹²² This structure reinforces fossil fuel dependencies, since fossil developers have already been granted the geographic and governance access and power for which renewable energy proponents now have to apply and compete.¹²³ The result is that IOUs can, for example, thwart requests for much-needed transmission line infrastructure that could accommodate renewable energy resources.¹²⁴ In this way, IOUs can undermine regional and interregional transmission improvements necessary for a more efficient and sustainable grid.¹²⁵ Addressing IOU dominance and state- and regional-level regulatory capture is essential for allowing new players to enter the market, which in turn is a vital first step to achieving clean energy abundance and advancing an equitable energy transition.

Another emerging challenge illustrates the systemic tilt favoring fossil-fuel infrastructure: the massive electricity demand of data centers is now being leveraged to justify new fossil generation. A recent Harvard Electricity Law Initiative report revealed that, rather than prioritizing cleaner resources to meet soaring data center demand, “[u]tilities . . . are instead offering to meet data center demand with transmission [upgrades] and gas-fired power plants, which have been the industry’s bread-and-butter for decades,” with

¹²¹ Peskoe, *Replacing the Utility Transmission Syndicate’s Control*, *supra* note 13, at 552.

¹²² See Peskoe, *Replacing the Utility Transmission Syndicate’s Control*, *supra* note 13, at 559; Peskoe, *Is the Utility Transmission Syndicate Forever?*, *supra* note 13, at 29, 57.

¹²³ See Peskoe, *Replacing the Utility Transmission Syndicate’s Control*, *supra* note 13, at 561–62.

¹²⁴ See *id.* at 607–08.

¹²⁵ See *id.*

“[s]ome utilities . . . even propping up their oldest and dirtiest power plants to meet data center demand.”¹²⁶ Without greater oversight and accountability mechanisms, such flawed regulatory decision-making risks undermining our transition to a modern, reliable, and clean grid, and reinforces fossil dependency right when a pivot to clean energy is most urgent. And we cannot rely on big tech or regulators to challenge entrenched utility interests.¹²⁷

2. Fighting Federal Regulatory Capture is Clean Energy Abundance Work

The federal level echoes this fossil-fuel-friendly bias—one symptomatic of regulatory capture. If we allow the continued approval of massive gas build-out, we risk locking ourselves into dirty and inefficient resources for the future. Recognizing this truth and acting upon it—that more gas infrastructure today undermines the clean energy abundance of tomorrow—is critical if we are to achieve a future of clean energy abundance.

A recent example that grounds this fact is the Federal Energy Regulatory Commission’s (“FERC”) approval of a proposal¹²⁸ from RTO PJM Interconnection, LLC (“PJM”) that unfairly enables large gas generators to “queue jump,” or effectively bypass standard interconnection procedures—despite gas projects’ longer development timelines, higher costs, comparative environmental permitting challenges, and more burdensome transmission upgrade

¹²⁶ ELIZA MARTIN & ARI PESKOE, ENV’T & ENERGY L. PROGRAM, HARVARD L. SCH., EXTRACTING PROFITS FROM THE PUBLIC: HOW UTILITY RATEPAYERS ARE PAYING FOR BIG TECH’S POWER 33 (2025), <https://eelp.law.harvard.edu/wp-content/uploads/2025/03/Harvard-ELI-Extracting-Profits-from-the-Public.pdf> [https://perma.cc/K2RC-EVU5].

¹²⁷ See *id.* (“Neither data centers nor regulators are challenging utilities to modernize their [fossil-powered] systems.”).

¹²⁸ PJM Interconnection, LLC is a regional transmission organization that coordinates the flow of electricity and develops market rules with FERC oversight, which includes “all or part of the states of Pennsylvania, New Jersey, Maryland, [...] Delaware, Ohio, Michigan, Illinois, Indiana, Virginia, West Virginia, North Carolina, Kentucky, a small part of Tennessee, along with the District of Columbia.” See *An Introductory Guide for Participation in PJM Processes*, FERC, [https://www.ferc.gov/introductory-guide-participation-pjm-processes#:~:text=PJM%20is%20the%20independent%20system,core\)%2C%20Delaware%2C%20Ohio%2C](https://www.ferc.gov/introductory-guide-participation-pjm-processes#:~:text=PJM%20is%20the%20independent%20system,core)%2C%20Delaware%2C%20Ohio%2C) [https://perma.cc/HQP3-5AZN] (last updated Jan. 23, 2025).

requirements relative to clean generation resources.¹²⁹ In FERC Commissioner Chang’s dissent, she found that by prioritizing project size over readiness, FERC’s order skewed the interconnection process in favor of fossil-fuel projects that are less likely to come online in time to address PJM’s near-term reliability concerns, while disadvantaging smaller, faster-to-deploy resources.¹³⁰ This misalignment undermines open access principles, creates unnecessary delays, and ultimately risks exacerbating—rather than—PJM’s projected capacity shortfall.¹³¹ In other words, as soon as gas industry players faced interconnection queue backlogs, development delays, supply chain issues, and transmission costs in the course of the proceeding at FERC, PJM and FERC effectively bailed out the gas industry by moving it to the front of the line at the expense of clean alternatives.

Similarly, another recent example from my career is FERC’s authorization of the Regional Energy Access Expansion interstate gas pipeline project, which starkly illustrates federal regulatory capture conflicting with clean energy abundance. FERC approved this project despite the State of New Jersey’s explicit objections.¹³² New Jersey regulators unequivocally stated to FERC that existing gas capacity was sufficient and unnecessary new capacity would harm

¹²⁹ See, e.g., *PJM Interconnection, L.L.C.*, 190 FERC ¶ 61,084, ¶¶ 6–11 (Feb. 11, 2025) (Chang, Comm’r, dissenting).

¹³⁰ See *id.*

¹³¹ See *id.*

¹³² See *N.J. Conservation Found. v. FERC*, 111 F.4th 42, 59-60 (D.C. Cir. 2024). See also Brief for Petitioner at 41, *N.J. Conservation Found. v. FERC*, 111 F.4th 42 (D.C. Cir. 2024) (No. 2009764) (“FERC’s reliance on unsubstantiated conclusions and bald shipper assertions that are inconsistent with past practice to reject findings that are supported by data and analyses (including from the state most affected) is the very definition of arbitrary and capricious decision-making.”); (Final) Opening Brief of N.J. Div. of Rate Couns. as Intervenor for Petitioners at 26, *N.J. Conservation Found. v. FERC*, 111 F.4th 42 (D.C. Cir. 2024) (No. 23-1065) (“To be sure, the NJ Study shows that New Jersey’s LDCs do *not* need the Project’s additional capacity to meet firm demand, even on a design day. But that means FERC should have found the Project unneeded rather than look for unspecified and uncertain amounts of ‘potential’ interruptible demand as a reason to certificate it.”) [hereinafter Brief for Intervenor].

ratepayers.¹³³ The New Jersey Division of Rate Counsel, New Jersey Conservation Foundation, New Jersey League of Conservation Voters, Aquashicola Pohopoco Watershed Conservancy, an impacted landowner, and the Delaware Riverkeeper Network took FERC to court, challenging the lawfulness of FERC's authorization over the empirically grounded objection of state regulators, among other things.¹³⁴ New Jersey's Rate Counsel and petitioners were supported by state Attorneys General in an amicus brief.¹³⁵ The legal challengers won in court with the D.C. Circuit finding FERC's decision-making to be unlawful,¹³⁶ but it was too late—the project was operational by August 2024,¹³⁷ and neither FERC nor the court granted our request to pause construction or the underlying authorization while our challenge was pending.¹³⁸ By granting gas projects preferential treatment even over the objection of state regulators, federal regulators lock in more fossil-fuel capacity—hurting ratepayers, hindering climate goals, and threatening grid reliability.¹³⁹

¹³³ N.J. Conservation Found. v. FERC, 111 F.4th 42, 52 (D.C. Cir. 2024). See also Brief for Petitioner, *supra* note 132, at; Brief for N.J. Div. of Rate Couns. as Intervenor, *supra* note 132, at 26.

¹³⁴ See *New Jersey Conservation Found.*, 111 F.4th at 43.

¹³⁵ See Amicus Curiae Brief of New Jersey, Washington, Connecticut, Maryland, Massachusetts, New York, Oregon, and Vermont in support of petitioners and reversal, *New Jersey Conservation Found. v. FERC*, 111 F.4th 42 (D.C. Cir. 2024).

¹³⁶ See *N.J. Conservation Found.*, 111 F.4th at 58–63, (finding, among other things, FERC's public interest determination in authorization of the project arbitrary and capricious, including because FERC's market need assessment and balance of public benefits and harms were deficient).

¹³⁷ See Order on Remand Reinstating Certificate and Abandonment Authorization at 12, 190 FERC ¶ 61,048 (2025) (citing Transco's August 2, 2024 Notice of Commencement of Full Service).

¹³⁸ See *New Jersey Conservation Foundation, et al. v. FERC*, Document #1992981, No. 23-1064 (D.C. Cir. Apr. 3, 2023) (order denying motion to stay authorization and construction) (per curiam); *Transcon. Gas Pipe Line Co., LLC*, 183 FERC ¶ 61,071, 61,521 (2023) (denying motion to stay authorization and construction).

¹³⁹ See Alexandra B. Klass, *Evaluating Project Need for Natural Gas Pipelines in an Age of Climate Change: A Spotlight on FERC and the Courts*, 39 YALE J. ON REGUL. 658 (2022) (arguing that FERC's failure to adequately address project need for pipelines in the wake of climate change and states' transition to clean energy burdens ratepayers and landowners, implicating sections 4, 5, and 7 of the Natural Gas Act).

These recent examples are not regulatory quirks but systemic patterns and practices that continue to shift our entire energy system toward fossil fuels. Crucially, this is in part due to some of the most glaring legal relics in need of a clean “energy abundance” modernization: the Natural Gas Act of 1938 and FERC’s related 1999 Certificate Policy Statement.

3. Continuously Rubberstamping Methane Gas Projects Exemplifies Regulatory Capture and Demands Reform to Achieve Energy Abundance

FERC’s near-100% approval rate for gas pipeline projects epitomizes regulatory capture that fundamentally opposes progress toward clean energy abundance. FERC, an independent agency with extraordinary power over energy markets through the Natural Gas Act of 1938 (“NGA”), as amended,¹⁴⁰ has exclusive authority to review and approve interstate gas pipeline projects, even granting the extraordinary power of eminent domain to developers.¹⁴¹

The original purpose of the NGA was to protect U.S. consumers from corporate abuse¹⁴² and to encourage the orderly development of gas infrastructure at reasonable prices.¹⁴³ Unfortunately, the original purpose and intent of the NGA have been largely lost. Since the fracking boom began in the early 2000s, FERC has approved more than 99% of proposed gas infrastructure projects, despite its legal obligation to authorize only those that serve the “public convenience and necessity.”¹⁴⁴

¹⁴⁰ See 15 U.S.C. §§ 717 *et seq.*

¹⁴¹ See 15 U.S.C. § 717f(c)(1)(A).

¹⁴² See *City of Clarksville, Tenn. v. FERC*, 888 F.3d 477, 479 (D.C. Cir. 2018) (explaining one primary goal of the NGA was “protect[ing] consumers against exploitation at the hands of natural gas companies” (quoting *Fed. Power Comm’n v. Hope Nat. Gas Co.*, 320 U.S. 591, 610 (1944))); *Atl. Refin. Co. v. Pub. Serv. Comm’n of New York*, 360 U.S. 378, 388 (1959) (“The Act was so framed as to afford consumers a complete, permanent and effective bond of protection from excessive rates and charges.”).

¹⁴³ See *Myersville Citizens for a Rural Cmty., Inc. v. FERC*, 783 F.3d 1301, 1307 (D.C. Cir. 2015), citing *NAACP v. Fed. Power Comm’n*, 425 U.S. 662, 669-70 (1976).

¹⁴⁴ See, e.g., Alison Gocke, *Pipelines and Politics*, 47 HARV. ENV’T L. REV. 207, 235–37, 273 (2023) (describing FERC’s trajectory toward deference to pipeline interests); *Pipelines Over People: How FERC Tramples Landowner Rights in Natural Gas Projects Before the Subcomm. on Civil Rights & Civil Liberties*, H.

FERC uses a framework established in its 1999 “Certificate Policy Statement” to assess proposed gas projects before it under the NGA, which remains the foundational framework for pipeline certification proceedings.¹⁴⁵ The Certificate Policy Statement makes clear that FERC begins its analysis with a threshold inquiry into whether there is a demonstrated market need for a project.¹⁴⁶ The Statement emphasizes that need cannot be presumed from any single type of evidence, but instead should be assessed based on a number of factors.¹⁴⁷ Only after that showing is made, is the Commission supposed to balance a proposed project’s benefits against its adverse impacts, including on existing customers, competing pipelines, landowners, and surrounding communities.¹⁴⁸

Comm. On Oversight & Reform, 116th Cong. 2 (2020) (statement of Rep. Raskin, Chairman, Subcomm. on Civil Rights & Civil Liberties) (noting that in the last 20 years, FERC has only denied six of more than 1,000 applications to build natural gas projects); Klass, *supra* note 139, at 667 (“between 1999 and July 2019, FERC approved 474 interstate natural gas pipeline projects and rejected only two” (citing SUSAN F. TIERNEY, FERC’S CERTIFICATION OF NEW INTERSTATE NATURAL GAS FACILITIES: REVISING THE 1999 POLICY STATEMENT FOR 21ST CENTURY CONDITIONS 8 (2019), https://www.analysisgroup.com/globalassets/content/insights/publishing/revising_ferc_1999_pipeline_certification.pdf); see also *Pipelines Over People (Part II): Midship Pipeline’s Disregard for Landowners in Its Pathway*, Subcomm. on Civil Rights & Civil Liberties, H. Comm. on Oversight & Reform, 117th Cong. 2 (2021) (statement of Rep Raskin, Chairman of Subcomm. on Civil Rights & Civil Liberties) (“FERC only requires that the companies demonstrate they’ve made, quote, “substantial progress” on restoration prior to going into service, but it never specifies what that means. In practice, as the Midship Pipeline case illustrates, FERC’s standard is totally slippery and woefully insufficient. It’s a promise basically written in disappearing ink.”).

¹⁴⁵ See The Natural Gas Act of 1938, Pub. L. No. 75-688, 52 Stat. 821; Certification of New Interstate Natural Gas Pipeline Facilities, 88 FERC ¶ 61,227 (1999), modified by 89 FERC ¶ 61,040 (1999), Order Clarifying Statement of Policy, 90 FERC ¶ 61,128 (1999), and further clarified, Order Further Clarifying Statement of Policy, 92 FERC ¶ 61,094 (2000) (commonly referred to as FERC’s “Certificate Policy Statement”).

¹⁴⁶ See Statement of Policy, Certification of New Interstate Natural Gas Pipelines, 88 FERC ¶ 61,227, 61,747 (Sept. 15, 1999) [hereinafter FERC Certificate Policy Statement].

¹⁴⁷ See *id.* ¶ 61,747–48 (explaining that “[r]ather than relying only on one test for need, the Commission will consider all relevant factors reflecting on the need for the project. These might include, but would not be limited to, precedent agreements, demand projections, potential cost savings to consumers, or a comparison of projected demand with the amount of capacity currently serving the market.”).

¹⁴⁸ See *id.* ¶ 61,747.

Precedent agreements—contracts between proposed pipelines and prospective shippers—are one factor; however, as highlighted below, the Commission currently treats them as dispositive.¹⁴⁹ Pipeline applicants can demonstrate need through “precedent agreements, demand projections, potential cost savings to consumers, or a comparison of projected demand with the amount of capacity currently serving the market.”¹⁵⁰ Notably, precedent agreements with corporate affiliates are supposed to be subjected to higher scrutiny¹⁵¹ and are also supposed to be considered less meaningful indicators of need.¹⁵² Where a proposed project has extreme and adverse impacts on the local community, economy, ecology, and the environment—and results in the forced taking of private property—the amount of evidence necessary to establish project need and benefits is supposed to be heightened even further.¹⁵³

In practice, however, FERC has relied “almost exclusively on precedent agreements” in these approvals—including precedent agreements¹⁵⁴ between affiliate corporations—while neglecting evidence of overbuilding and undervaluing adverse domestic and community impacts.¹⁵⁵ Today, practitioners observe a near rubber-stamp process that approves harmful and unnecessary interstate gas infrastructure.¹⁵⁶ FERC’s near-automatic approvals often disregard or ignore credible evidence of lack of need (as evaluated in *New Jersey*

¹⁴⁹ See *infra* notes 154–158 and accompanying text.

¹⁵⁰ FERC Certificate Policy Statement, *supra* note 146, ¶ 61,747.

¹⁵¹ See *Env’t Def. Fund v. FERC*, 2 F.4th 953, 973 (D.C. Cir. 2021) (finding that “evidence of “market need” is too easy to manipulate when there is a corporate affiliation between the proponent of a new pipeline and a single shipper who have entered into a precedent agreement.”) (citations omitted).

¹⁵² See FERC Certificate Policy Statement, *supra* note 146, ¶¶ 61,227, 61,744, 61,748.

¹⁵³ See *id.* ¶ 61,748. See also *Env’t Def. Fund*, *supra* note 151, at 973.

¹⁵⁴ Precedent agreements are conditional contracts between a potential shipper and the pipeline for firm transportation capacity on the pipeline if the pipeline is built and becomes operational. Gocke, *supra* note 144, at 237.

¹⁵⁵ See *Spire STL Pipeline, LLC*, 181 FERC ¶ 61,232, PP98–100 (Dec. 15, 2022); *id.* PP3–5 (Clements, Comm’r, concurring); *N.J. Conservation Found. v. FERC*, 111 F.4th 42, 59–60 (D.C. Cir. 2024); *City of Oberlin v. FERC*, 937 F.3d 599, 606–08 (D.C. Cir. 2019) (remanding to FERC to properly explain finding of market need where more than half of capacity was predicated on exports).

¹⁵⁶ See Gocke, *supra* note 144, at 208–09, 239.

Conservation Foundation), perverse financial incentives, and adverse impacts in its decision-making.¹⁵⁷

Apart from one failed attempt in 2022,¹⁵⁸ FERC has not significantly updated that policy statement since 1999—well before the dawn of fracking and gas supply glut in the United States. In February 2022, after years of work by the Commission and thousands of comments in response to several comment periods to consider the issue, the Commission issued an “Updated Policy Statement on Certification of New Interstate Natural Gas Facilities” on pipeline certification that briefly acknowledged the importance of “regional projections for both gas supply and market growth” and cautioned that “ensuring the orderly development of natural gas supplies includes preventing overbuilding.”¹⁵⁹ But after targeted political pressure, these reforms were reverted to draft form, leaving modern gas and energy realities unaddressed.¹⁶⁰ In August 2025, the Trump administration pressured FERC to rescind the Updated Policy Statement altogether,¹⁶¹ and FERC issued an order terminating the draft

¹⁵⁷ See *N.J. Conservation Found.*, 111 F.4th at 59–60; *Env’t Def. Fund v. FERC*, 2 F.4th 953, 975 (D.C. Cir. 2021) (finding FERC’s decision making arbitrary and capricious where it failed to engage with “plausible evidence of self-dealing . . . includ[ing] that the proposed pipeline is not being built to serve increasing load demand and that there is no indication the new pipeline will lead to cost savings”); *Venture Global CP2 LNG, LLC*, 187 FERC ¶ 61,199, para. 1 n.179 (June 27, 2024) (Clements, Comm’r, dissenting) (“The . . . Project’s adverse environmental and socioeconomic impacts are so great that I am compelled to find that approving the project is inconsistent with the public interest.” (emphasis added)).

¹⁵⁸ See Updated Certificate Policy Statement, Certification of New Interstate Nat. Gas Facilities, 178 FERC ¶ 61,107 (2022); Order on Draft Policy Statements, 178 FERC ¶ 61,197 (2022).

¹⁵⁹ Certification of New Interstate Nat. Gas Facilities, *supra* note 158, at ¶ 61,107, PP57, 69.

¹⁶⁰ See Certification of New Interstate Nat. Gas Facilities Consideration of Greenhouse Gas Emissions in Nat. Gas Infrastructure Project Revs., 178 FERC ¶ 61,197, para. 2 (Mar. 24, 2022) (reverting updated policy statement to draft format and inviting comments).

¹⁶¹ See U.S. DEP’T OF ENERGY, SECRETARY OF ENERGY’S DIRECTION THAT THE FEDERAL ENERGY REGULATORY COMMISSION INITIAL RULEMAKING PROCEDURES AND PROPOSALS TO RESCIND THE DRAFT UPDATED CERTIFICATE POLICY STATEMENT PURSUANT TO THE SECRETARY’S AUTHORITY UNDER SECTION 403 OF THE DEPARTMENT OF ENERGY ORGANIZATION ACT, DOCUMENT ACCESSION NO. 20250902-4000 (2025), https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20250902-4000 [<https://perma.cc/N3TG-X6DL>].

Updated Certificate Policy Statement two weeks later, with little notice to the thousands of commenters and impacted parties.¹⁶²

Under FERC's jurisdiction, we thus have a gas regime fueled by developer incentives rather than the public interest—for example, the Commission has long granted a near guaranteed 14% return on equity for new pipelines,¹⁶³ a rate set around 1997 that is roughly 40% higher than typical utility project returns.¹⁶⁴ The result is encouraging a gas overbuild for profit's sake.¹⁶⁵ Lawyers and policy-makers committed to energy abundance must not only facilitate clean energy projects but also continue to challenge outdated policies that favor fossil fuels over the public good.¹⁶⁶ Put more simply, we are in desperate need of more lawyers and policymakers willing to “fight the dinosaurs” by taking on the entrenched interests and

¹⁶² See *Order Terminating Proceeding, Certification of New Interstate Natural Gas Facilities*, 192 FERC ¶ 61,216, P1 (2025), https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20250912-3063 [<https://perma.cc/HM6W-RFRA>]; DEP'T OF ENERGY, Notice of Secretary of Energy Proposal to Rescind the Draft Updated Certificate Policy Statement and Soliciting Comments, Certification of New Interstate Natural Gas Facilities, Document Accession No. 20250902-3068 (Sept. 2, 2025), https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20250902-3068 [<https://perma.cc/DNX8-ZND5>] (giving the public less than seven days to comment on “the Secretary of Energy's proposal that the Commission terminate the proceedings”).

¹⁶³ See, e.g., *Mountain Valley Pipeline, LLC*, 171 FERC ¶ 61,232, ¶¶ 53–54 (June 18, 2020) (approving a cost of service for one southeastern gas pipeline system “utilizing a capital structure of 50% debt and 50% equity, a proposed cost of debt of 6%, [and a return on equity] of 14%”). The 14% return on equity was subsequently affirmed by the D.C. Circuit Court of Appeals on review. *Sierra Club v. FERC*, 38 F.4th 220, 229–32 (D.C. Cir. 2022). See also *City of Oberlin v. FERC*, 937 F.3d 599, 609–10 (D.C. Cir. 2019) (upholding the Commission's established policy allowing a 14% return on equity for greenfield pipelines because of the different risks facing existing pipelines and greenfield pipelines); *Mountain Valley Pipeline, LLC*, 172 FERC ¶ 61,261, ¶¶ 13–18, n.40 (Sept. 17, 2020) (discussing challenge to FERC's return-on-equity decision in the instant proceeding and collecting previous FERC decisions approving similar rates).

¹⁶⁴ See OIL CHANGE INTERNATIONAL, PUBLIC CITIZEN & SIERRA CLUB, *ART OF THE SELF-DEAL: HOW REGULATORY FAILURE LETS GAS PIPELINE COMPANIES FABRICATE NEED AND FLEECE RATEPAYERS* (2017) (“[This approximate 14% rate or return] is around 40% higher than the typical returns – of about 10% - that companies can expect to receive for power plants and FERC-authorized interstate electric transmission projects.”) (citations omitted).

¹⁶⁵ See *id.*

¹⁶⁶ See Gocke, *supra* note 144, at 208–09, 257–58.

archaic rules that keep unnecessary fossil infrastructure barreling toward approval.

Under Commission leadership that prioritizes the public over corporate interests,¹⁶⁷ revitalization and finalization of FERC's stalled certificate reforms would help realign proposed new gas project reviews with the public interest. As a preliminary matter, FERC must review far more than just an affiliate and/or precedent contract to "find" a market need, devise a more market-driven return on equity authorization (instead of the near-automatic fourteen percent guarantee in place now), require genuine quantification of adverse domestic and community impacts, and apply robust cost-benefit analyses that account for climate impacts and future stranded assets. Though such congressional reform may be on ice, this shift must also include overhauling the eighty-five-year-old NGA to distinguish necessary projects from speculative, costly, or overly harmful ventures. Until such systemic updates occur, lawyers, policymakers, and advocates can continue to help by challenging FERC rulings that overlook the evidentiary record, participating in administrative proceedings that press for stronger transparency and rigor, and advocating for legislative or rulemaking solutions that balance evolving energy demands with adverse impacts and the risks of continued fossil fuel overbuilding.¹⁶⁸

A parallel narrative of regulatory capture emerges in the realm of liquified natural gas ("LNG") exports. Under both FERC and the Department of Energy's ("DOE") jurisdiction, LNG facility and

¹⁶⁷ The current Commission, as of August 2025, has demonstrated a clear pattern of favoring corporate and political interests over the public good. *See, e.g.*, Request for Rehearing, Motion to Intervene, and Motion to Stay at pt. III, S. Env't L. Ctr. et al. (2025) (No. CP25-499-000) (outlining the Commission's unlawful actions in issuing a blanket suspension of a rule that offers basic protections to impacted communities without notice and comment).

¹⁶⁸ *See e.g.*, N.J. Conservation Found. v. FERC, 111 F.4th 42, 52-53 (D.C. Cir. 2024) (granting petitions brought by various organizations to review FERC's decision finding Regional Energy Access Expansion Project for gas delivery was in public interest); Env't Def. Fund. v. FERC, 2 F.4th 953, 960-61 (D.C. Cir. 2021) (agreeing with Petitioner Environmental Defense Fund that FERC's "refusal to seriously engage with" evidence undermining pipeline contract "did not evince reasoned and principled decisionmaking" and failed to comply with its own "interest-balancing" mandate).

export approvals have proceeded with almost no denials,¹⁶⁹ driving the United States from being a minor player to the largest exporter of methane gas globally in under a decade.¹⁷⁰ The United States exported approximately 16 billion cubic feet of LNG total for the entire year in 2014.¹⁷¹ A decade later, by February 2024—shortly before the DOE’s *temporary* suspension of LNG export approvals to non-Free Trade Agreement (“non-FTA”) countries—the nation’s export capacity had already climbed above 14 billion cubic feet per day.¹⁷² Even more striking, DOE authorizations for LNG exports reached over 48 billion cubic feet per day at the end of 2024, and 49.28 billion cubic feet per day at the end of 2025.¹⁷³ If the industry were to build all of this authorized infrastructure, and it were

¹⁶⁹ See, e.g., Nicole Pollack, *FERC Decides if LNG Facilities Benefit the Public. Is it Doing its Job?*, CANARY MEDIA (Nov. 7, 2023), <https://www.canarymedia.com/articles/liquefied-natural-gas/ferc-decides-if-lng-facilities-benefit-the-public-is-it-doing-its-job> [<https://perma.cc/X7Q5-Z3DP>] (“FERC has only ever rejected one proposed LNG export terminal—the Jordan Cove facility in Oregon—after finding in 2016 that the developer failed to prove there would be demand for the gas. But the agency then approved a revised application for that project four years later.”).

¹⁷⁰ See *U.S. LNG Exporter 2022*, *supra* note 15.

¹⁷¹ See *Natural Gas*, U.S. ENERGY INFO. ADMIN., <https://www.eia.gov/dnav/ng/hist/n9133us2A.htm> [<https://perma.cc/IE69-AT5Q>] (last visited Feb. 15, 2026).

¹⁷² See U.S. DEP’T OF ENERGY, THE TEMPORARY PAUSE ON REVIEW OF PENDING APPLICATIONS TO EXPORT LIQUEFIED NATURAL GAS DOE FACT SHEET 3 (2024) [hereinafter DOE FACT SHEET], https://www.energy.gov/sites/default/files/2024-02/The%20Temporary%20Pause%20on%20Review%20of%20Pending%20Applications%20to%20Export%20Liquefied%20Natural%20Gas_0.pdf [<https://perma.cc/4KCT-ERWV>] (citing U.S. ENERGY INFO. ADMIN., SHORT-TERM ENERGY OUTLOOK FEBRUARY 2024 (2024), <https://www.eia.gov/outlooks/steo/archives/feb24.pdf> [<https://perma.cc/H7WJ-7689>]). DOE temporarily suspended LNG export approvals to non-Free Trade Agreement countries in February 2024. See *id.*

¹⁷³ See U.S. DEP’T OF ENERGY, ENERGY, ECONOMIC, AND ENVIRONMENTAL ASSESSMENT OF U.S. LNG EXPORTS S-3–S-4 n.5 (2024), https://www.energy.gov/sites/default/files/2024-12/LNGUpdate_SummaryReport_Dec2024_230pm.pdf [<https://perma.cc/EM5R-PC8W>] [hereinafter DOE LNG STUDY] (“As of December 2023, 48.45 Bcf/d of U.S.-sourced natural gas had been approved for export as LNG to non-FTA countries, and 26.29 Bcf/d of corresponding capacity was in operation or under construction pursuant to a final investment decision.”); U.S. DEP’T OF ENERGY, LIQUEFIED NATURAL GAS (LNG) EXPORTS 2 (2025), [HTTPS://WWW.ENERGY.GOV/SITES/DEFAULT/FILES/2025-12/LNG%20SNAPSHOT%20DEC%2031%202025.PDF](https://www.energy.gov/sites/default/files/2025-12/LNG%20SNAPSHOT%20DEC%2031%202025.PDF).

operational tomorrow, our LNG exports would surpass approximately *forty-five percent* of current domestic production.¹⁷⁴

A recent DOE study confirms that the increase of LNG exports raises costs for U.S. households and businesses.¹⁷⁵ Across all supply scenarios studied, “[h]igher U.S. LNG export levels in 2050 are associated with higher U.S. residential natural gas prices.”¹⁷⁶ Price increases were especially high in regions that host LNG facilities, and which, therefore, also bear the pollution burdens of export infrastructure.¹⁷⁷ DOE’s conclusions were based on some rather generous assumptions—including about the availability and deployment of carbon capture and sequestration—that favor industry.¹⁷⁸ Yet even with those assumptions, the Secretarial Statement outlining leadership’s perspective on the final concluded study is illuminating:

DOE analysis exposes a triple-cost increase to U.S. consumers from increasing LNG exports—the increasing domestic price of the natural gas itself, increases in electricity prices (natural gas being a key input in many U.S. power markets), and the increased costs for consumers from the pass-through of higher costs to U.S. manufacturers.¹⁷⁹

These findings were recently confirmed in a U.S. Energy Information Administration report, which noted that natural gas prices have increased by over double the price in 2024, and the “higher natural gas prices in 2025 and 2026 are the result of strong export

¹⁷⁴ See DOE FACT SHEET, *supra* note 172, at 1.

¹⁷⁵ See U.S. DEP’T OF ENERGY, STATEMENT FROM U.S. SECRETARY OF ENERGY JENNIFER M. GRANHOLM ON UPDATED FINAL ANALYSES 1–3 (2024), https://www.energy.gov/sites/default/files/2024-12/Statement%20from%20U.S.%20Secretary%20of%20Energy%20Jennifer%20M.%20Granholtm%20on%20Updated%20Final%20Analyses_12.17.2024.pdf [<https://perma.cc/R56H-7NAX>].

¹⁷⁶ See DOE LNG STUDY, *supra* note 173, at S-4.

¹⁷⁷ See *id.*

¹⁷⁸ See *id.* at S-2–S-4. Notwithstanding its assumptions involving carbon capture and sequestration (“CCS”) technology, the study acknowledges that increased CCS availability could be optimistic given current global deployment levels and technological constraints. See *id.* at S-2, S-16–S-17.

¹⁷⁹ STATEMENT ON UPDATED FINAL ANALYSES, *supra* note 175, at 1.

growth that persistently outpaces U.S. natural gas production.”¹⁸⁰ These findings, of course, heavily undermine the purported economic benefits of increased LNG exports and support what communities and U.S. manufacturers have been telling DOE for years: that “[e]xisting cumulative LNG approval volumes already jeopardize both natural gas and electric reliability.”¹⁸¹

Moreover, higher energy costs for Americans will exacerbate energy poverty, without any of the alleged economic benefits.¹⁸² Recent studies that identify economic benefits from LNG exports—in an attempt to push back on the DOE study’s findings—primarily rely on U.S. Gross Domestic Product (“GDP”) as an indicator of overall economic benefits.¹⁸³ However, GDP is a poor measure of domestic economic impacts, as it doesn’t capture the impacts everyday Americans feel when an industry grows—like changes in the costs of some consumer goods, the increases in pollution from production, and the losses of other industries.¹⁸⁴ As Robert F. Kennedy

¹⁸⁰ U.S. ENERGY INFO. ADMIN, SHORT-TERM ENERGY OUTLOOK JUNE 2025 3 (2025), <https://www.eia.gov/outlooks/steo/archives/Jun25.pdf> [<https://perma.cc/4KMD-826V>].

¹⁸¹ Notice of Intervention, Protest and Comment at 2, Venture Global CP2 LNG, LLC, FE Docket. No. 21-131-LNG (Mar. 11, 2022), https://www.energy.gov/sites/default/files/2022-03/IECA%20MOI%203-11-2022_1.pdf [<https://perma.cc/S7FR-8ZKV>].

¹⁸² See, e.g., Melba Newsome, *More Americans Are Having to Choose Between Food and Energy Bills*, CBS NEWS (Aug. 26, 2024, 5:00 EDT), <https://www.cbsnews.com/news/energy-prices-electricity-heat-costs/> [<https://perma.cc/9UAD-HK9V>].

¹⁸³ See, e.g., U.S. Chamber of Commerce Cover Letter to the U.S. Department of Energy, RE: 2024 LNG Export Study: Energy, Economic, and Environmental Assessment of U.S. LNG Exports (Mar. 20, 2025), https://www.uschamber.com/assets/documents/250320_Comment_A-US-LNG-Impact-Study-Phase-1-and-Phase-2_DOE.pdf [<https://perma.cc/Y6C7-ZGSZ>] (submitting U.S. Chamber of Commerce-commissioned pro-LNG export reports in response to DOE LNG Study); S.P. GLOBAL, MAJOR NEW U.S. INDUSTRY AT A CROSSROADS: A U.S. LNG IMPACT STUDY-PHASE 2, at 5 (2025), https://www.spglobal.com/content/dam/spglobal/global-assets/en/special-reports/lng-study/USLNGImpact%20Study_Phase2Report.pdf [<https://perma.cc/BH3Q-FKWF>].

¹⁸⁴ See, e.g., Amit Kapoor & Bibek Debroy, *GDP Is Not a Measure of Human Well-Being*, HARV. BUS. REV. (Oct. 4, 2019), <https://hbr.org/2019/10/gdp-is-not-a-measure-of-human-well-being> [<https://perma.cc/WN4K-72PQ>]; *The Trouble with GDP*, ECONOMIST (Apr. 30, 2016), <https://www.economist.com/briefing/2016/04/30/the-trouble-with-gdp> [<https://perma.cc/VG3U-YMZ9>].

put it in his 1968 election speech: “[GDP] measures everything in short, except that which makes life worthwhile.”¹⁸⁵

The study employed combinations of policy, technology, and LNG export assumptions to produce various export and emissions scenarios to aid the study’s overall purpose of informing decisions about future export applications.¹⁸⁶ Regardless of which combination of assumptions about climate policies, technology availability, and export rates applied, the study found that increased LNG exports will exacerbate global greenhouse gas (“GHG”) emissions.¹⁸⁷ Under current GHG emissions policies for all countries—which assumed no additional GHG reduction commitments and that the United States would implement the IRA, among other things now being rescinded or rolled back by the Trump administration—the study modeled a projected increase of 56.3 billion cubic feet per day in export capacity by 2050.¹⁸⁸ Notably, the study helps dispel ongoing industry myths that U.S. LNG exports simply displace dirtier fuels like coal abroad, instead showing that increased U.S. LNG exports result in greater global gas consumption and higher emissions.¹⁸⁹ This finding helps settle some of the doubt that the gas industry has sown regarding whether LNG might serve as a climate solution by reducing emissions. Even under the most optimistic scenarios, it does not.

¹⁸⁵ Robert F. Kennedy, Address at the University of Kansas (Mar. 18, 1968), in *Address at University of Kansas*, ROBERT & ETHEL KENNEDY HUM. RTS. CTR. (last visited Feb. 28, 2025), <https://rfkhumanrights.org/speech/address-at-university-of-kansas/> [<https://perma.cc/HM2M-PN7P>].

¹⁸⁶ See DOE LNG Study, *supra* note 173, at S-11.

¹⁸⁷ See *id.*, at S-7 tbl. ES-2.

¹⁸⁸ See DOE LNG STUDY *supra* note 173, at S-7 tbl. ES-2, S-18. The Department of Energy provided additional details about the particular models it used and scenarios it developed in an Appendix to the study. See generally U.S. DEP’T OF ENERGY, APPENDIX A: GLOBAL ENERGY AND GREENHOUSE GAS IMPLICATIONS OF U.S. LNG EXPORTS (2024), https://www.energy.gov/sites/default/files/2024-12/LNGUpdate_AppendixA_Dec2024.pdf [<https://perma.cc/Y4LS-WMTQ>].

¹⁸⁹ See *id.* at S-22 tbl.7, S-24; see also U.S. JEREMY SYMONS, SYMONS PUB. AFFS., STATUS OF U.S. LNG EXPORT PERMITS AND ASSOCIATED GREENHOUSE GASE EMISSIONS 13 (2023), <https://www.symonspa.com/post/report-status-of-u-s-lng-export-permits-and-associated-greenhouse-gas-emissions> [<https://perma.cc/A8SS-X6N9>] (finding that US LNG expansion will compete with renewable energy—not coal and gas—around the world).

Yet we now see disturbing moves toward further deregulating the LNG export industry—an industry that has never struggled to secure approvals from either Democratic or Republican administrations, as its exponential growth over the past decade proves. Such an unregulated, massive buildout, with the Trump administration’s early 2025 Executive Orders being a “first step,”¹⁹⁰ coupled with the near half of our total domestic production capacity already authorized for export, is flatly incompatible with any future of clean energy abundance.

The simple fact is that if we approve and build all of this massive methane gas capacity expansion—the generation, the transmission via pipelines, the export facilities—we will not meet domestic (where they still exist) or global decarbonization goals.¹⁹¹ Instead, we will be locked into a dirty, inefficient, and expensive fossil fuel-run grid for decades to come. Recognizing and confronting this reality, actively opposing unnecessary and harmful fossil fuel developments, and pursuing robust, informed reforms are essential steps toward achieving the vision of affordable, equitable, reliable, and truly abundant clean energy.

B. The Other Side of the Coin: Accelerating Clean Energy Infrastructure Is Abundance Work (Speeding Up the Good)

How do we build the infrastructure we actually need? My own work—challenging unnecessary pipelines and export facilities—has repeatedly revealed how entrenched regulatory capture runs and how necessary it is to disrupt methane gas projects on their glide path to near-certain approval and completion. Yet, as fossil-fuel projects are fast-tracked, projects that bring us closer to energy

¹⁹⁰ See CARRIE JENKS & SARA DEWEY, ENV’T & ENERGY L. PROGRAM, HARV. L. SCH., ENVIRONMENTAL AND ENERGY EXECUTIVE ORDERS: INITIAL INSIGHTS AND WHAT WE’RE WATCHING 8-9 (2025), <https://eelp.law.harvard.edu/trumps-environmental-and-energy-executive-orders-initial-insights-and-what-were-watching/> [<https://perma.cc/2FB3-VGZA>].

¹⁹¹ See, e.g., Johnny Wood, *European Commission Proposes Methane Emissions Limit on Gas Imports. Here’s What to Know*, WORLD ECON. FORUM (Oct. 31, 2023), <https://www.weforum.org/stories/2023/10/tackling-methane-levels-is-the-quickest-way-to-slow-climate-change-say-scientists/>; BAIRD LANGENBRUNNER, JULIE JOLY, & GREIG AITKEN, GLOBAL ENERGY MONITOR, PIPE DREAMS: STRANDED ASSETS AND MAGICAL THINKING IN THE PROPOSED GLOBAL GAS PIPELINE BUILDOUT 19–20, 23 (2022), https://globalenergymonitor.org/wp-content/uploads/2022/02/GEM_GasPipelineReport2022_r7.pdf.

abundance—such as high-voltage transmission lines, emerging renewable installations, or battery storage—continue to face more stringent permitting and interconnection barriers.¹⁹² While fighting regulatory capture remains pivotal to preventing further fossil fuel lock-in, accelerating clean energy infrastructure is just as vital to achieving a reliable, affordable, and decarbonized grid.

Ironically, the lessons learned from obstructing harmful fossil fuel projects paved the way for my understanding of how best to facilitate an essential piece of real energy abundance: high-voltage interstate transmission lines.

Energy abundance signifies both the capacity to produce ample, affordable power, as well as the infrastructure required to deliver that power where it is needed. Transmission lines are the lifeblood of this vision. They move electricity from remote generation sites—often wind or solar facilities, the cheapest generation available on the market¹⁹³—to consumers in more densely populated areas. If we fail to build out large “backbone” transmission lines at a sufficient pace, all the clean-energy development in the world will stall on the doorstep of a fragmented grid.

The work to build out transmission capacity is clearly energy abundance work. It is well established that we urgently need to increase our transmission line capacity three- or four-fold to keep pace with growing demand and to support economic growth, energy

¹⁹² See discussion *infra* Parts II.B.1–2.

¹⁹³ See LAZARD, LAZARD’S LEVELIZED COST OF ENERGY ANALYSIS—VERSION 17.0 9, at 15 (2024), https://www.lazard.com/media/xemfey0k/lazards-lcoeplus-june-2024_vf.pdf [<https://perma.cc/G38J-A26U>] (In which Data shows onshore wind and utility-scale solar photovoltaics to be the comparatively cheapest generation technologies available and still cost-competitive in most markets when coupled with battery storage; combined-cycle generation from gas is subject to fuel-cost fluctuations). See also NEXTERA ENERGY, *supra* note 40, at 12–14 (demonstrating renewable energy and storage facilities as cheapest and quickest resources to deploy, respectively).

security, decarbonization, grid reliability, and affordability.¹⁹⁴ Yet there are heavily politicized efforts to slow down the buildout.¹⁹⁵

According to the DOE's triennial National Transmission Needs Study, "all combinations of new generation will require increased transmission deployment to remove expected constraints and congestion that would negatively impact consumers and bring new generation to market, but to differing degrees."¹⁹⁶ In future scenarios that assume high demand and lots of clean energy penetrating the grid, the results suggested a near-40% increase required in today's system by 2030, and by 2040, almost one-and-a-half times the size of today's transmission system within a region.¹⁹⁷ That figure is much higher for interregional transfer, with median study results showing a need for a 467% growth nationwide of interregional

¹⁹⁴ See EVIDENCE-BASED RECOMMENDATIONS REPORT, *supra* note 36, at 2; see also

ERIC LARSON ET AL., NET-ZERO AMERICA: POTENTIAL PATHWAYS, INFRASTRUCTURE, AND IMPACTS 27–29 (2020), https://netzeroamerica.princeton.edu/img/Princeton_NZA_Interim_Report_15_Dec_2020_FINAL.pdf (estimating increase in transmission capacity two to five times that of 2020 levels would be needed to reach zero emissions); see also LIZA REED ET AL., NISKANEN CTR., HOW ARE WE GOING TO BUILD ALL THAT CLEAN ENERGY INFRASTRUCTURE?: CONSIDERING PRIVATE ENTERPRISE, PUBLIC INITIATIVE, AND HYBRID APPROACHES TO THE CHALLENGE OF ELECTRICITY TRANSMISSION 6–7 (2021), https://www.niskanencenter.org/wp-content/uploads/2021/08/CATF_Niskanen_CleanEnergyInfrastructure_Report.pdf [<https://perma.cc/C7EY-6MLL>] (discussing Larson's findings on the scale of needed change).

¹⁹⁵ See *supra* Section III.A; see also Sean Wolfe, *A \$5B Loan Guarantee for a Long-Range Transmission Project May Be Elon Musk's Next Target*, FACTOR THIS (Mar. 12, 2025), <https://www.renewableenergyworld.com/power-grid/transmission/a-5b-loan-guarantee-for-a-long-range-transmission-project-may-be-elon-musks-next-target/> [<https://perma.cc/7DJ3-BARB>] (discussing letter from Missouri Attorney General to Elon Musk at the "Department of Government Efficiency" requesting an investigation of the near five billion dollar loan guarantee to the Grain Belt Express transmission project, which would be a 2,500-megawatt interregional line that would have bidirectional capabilities and connect three regional grids: the Southwest Power Pool, the Midcontinent Independent System Operator, and Associated Electric Cooperative Incorporated).

¹⁹⁶ U.S. DEP'T OF ENERGY, NATIONAL TRANSMISSION NEEDS STUDY 143 (2023), https://www.energy.gov/sites/default/files/2023-12/National%20Transmission%20Needs%20Study%20-%20Final_2023.12.1.pdf [<https://perma.cc/V8J8-Y3XC>].

¹⁹⁷ See *id.* at 143–44.

transfer capacity.¹⁹⁸ Increased transmission deployment and interregional transfer capabilities helps ensure grid reliability, including during extreme weather events. The real-world evidence strongly supports these findings, including the aftermath of Winter Storm Uri in Texas in 2021. While the Electric Reliability Council of Texas (“ERCOT”)—Texas’s isolated grid—suffered catastrophic outages, neighboring regions in the Midwest and Plains (with better connectivity to other grids) were able to import large amounts of power from their neighbors and avoid the worst outcomes that befell Texas.¹⁹⁹ The stark reality is that we are failing to meet the moment, as these more significant, “backbone” lines are difficult to site, permit, and build under fragmented statutory and regulatory structures that span numerous state and federal agencies with distinct mandates and timelines.²⁰⁰

This last point is unfortunately exemplified by several significant projects, including the Plains and Eastern Clean Line, a transmission project proposal that would have connected renewable energy generation in Oklahoma to the Southeast and Mid-South, for use on the grid in Tennessee and Arkansas.²⁰¹ The project developer noted in its application to DOE that it would “make possible some \$12 billion of renewable energy projects that otherwise cannot be built due to limitations of the existing grid.”²⁰² More than six years

¹⁹⁸ See *id.* at 144. The discrepancy is due in large part to the incentive to expand *within* rather than *between* utilities’ territories. See Peskoe, *Replacing the Utility Transmission Syndicate’s Control*, *supra* note 13, at 609 (observing that “IOUs tend to oppose—or at least not advocate for—interregional transmission because it can diminish IOUs’ control and undermine their generation investments”).

¹⁹⁹ See MICHAEL GOGGIN & JESSES SCHNEIDER, GRID STRATEGIES, THE ONE-YEAR ANNIVERSARY OF WINTER STORM URI: LESSONS LEARNED AND THE CONTINUED NEED FOR LARGE-SCALE TRANSMISSION 1–2 (2022), *the-one-year-anniversary-of-winter-storm-uri-lessons-learned-and-the-continued-need-for-large-scale-transmission.pdf*. [<https://perma.cc/M5XA-ZG7J>]

²⁰⁰ See *generally* EVIDENCE-BASED RECOMMENDATIONS REPORT, *supra* note 36, at 18–19 (discussing EIS review timelines for transmission lines).

²⁰¹ See Record of Decision in re Application of Clean Line Energy Partners LLC, 81 Fed. Reg. 18602, 18603 (Mar. 31, 2016). See also EVIDENCE-BASED RECOMMENDATIONS REPORT, *supra* note 36, at 94–96 (discussing case study examination of the Plains and Eastern Clean Line).

²⁰² PLAINS & EASTERN CLEAN LINE, PROJECT PROPOSAL FOR NEW OR UPGRADED TRANSMISSION LINE PROJECTS UNDER SECTION 1222 OF THE ENERGY POLICY ACT OF 2005 at 2 (Jul. 2010),

after Clean Line initially submitted its application to the Arkansas Public Utilities Commission, kicking off its formal siting, permitting, and approval process, and shortly after the beginning of Trump's first administration, Arkansas state congressional officials asked DOE to review one of Clean Line's federal permits.²⁰³ Not long after that, and "despite previous support from" would-be purchaser Tennessee Valley Authority ("TVA"), Tennessee elected officials started targeting the project, and in "December 2017, TVA backed out of the [Memorandum of Understanding] with Clean Line."²⁰⁴ In the end, TVA decided "not to buy power from the project, even though analyses appeared to show the project would have resulted in competitive pricing."²⁰⁵ Project proponents started selling off portions of the original project that same year.²⁰⁶

Clean Line's unfortunate fate illustrates a larger recurring problem, namely that shifting political winds, local political pressures, state-level siting, and zoning fights can derail projects of national importance.²⁰⁷ Opponents of clean energy infrastructure often mobilize the very same tools—zoning ordinances, permitting processes, and political influence—that fossil fuel projects so often

<https://www.energy.gov/sites/prod/files/Plains%20%26%20Eastern%20Clean%20Line%20Transmission%20Project%20Application.pdf>
[<https://perma.cc/VW7H-2SLN>]

²⁰³ See EVIDENCE-BASED RECOMMENDATIONS REPORT, *supra* note 36, at 96 (citing Press Release, Steve Womack, *Arkansas Delegation Urges Secretary Perry to Review Clean Line Project* (Mar. 7, 2017), <https://womack.house.gov/news/documentsingle.aspx?DocumentID=398764> [<https://perma.cc/T6EV-NQ2Z>]).

²⁰⁴ *Id.* (citing Wesley Brown, *Controversial \$2.5 Billion Clean Line Project Stalled; Will Evaluate Options, Officials Say*, TALK BUS. & POL. (Jan. 3, 2018), <https://talkbusiness.net/2018/01/controversial-2-5-billion-clean-line-project-stalled-will-evaluate-options-officials-say/> [<https://perma.cc/L86S-Y62E>]).

²⁰⁵ *Id.* at 27.

²⁰⁶ See *id.* (citing Michelle Froese, *NextEra Acquires Oklahoma Portion of Plains & Eastern Clean Line Transmission Project*, WINDPOWER ENG'G & DEV. (Dec. 27, 2017), <https://www.windpowerengineering.com/nextera-acquires-oklahoma-portion-plains-eastern-clean-line-transmission-project/> [<https://perma.cc/M8ST-L4CA>]).

²⁰⁷ See Sean Wolfe, *A \$5B Loan Guarantee for a Long-Range Transmission Project May Be Elon Musk's Next Target*, FACTOR THIS (Mar. 12, 2025), <https://www.renewableenergyworld.com/power-grid/transmission/a-5b-loan-guarantee-for-a-long-range-transmission-project-may-be-elon-musks-next-target/> [<https://perma.cc/7DJ3-BARB>]

evade due to regulatory capture.²⁰⁸ Recognizing and addressing these issues through thoughtfully streamlining permitting processes between and among state and federal entities would take us quite far.²⁰⁹

1. The Acceleration of Clean Energy Infrastructure Deployment is Essential Energy Abundance Work

It is clear that there are layered reasons for why we cannot build what we need to build, and we desperately need more smart, dedicated people to do the work of energy abundance. In the development of both on- and offshore wind, the United States can and should be leading the game. The contiguous United States has the potential to generate up to 37 million gigawatt-hours annually from wind energy—nearly ten times the total U.S. electricity generation in 2009—due to advances in wind resource assessment technology that “triple previous estimates of the size of the nation’s wind resources.”²¹⁰ Many states have already taken advantage of onshore wind potential, with states such as Texas, Iowa, and South Dakota consistently leading the way.²¹¹

²⁰⁸ See *infra* Part III.B.3. See also EVIDENCE-BASED RECOMMENDATIONS REPORT, *supra* note 36, at 26–29 (discussing state and local opposition to clean energy infrastructure with recommendations for mitigation).

²⁰⁹ See EVIDENCE-BASED RECOMMENDATIONS REPORT, *supra* note 36, at 26–29.

²¹⁰ NAT’L RENEWABLE ENERGY LAB’Y, NREL TRIPLES PREVIOUS ESTIMATES OF U.S. WIND POWER POTENTIAL 1 (2011), <https://www.nrel.gov/docs/fy11osti/51555.pdf> [<https://perma.cc/T4ZU-KQWQ>]. The National Renewable Energy Laboratory’s study identified Texas, Kansas, and Nebraska as having the greatest potential wind capacity and highlighted technological improvements that have revealed new wind development areas previously considered unsuitable. *Id.* at 2.

²¹¹ In January 2025, the five states with the greatest total amount of wind power generation across all sectors nationally at utility-scale facilities were Texas (25%), Iowa (11%), Oklahoma (7%), Illinois (6%), and Kansas (5%). See MARCH 2025 U.S. ENERGY INFO. ADMIN. ELECTRIC POWER MONTHLY, tbl.1.14.B (2025), <https://www.eia.gov/electricity/monthly/archive/march2025.pdf> [<https://perma.cc/78S7-QCNF>]. These same states held the same positions in 2023. See *Wind Explained: Where Wind Power is Harnessed*, U.S. ENERGY INFO. ADMIN. (June 12, 2024), <https://www.eia.gov/energyexplained/wind/where-wind-power-is-harnessed.php> [<https://perma.cc/9SYT-J3TK>] (noting those same five states combined “produced about 59% of total U.S. wind electricity generation in 2023”). The states where wind generated the highest percentage of utility-scale

Yet developers have canceled or requested renegotiation of rates for almost half of the twenty-one gigawatts of offshore electric capacity of contracts awarded.²¹² What is more, many others will likely be delayed and never built due to inconsistent state-level processes, local opposition, and prolonged environmental reviews. For example, former Senator Edward M. Kennedy of Massachusetts and fossil fuel industrialist William I. Koch played central roles in successfully opposing what would have been the nation's first offshore wind project, visible from their waterfront estates in Cape Cod, Massachusetts.²¹³ The project would have provided 468 megawatts of nameplate capacity and 174 megawatts of average anticipated output—enough energy to “supply up to 75% of the electricity needs of Cape Cod[,] . . . Martha's Vineyard and Nantucket.”²¹⁴ For

electricity generation in-state total were Iowa (66%), South Dakota (64%), New Mexico (43%), Kansas (40%), and Oklahoma (38%). See MARCH 2025 U.S. ENERGY INFO. ADMIN. ELECTRIC POWER MONTHLY, tbl. 1.14.B (2025), tbl. 1.3.B, tbl. 1.14.B (2025), <https://www.eia.gov/electricity/monthly/archive/march2025.pdf> [<https://perma.cc/78S7-QCNF>].

²¹² See Ivan Penn, Stanley Reed & Brad Plumer, *What Ails Offshore Wind: Supply Chains, Ships and Interest Rates*, N.Y. TIMES (Dec. 11, 2023), <https://www.nytimes.com/2023/12/11/business/energy-environment/offshore-wind-energy-east-coast.html> [<https://perma.cc/S8HR-7XRE>].

²¹³ See WHITE & CASE, OFFSHORE WIND PROJECTS: ASSESSING THE ENVIRONMENTAL IMPACT 31 (2019), <https://www.whitecase.com/sites/white-case/files/offshore-wind-projects-assessing-the-environmental-impact-final.pdf> [<https://perma.cc/L8HZ-9269>] (concluding that “Cape Wind was ultimately unsuccessful largely due to opposition from property owners concerned about adverse visual effects”); see also Stanley Reed & Ivan Penn, *Massachusetts Gains Foothold in Offshore Wind Power, Long Ignored in U.S.*, N.Y. TIMES (May 23, 2018), <https://www.nytimes.com/2018/05/23/business/energy-environment/offshore-wind-massachusetts.html> [<https://perma.cc/BT23-WQQ9>] (describing that offshore wind projects “have run into opposition . . . over both cost and aesthetics . . . [and] communities have resisted plans regarded as eyesores”); Katharine Q. Seelye, *After 16 Years, Hopes for Cape Cod Wind Farm Float Away*, N.Y. TIMES (Dec. 19, 2017), <https://www.nytimes.com/2017/12/19/us/offshore-cape-wind-farm.html> [<https://perma.cc/H3RA-HEK2>]<https://perma.cc/H3RA-HEK2>] (describing leading role of William I. Koch, “a billionaire industrialist who made his fortune in fossil fuels,” amid Cape Wind's failure, and noting that turbines “would have been visible to wealthy waterfront property owners”).

²¹⁴ BUREAU OF OCEAN ENERGY MGMT., CAPE WIND ENERGY PROJECT (2015), <https://www.boem.gov/sites/default/files/renewable-energy-program/Studies/Cape-Wind-Fact-Sheet—Sept-2015-clean-%281%29.pdf> [<https://perma.cc/VBD7-WSWJ>]. See also Seelye, *supra* note 213 (noting that project “would provide clean power to 200,000 homes on Cape Cod”).

reference, Europe has already installed 37 gigawatts of offshore wind capacity (and another 248 gigawatts of onshore wind),²¹⁵ compared to the United States, which had installed a mere 0.174 gigawatts (174 megawatts) of offshore capacity (and approximately 149 gigawatts of onshore) as of May 2024 and, without major obstacles, *could* deploy between 40 and 42 gigawatts of offshore wind by the end of 2035.²¹⁶

That projected wind generation has now been delayed. President Trump is a known critic of wind generation, and under his first administration, the federal government held up permits.²¹⁷ On his first day back in office, President Trump issued an Executive Order suspending approvals for new wind energy projects in federal lands and waters.²¹⁸ The Order also pauses projects that have already been permitted but not yet leased, pending a review of federal wind leasing and permitting practices led by the Secretary of the Interior.²¹⁹ With no time frame for the completion of the review, this action goes beyond a mere permitting delay, and now threatens the credibility of developing offshore wind projects in the United States.²²⁰ The Trump administration went so far as to recently pay \$1 billion

²¹⁵ See GIUSEPPE COSTANZO ET AL., WINDEUROPE, WIND ENERGY IN EUROPE 9 (2025), <https://windeurope.org/intelligence-platform/product/wind-energy-in-europe-2024-statistics-and-the-outlook-for-2025-2030/> [<https://perma.cc/GU2L-2MEG>].

²¹⁶ See NAT'L RENEWABLE ENERGY LAB'Y, OFFSHORE WIND MARKET REPORT 2024 EDITION iv, ix (2024), <https://www.nrel.gov/docs/fy24osti/90525.pdf> [<https://perma.cc/Y26X-7NNT>].

²¹⁷ See Penn, *supra* note 212.

²¹⁸ See Temporary Withdrawal of All Areas on the Outer Continental Shelf from Offshore Wind Leasing and Review of the Federal Government's Leasing and Permitting Practices for Wind Projects, 90 Fed. Reg. 8363 (Jan. 29, 2025) (temporarily withdrawing all offshore areas from wind leasing and dictating review of existing leases).

²¹⁹ See *id.* § 2.

²²⁰ See *id.*; Michael Copley, *Trump's Attacks on Offshore Wind Could Hurt Infrastructure Spending Across the Economy*, NAT'L PUB. RADIO (Mar. 26, 2026), <https://www.npr.org/2026/03/26/nx-s1-5760979/trump-offshore-wind-climate-change-energy> [<https://perma.cc/R839-ZFU7>]. In a recent federal district court order finding President Trump's Executive Order suspending federal wind energy permitting to be unlawful, the court noted, "Agency Defendants candidly concede that the sole factor they considered in deciding to stop issuing permits was the President's direction to do so." *New York v. Trump*, 811 F. Supp. 3d 215, 240 (D. Mass. 2025).

to a developer in exchange for a commitment to walk away from two already-obtained offshore wind leases.²²¹ We can expect more permitting delays and deployment obstacles under President Trump's second term, at great cost to the communities, economy, and the grid itself, which would benefit enormously from these projects coming online.

In Ohio, state legislation granted local governments the power to ban wind and solar farms from their jurisdictions; however, no such right exists for fossil fuel projects.²²² This legislation has led to more than one-fourth of Ohio's eighty-eight counties banning such projects.²²³ The recently cancelled Grange Solar project in Ohio epitomizes how this skewed process can cancel even projects that are receptive to public input and have strong public support.²²⁴ If we are going to accelerate clean energy infrastructure development, we need to equip local governments and their communities with the tools to support on-the-ground deployment in the face of state-level

²²¹ Jennifer McDermott et al., *Trump Administration to Pay French Company \$1B to Walk Away from US Offshore Wind Leases*, Associated Press (Mar. 23, 2026), <https://apnews.com/article/trump-offshore-wind-energy-climate-totalenergies-interior-092eeeacc5d09730d4e20a95d7df7de1> [https://perma.cc/TF3G-RLMZ].

²²² See S.B. 52, 134th Gen. Assemb. Reg. Sess. (Ohio 2021) (granting zoning powers to local authorities otherwise reserved for the state regarding construction of any public utilities); Peggy Kirk Hall, *When Can a County or Township Prohibit Renewable Energy Facilities from Locating in the Community?*, OHIO ST. UNIV. EXTENSION FARM OFFICE (Sept. 9, 2022), <https://farmoffice.osu.edu/blog/fri-09092022-900am/when-can-county-or-township-prohibit-renewable-energy-facilities-locating> [https://perma.cc/6F6W-RX65].

²²³ See Jake Zuckerman, *How State Legislation Led the Banning of Big Wind and Solar Projects in a Fourth of Ohio's Counties*, CLEVELAND.COM (July 13, 2024), <https://www.cleveland.com/open/2024/07/how-state-legislation-led-the-banning-of-big-wind-and-solar-projects-in-a-fourth-of-ohios-counties.html> [https://perma.cc/ZT64-GFXW]; Kathiann M. Kowalski, *Ohio Landowners Say Solar Opposition Groups Threaten Their Property Rights*, CANARY MEDIA (Mar. 21, 2024), <https://www.canarymedia.com/articles/enn/ohio-landowners-say-solar-opposition-groups-threaten-their-property-rights> [https://perma.cc/3WYF-EVYW].

²²⁴ See Kathiann M. Kowalski, *Another Big Ohio Solar Project Bites the Dust*, CANARY MEDIA (Mar. 7, 2025), <https://www.canarymedia.com/articles/solar/another-big-ohio-solar-project-bites-the-dust> [https://perma.cc/MDB6-T5XP] (describing how Grange solar project would have brought millions of dollars' worth of economic benefits to area, but state regulatory staff found it not in the public interest despite significant public engagement and support).

or other coordinated local opposition. And to state the obvious, even “deleting NEPA” would not aid in the development of projects that face local bans on siting clean energy infrastructure.

On the fight against renewables generally, a Columbia Law Report found a rapidly growing number of state and local restrictions on renewable energy facilities, identifying at least 395 local restrictions across 41 states, in addition to 19 state-level restrictions that were “so severe that they could have the effect of blocking a renewable energy project.”²²⁵ Relatedly, some large-scale solar developments languish in interconnection queues or face regulatory hurdles, including local ordinances restricting renewable development, community opposition (noted frequently to be born of misinformation), and state or local processes that developers view as unusually stringent or discretionary.²²⁶ Over 95% of the nearly 2,600 gigawatts of total generation and storage capacity currently seeking connection to the grid is for zero-carbon resources (solar, wind, and storage).²²⁷ The amount of new electric capacity in these queues is increasing rapidly—over 900 gigawatts entered the queue in 2023 alone.²²⁸ The need for innovative, clean energy abundance advocates to help clean energy projects navigate politically motivated mazes, often strewn with artificially created obstacles, is increasingly urgent if the United States hopes to preserve its prospects for leadership in energy, technology, and innovation.

²²⁵ MATTHEW EISENSEN ET AL., SABIN CTR. FOR CLIMATE CHANGE L., OPPOSITION TO RENEWABLE ENERGY FACILITIES IN THE UNITED STATES: JUNE 2024 EDITION 5 (2024), https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=1227&context=sabin_climate_change [<https://perma.cc/6TH9-FA3W>].

²²⁶ See Robi Nilson et al., *Halfway Up the Ladder: Developer Practices and Perspectives on Community Engagement for Utility-Scale Renewable Energy in the United States*, 117 ENERGY RSCH. & SOC. SCI., Aug. 9, 2024, at 5–6, 8–9; Lawrence Susskind et al., *Sources of Opposition to Renewable Energy Projects in the United States*, 165 ENERGY POL’Y 1, 5–8, 13 (2022), <https://www.sciencedirect.com/science/article/pii/S0301421522001471?via%3Dihub> [<https://perma.cc/CH4T-7TRA>].

²²⁷ See JOSEPH RAND ET AL., LAWRENCE BERKELEY NAT’L LAB’Y, QUEUED UP: 2024 EDITION: CHARACTERISTICS OF POWER PLANTS SEEKING TRANSMISSION INTERCONNECTION AS OF THE END OF 2023 3, 8–11, 45 (2024), https://eta-publications.lbl.gov/sites/default/files/queued_up_2024_edition_r2.pdf [<https://perma.cc/KQ69-HQZ5>].

²²⁸ See *id.* at 8, 10.

2. An Example of Accelerating Energy Abundance: DOE CITAP

To advance clean energy abundance, we need to increase high-voltage transmission capacity, which is generally another large culprit in the interconnection queue problem. DOE recently took some big swings at attempting to fix this problem and help streamline processes to deploy capacity.

Several years ago, my curiosity—combined with years of experience in energy regulatory circles—won me entry into the sometimes formal, always nerdy transmission-focused corners of the energy abundance and “permitting reform” world. It’s important to note that up until that point in my career, I had received no formal training on how to build energy infrastructure strategically. Like many of my peers, I learned on the fly from reading, leaning on colleagues and mentors, and drawing upon my in-depth experience working against the buildout of harmful infrastructure. In short, I flipped my internal strategic switch from asking how to brake to asking how to accelerate.

As it turned out, the flip was quite timely. Around that same moment, dedicated and smart civil servants, lawyers, analysts, and developers across the country, at the state and federal levels, were rolling up their sleeves and getting to work on policies that furthered the energy abundance agenda. The most thoughtfully designed programs, including some I had the privilege to help inform and work on, were not models of deregulatory fervor. Instead, these promising programs married acceleratory initiatives with rigorous yet efficient oversight. One notable example of this emerging abundance approach came out of DOE.

In 2023 and 2024, DOE positioned itself to be the one-stop coordinator for all federal permits and environmental reviews needed to site interstate transmission lines. Drawing on authority granted under Section 216(h) of the Federal Power Act,²²⁹ it designed the Coordinated Interagency Transmission Authorizations and Permits Program (“CITAP”).²³⁰

CITAP attacked the transmission permitting bottleneck by harmonizing environmental reviews and consolidating them into a

²²⁹ See 16 U.S.C. § 824p (2021).

²³⁰ See Coordination of Federal Authorizations for Electric Transmission Facilities Final Rule, 89 Fed. Reg. 35,312, 35,313 (May 1, 2024) (to be codified at 10 C.F.R. pt. 900).

single, streamlined process with a standardized timeline. Under the old model, developers had to wrestle with separate timelines at multiple federal agencies that may or may not have been coordinating with one another. By bringing multiple federal agencies onto a shared platform and establishing DOE as the lead coordinating authority, CITAP aimed to encourage investment in new lines, bolster grid reliability, and support building a more flexible, lower-cost, and lower-carbon energy system.²³¹ The integrated pre-application process reduces redundant paperwork and fosters earlier communication among developers, stakeholders, and impacted communities. In other words, CITAP is an excellent example of civil servants working toward energy abundance in an innovative, measured way to modernize how we permit interstate electric transmission lines.

While at the Niskanen Center, my colleagues and I submitted comments to DOE on the draft CITAP rule, drawing again in part on insights gleaned from my years of challenging fossil-fuel projects. Those challenges often grew from the perils of disjointed agency reviews, ambiguous timelines, and insufficient stakeholder engagement—all of which can be flashpoints for litigation and project delay or cancellation. During the public comment period, we offered data-driven recommendations for how CITAP could better clarify eligibility, strengthen public engagement, and reduce administrative confusion.²³² DOE incorporated some of these suggestions directly in its final rule, including by:

- **Defining “Regionally or Nationally Significant”:** We recommended specific metrics to help determine which lines merit special federal coordination, offering guidance on which lines would be considered of “regional or national significance.” DOE used three of our proposed factors in revising the rule, deciding to “determin[e] whether a proposed transmission facility is regionally or nationally significant” based on its ability to “reduce congestion costs, mitigate

²³¹ See *id.* at 35,312–13.

²³² See Niskanen Center, Comment Letter on Proposed Rule on Coordination of Federal Authorizations for Electric Transmission Facilities (Oct. 2, 2023), <https://www.niskanencenter.org/wp-content/uploads/2023/10/Niskanen-DOE-NOPR-CITAP-Comments.pdf> [<https://perma.cc/5547-DPMM>]; Megan Gibson & Johan Cavert, *DOE Stepping Up with CITAP*, NISKANEN CTR. (Apr. 25, 2024), <https://www.niskanencenter.org/doe-stepping-up-with-citap> [<https://perma.cc/7NGM-D75R>].

uncertainty, and enhance supply diversity.”²³³ In doing so, DOE provided clarity for developers and the public, reducing friction in the permitting process.

- **Refining Alternatives Analysis:** We emphasized the risk of wasting resources by requiring duplicative analyses in different portions of the application. DOE responded by confirming that only one resource report requires the primary alternatives discussion, cutting back on potential redundant reporting.²³⁴
- **Improving Public Access:** Our comments urged DOE to keep the administrative docket open to public scrutiny, noting that this would reduce litigation risks and build trust with local stakeholders. The Department ultimately committed to making docket materials available upon request, a positive step, even though a fully open docket would have further bolstered transparency.²³⁵

These changes reflected a broader understanding by not only us as commenters, but also developers and the agency itself that early clarity, coordinated decision-making, and transparent stakeholder involvement are essential to building the infrastructure we need in an equitable manner without prolonged, avoidable setbacks.

CITAP is a forward-looking example of how federal agencies can establish a more coordinated, rational approach to permitting major infrastructure. Yet for CITAP to achieve its full promise, federal agencies, developers, and communities must embrace this more comprehensive, proactive process. Continued evaluation of CITAP’s outcomes—and periodic adjustments to reflect emerging best practices—will be crucial.

To fully realize the goals of the energy abundance agenda, we need consistent support for programs like CITAP and related designations and initiatives, such as National Interest Electric Transmission Corridors (“NIETCs”),²³⁶ and utilization of FERC’s “backstop

²³³ Coordination of Federal Authorizations for Electric Transmission Facilities Final Rule, 89 Fed. Reg. at 35,321.

²³⁴ *Id.* at 35,351.

²³⁵ *Id.* at 35,352.

²³⁶ See *National Interest Electric Transmission Corridor Designation Process*, U.S. DEP’T OF ENERGY, <https://www.energy.gov/gdo/national-interest-electric-transmission-corridor-designation-process> [<https://perma.cc/Z472-2JCR>] (last visited Mar. 27, 2025).

siting authority” when state permitting fails.²³⁷ The first program kicks in when, through extensive study, DOE designates NIETCs as critical zones where transmission expansions are deemed vital to the national interest, thus providing a clearer path through regulatory hurdles.²³⁸ However, as of April 2025, there were only three options for NIETC designations, shaved down significantly from the initially floated ten corridor designations.²³⁹

Any weakening or abandoning of programs like CITAP, NIETCs, or the Permitting Council²⁴⁰ will likely detract from abundance. And, of course, the success of any such programs depends on attracting and retaining civil servants with highly technical

²³⁷ *Applications for Permits to Site Electric Transmission Facilities*, 187 FERC ¶ 61,069, para. 33-37 (May 13, 2024); *The Niskanen Center’s Comments on the Federal Energy Regulatory Commission’s Notice of Proposed Rulemaking for Applications for Permits to Site Interstate Electric Transmission Facilities* at 2–6, FERC Dkt. No. RM22-7-000 (May 17, 2023).

²³⁸ See U.S. DEP’T OF ENERGY, GRID DEPLOYMENT OFF., GUIDANCE ON IMPLEMENTING SECTION 216(A) OF THE FEDERAL POWER ACT TO DESIGNATE NATIONAL INTEREST ELECTRIC TRANSMISSION CORRIDORS 5, 23–30 (2023), <https://www.energy.gov/sites/default/files/2023-12/2023-12-15%20GDO%20NIETC%20Final%20Guidance%20Document.pdf> [<https://perma.cc/42GP-T5LL>] (finding “key areas where NIETC designation may be particularly valuable” based on DOE 2023 Needs Study’s identified transmission needs).

²³⁹ See U.S. DEP’T OF ENERGY, GRID DEPLOYMENT OFF., INITIATION OF PHASE 2 OF NATIONAL INTEREST ELECTRIC TRANSMISSION CORRIDOR (NIETC) DESIGNATION PROCESS: PRELIMINARY LIST OF POTENTIAL NIETCS ISSUED PURSUANT TO SECTION 216(A) OF THE FEDERAL POWER ACT 9–10 (2024), <https://www.energy.gov/sites/default/files/2024-05/PreliminaryListPotential-NIETCsPublicRelease.pdf> [<https://perma.cc/BY8P-B3P8>]; *National Interest Electric Transmission Corridor Designation Process*, U.S. DEP’T OF ENERGY, <https://www.energy.gov/gdo/national-interest-electric-transmission-corridor-designation-process> [<https://perma.cc/2XND-YLZ6>] (last visited Mar. 27, 2025).

²⁴⁰ The Federal Permitting Improvement Steering Council (“Permitting Council”), made permanent by the Infrastructure Investment and Jobs Act of 2021, coordinates permitting activities for a specific category of infrastructure projects accelerated under Title 41 of the Fixing America’s Surface Transportation Act, known as FAST-41 projects. See *Our Mission & What We Do*, PERMITTING COUNCIL, <https://www.permitting.gov/about/our-mission> [<https://perma.cc/XH29-NVY8>]; *Current FAST-41 Portfolio*, PERMITTING COUNCIL, <https://www.permitting.gov/projects/current-fast-41-portfolio> [<https://perma.cc/2V5A-T2KK>].

expertise.²⁴¹ Without internal expertise and empowerment²⁴² within agencies, the permitting programs and corresponding infrastructure development would sacrifice efficiency gains, hindering clean energy's ability to flourish, while eroding public confidence in the federal government's stated commitment to modernizing the grid.

If the Trump administration, or any other presidential administration, is genuinely committed to streamlining infrastructure reviews and ensuring abundant, reliable energy for all,²⁴³ it should uphold and strengthen these permitting frameworks rather than pare them back. Yet recent actions by the Trump administration unfortunately point in the opposite direction. For example, DOE has eliminated the Grid Deployment Office and restructured key clean-energy offices amid an express policy shift toward expanded fossil-fuel production and away from clean energy development.²⁴⁴ By preserving and building on CITAP, NIETCs, and other key initiatives, future administrations can help deliver on the promise of an expanded, modern, and resilient power system capable of sustainably meeting America's current and future energy needs.

3. Energy Abundance Must be Grounded in Empirical Data

Accelerating energy abundance is not a matter of partisan conflict²⁴⁵ or blind ideology; rather, it requires collective action based

²⁴¹ See U.S. DEP'T OF ENERGY, *Grid Deployment Office: About Us*, <https://www.energy.gov/gdo/about-us> (last visited Mar. 28, 2025) [<https://perma.cc/6CAH-3Q7T>] (describing expertise groups hosted within Grid Deployment Office).

²⁴² See generally JENNIFER PAHLKA, [RE]CODING AMERICA: WHY GOVERNMENT IS FAILING IN THE DIGITAL AGE AND HOW WE CAN DO BETTER (2023).

²⁴³ See, U.S. DEP'T OF ENERGY, *Secretary Wright Acts to "Unleash Golden Era of American Energy Dominance"* (Feb. 5, 2025), <https://www.energy.gov/articles/secretary-wright-acts-unleash-golden-era-american-energy-dominance> [<https://perma.cc/8GDC-GT7P>] ("[The DOE has an] opportunity to promote energy abundance, demonstrate leadership in scientific and technological innovation . . . permit and build energy infrastructure and remove barriers to progress, including federal policies that make it too easy to stop projects and far too difficult to complete projects.").

²⁴⁴ Brad Plumer, *A Trump Overhaul of the Energy Dept. Breaks Up Clean Energy Offices*, N.Y. Times (Nov. 20, 2025), <https://www.nytimes.com/2025/11/20/climate/clean-energy-department-offices.html>.

²⁴⁵ See Klass & Appel, *supra* note 4, at 66, 75–76.

upon robust, real-world data and verifiable facts. Data-informed permitting ensures that we build the right infrastructure faster, which embodies the ethos of abundance—spurring clean, reliable projects while averting avoidable harm.

An emphasis on fact-driven decision-making helped guide a year-long research project and published report that I co-authored²⁴⁶ with colleagues at the Niskanen Center, Perkins Coie, and CATF, titled *Evidence-Based Recommendations for Overcoming Barriers to Federal Transmission Permitting*.²⁴⁷ We focused on federal transmission permitting because, as noted above,²⁴⁸ it is one of the most complex and critical dimensions of building out a modernized, reliable, and clean-energy grid. Through this evidence-based approach, we sought to pinpoint the actual obstacles in federal permitting and propose workable solutions.

In the course of our year-long investigation, we conducted in-depth interviews with industry consultants, developers, and government officials.²⁴⁹ We compiled data on project permitting case studies²⁵⁰ and the experiences of project developers, regulators, advocates, impacted community members, and Tribes.²⁵¹ Our comprehensive research identified a range of real-world, practical roadblocks that must be addressed to accelerate interstate transmission infrastructure effectively: fragmented state and local siting authorities;²⁵² insufficient agency staffing and expertise;²⁵³ and the lack of transparent, coherent processes to coordinate across multiple jurisdictions.²⁵⁴ Notably, the findings did not indicate that these problems can be solved by reflexively undoing existing regulations or gutting environmental safeguards.

²⁴⁶ Many thanks to Dr. Liza Reed, who was a part of the original brain trust who conceived the framework of the project, and Johan Cavert, who was essential in getting this transmission research and publication across the finish line.

²⁴⁷ EVIDENCE-BASED RECOMMENDATIONS REPORT, *supra* note 36.

²⁴⁸ *See supra* Section III.B.

²⁴⁹ *See* EVIDENCE-BASED RECOMMENDATIONS REPORT, *supra* note 36, at 1.

²⁵⁰ *See id.* at 40–96. Nils Nichols and Elisabeth Blaug are to be commended for the incredibly thorough case studies we integrated into and attached to the report.

²⁵¹ *See id.* at 1; 21; 26; 38; 42–96.

²⁵² *See id.* at 26–27.

²⁵³ *See id.* at 21–23.

²⁵⁴ *See id.* at 31.

Instead, our research showed that streamlined, coordinated, data-driven procedures—particularly those that begin as early as possible—can accelerate transmission-line deployment by averting duplicative processes, minimizing local backlash, and avoiding protracted litigation that can plague large infrastructure proposals.²⁵⁵ Particular to the context of NEPA reviews, we found that NEPA’s transparent, data-driven framework can help agencies *avoid* duplicative processes and public backlash by encouraging them to coordinate early and effectively.²⁵⁶ Simplistic calls to abandon such environmental reviews not only risk ecological and community harm; they can also backfire by generating litigation and distrust, thereby prolonging project timelines.²⁵⁷

This risk has ballooned with the current Trump administration’s efforts to revoke and dismantle NEPA, beginning with an Executive Order rescinding the Council on Environmental Quality’s (“CEQ’s”) centralized authority to promulgate NEPA regulations that are binding on all federal agencies.²⁵⁸ Recent opinions by the federal courts also questioned CEQ’s authority,²⁵⁹ but “until Executive Order 14154, every president had used CEQ regulations to ensure that federal agencies ‘use all practicable means . . . to improve and coordinate Federal plans, functions, programs, and resources’”²⁶⁰ As experts at Perkins Coie acutely observed, “[f]or many decades, the CEQ regulations have provided federal agencies with a consistent framework to implement NEPA, allowing for increased coordination and certainty for project applicants.”²⁶¹ But chipping away at NEPA and CEQ’s authority (not to mention staffing) undermines the very alleged efficiencies the Trump administration wants to support and uphold.

²⁵⁵ See *id.* at 33–34.

²⁵⁶ See *id.* at 3, 19–20, 22, 32–33, 93.

²⁵⁷ See, e.g., *id.* at 61, 75 (discussing case studies where an incomplete or cursory initial NEPA review led to years of delays).

²⁵⁸ See Exec. Order No. 14,154, *supra* note 82, at 8,355.

²⁵⁹ *Marin Audubon Soc’y v. Fed. Aviation Admin.*, 121 F.4th 902 (D.C. Cir. 2024); *Iowa v. Council on Env’t. Quality*, No. 1:24-cv-089, 2025 WL 598928 (D.N.D. Feb. 3, 2025).

²⁶⁰ Boling, Zagar & Jensen, *supra* note 82 (quoting 42 U.S.C. § 4331(b)).

²⁶¹ *Id.*

The lesson is simple but crucial: We can move faster without sacrificing robust oversight, so long as we align our policies and procedures with empirical realities. Energy abundance demands a modernized transmission system, and responsibly building it entails both coordinated permitting and fact-based assessment—twin pillars that can transform an otherwise fraught process into a reliable engine of progress.

III. THE PATH FORWARD: BUILDING A BRIDGE FROM THEORY TO PRACTICE

Our ability to realize energy abundance depends on more than simply building new power lines or stopping fossil fuel projects. It demands an integrated approach that slows harmful infrastructure deployment, accelerates clean alternatives, and weaves both strategies into the fabric of law and policy, all to level the playing field moving forward. The following sections outline the beginnings of a strategic framework for achieving this balance and highlight how lawyers, advocates, and policymakers can drive that transformation. And the stakes could not be higher.

The United States faces an imminent boom in electricity demand—by some estimates, 15.8% by 2029, primarily due to data centers, the “single largest component of growth in utility load forecasts,” and to a lesser extent, manufacturing and other sources, such as electrification.²⁶² In the Southeast alone, for example, vertically integrated utilities have used these demand projections to propose a massive gas buildout. Southeast utilities’ Integrated Resource Plans (“IRPs”) envision adding *45,000 megawatts* of new methane gas generation by 2039.²⁶³ Such a buildout and gas lock-in would

²⁶² JOHN D. WILSON ET AL., GRID STRATEGIES, STRATEGIC INDUSTRIES SURGING: DRIVING US POWER DEMAND 12–13 (2024), <https://gridstrategiesllc.com/wp-content/uploads/National-Load-Growth-Report-2024.pdf> [<https://perma.cc/RG5E-MGEC>].

²⁶³ This figure includes data aggregated by SELC from recent IRPs of Appalachian Power, Alabama Power, Duke Energy Carolinas and Progress, Dominion VA and SC, Georgia Power, TVA, and Santee Cooper. See Alabama Power, 2025 Integrated Resource Plan Summary Report 33 fig.IV-I-1 (2025), <https://www.alabamapower.com/content/dam/alabama-power/pdfs-docs/company/compliance—regulation/2025-irp.pdf> [<https://perma.cc/27H7-VW9G>]; Duke Energy Carolinas, LLC, and Duke Energy Progress, LLC, 2025 Biennial Consolidated Carbon Plan and Integrated Resource Plans App. C at 97, figs.C-49 & C-50, N.C. Utils.

undermine national decarbonization targets and perpetuate higher costs and environmental impacts. Our energy system's reliability, affordability, and long-term viability are all at risk from a future so reliant on fossil fuels.

A purely deregulatory approach cannot meet the moment, nor can an obstructionist strategy that stalls everything (especially essential clean-energy projects and transmission). Instead, we need an institutional ethos in abundance that embraces meaningful projects while rejecting reckless expansion. Lawyers, policymakers, and advocates must break out of old silos. Many of today's structures are designed for legacy environmental advocacy or legal defense for fossil-fuel interests and captured regulatory entities. Flourishing clean energy abundance must either entirely repurpose these institutions, including law clinics, non-profits, the regulatory commissions, and legal apparatus itself (a tall order), or build new institutions altogether. We need a cadre of lawyers to help us weave a political and legal tapestry that facilitates clean energy projects while restraining fossil fuel expansion. Achieving this will require significant additional support of legal education, training, and professional exposure that prioritizes collaborative, data-driven skill

Comm'n Dkt. No. E-100 Sub 207 (Oct. 1, 2025), <https://starw1.ncuc.gov/NCUC/ViewFile.aspx?Id=7ca60dac-1bce-41e1-80d4-704d5f7adb30>; Va. Elec. Power Co., 2024 Integrated Resource Plan at 61 fig.5.1.5, State Corp. Comm'n Case No. PUR-2024-00184 (Oct. 15, 2024), https://cdn-dominionenergy-prd-001.azureedge.net/-/media/content/about/our-company/irp/pdfs/2024-irp-w_o-appendices.pdf?rev=5b28b014e4814135bb2fcec470dcc92b [perma.cc/GP5H-JPBM]; Ga. Power Co., 2025 Integrated Resource Plan, Ga. Pub. Serv. Comm'n Dkt. No. 56002 (Jan. 31, 2025), <https://psc.ga.gov/search/facts-document/?documentId=221233> [perma.cc/353G-YHZ2](compiling capacity expansion plans spreadsheet for MG0 base); Dominion Energy S. Carolina, Inc., Integrated Resource Plan: 2024 Update at 10 fig.1, Pub. Serv. Comm'n. S. Carolina Dkt. No. 2024-9-E (Mar. 28, 2024), <https://dms.psc.sc.gov/Attachments/Matter/3a27d786-346f-45cd-8a5a-05471ee1cedb> [https://perma.cc/5QDC-HKQ2]; *Draft 2025 Integrated Resource Plan*, Tenn. Valley Auth., <https://www.tva.com/environment/draft-2025-integrated-resource-plan#resources> (last visited Mar. 30, 2026) (compiling data for reference (with greenhouse gas rule) scenario and baseline utility planning strategy from "incremental capacity tables" and "total capacity tables" available for download within section labeled "supporting data files"); Santee Cooper, Integrated Resource Plan: 2024 Update at 56 tbl.19, Pub. Serv. Comm'n S. Carolina Dkt. No. 2024-18-E (Sep. 16, 2024), <https://www.santeecooper.com/About/Integrated-Resource-Plan/Reports-and-Materials/Santee-Cooper-2024-IRP-Update.pdf> [perma.cc/26R9-5AKY].

sets and forging new career pathways in private practice, nonprofit organizations, and government agencies.

The end goal is energy abundance for all, premised on sound governance, robust community protections, and unwavering acceptance of the reality of climate change. While this Article certainly does not cover every possible scenario and strategy to make that happen, under this framework, communities would gain more reliable power with less adverse health and environmental impacts, and at lower costs; businesses and ratepayers would benefit from stable, predictable energy markets; frontline communities would see meaningful engagement and tangible potential economic opportunities, not just empty promises, dirty air and water, and destruction of local economies; and policymakers would be compelled to align regulatory processes with science, existing and emerging technologies, fostering a genuine upgrade and expansion of a modern, clean grid, rather than perpetuating fossil-fuel reliance.

Achieving this clean energy abundance demands a cohesive legal architecture that blends modernization of archaic and captured fossil fuel regulation and policies with streamlined permitting for renewables and transmission. As we have seen, abundance-minded lawyers and policymakers stand to play a pivotal role in this,²⁶⁴ serving as both guardrails, to ensure we do not veer off the path, and also as snowplows to push through obstacles along the way. A key to bridging these policy gaps is cultivating a legal workforce equipped with the skills necessary to engage with complex data:

- **Technical Literacy:** Understanding and competency in more complex matters, such as grid operations, interconnection queues, financing, and project feasibility. Academic institutions should encourage joint programs or electives in engineering, economics, and environmental science for future lawyers.
- **Administrative Mastery:** Navigating FERC dockets, DOE rulemakings, and state regulatory bodies with confidence. Aspiring attorneys should learn to interpret FERC rules, DOE regulations, and other key federal and state permitting laws and regulations—and, where useful, to help shape or amend them through comments, advocacy, and litigation—

²⁶⁴ See *supra* Part II.A.3 (discussing procedures under Natural Gas Act and FERC's Certificate Policy Statement); Part II.B.2 (discussing DOE's CITAP).

practical knowledge often missing from standard law school curricula.

- **Community Engagement:** Building coalitions with frontline communities, Tribal governments and representatives and local stakeholders to support more informed, durable, and equitable outcomes. Graduate programs can incorporate clinical and field-based experiences where students advocate for, and/or collaborate directly with, local communities and Tribal nations on real-world siting and permitting conflicts, learning to communicate with, learn from, and understand the full range of affected stakeholders.
- **Policy Entrepreneurship:** Developing legislation, rulemaking, and policy proposals that streamline clean energy infrastructure while preserving robust environmental oversight. Law schools and continuing education providers can foster legislative drafting and policymaking skills, helping to equip students and practitioners to approach energy and environmental governance proactively.

These competencies will allow future attorneys, policymakers, and organizational leaders to transcend political polarization, harnessing evidence—the foundational prerequisite to abundance—rather than ideology or rhetoric to drive decision-making. In today’s charged political climate, ignoring data to prop up outdated ideologies can and will derail progress, even when the stakes are existential. The Trump administration’s disregard of scientific evidence and flawed understanding of the energy market²⁶⁵ underscore how critical it is to ground energy policy in credible analysis. Lawyers dedicated to clean energy abundance must counter this trend and help facilitate good energy governance in several ways, including:

²⁶⁵ See Exec. Order No. 14,156, 90 Fed. Reg. 8,433 (Jan. 20, 2025) (announcing an “energy emergency” and defining “energy” or “energy resources” to explicitly exclude renewable energy, and to mean “crude oil, natural gas, lease condensates, natural gas liquids, refined petroleum products, uranium, coal, biofuels, geothermal heat, the kinetic movement of flowing water, and critical minerals”). *But see, e.g.*, Compl. ¶¶ 108–11, *Washington v. Trump*, No. 2:25-CV-00869 (W.D. Wash. May 9, 2025) (complaint brought by attorneys general of fifteen states refuting existence of any “emergency” and pointing to need for, and fast deployment capabilities of, renewable energy).

- **Meaningful Support of State Capacity:** Helping advocate for adequately funded federal and state agencies to expand their staff capacity and technical expertise;²⁶⁶
- **Streamlined Interagency Coordination:** Emphasizing coordination through authorities granted to the Permitting Council and full use and utilization of transparent tools (such as the FAST-41 Permitting Dashboard) without sacrificing due diligence;²⁶⁷
- **Streamlined Intergovernmental Processes:** Encouraging transparency and increased collaboration at and between state and federal levels of government;
- **Improved Decision-Making:** Ensuring that vital environmental review processes are rigorous and foster efficient, informed decision-making. Put plainly, perhaps it is in our best interest to *not* unquestioningly approve projects that light our rivers afire²⁶⁸ or poison our clean water, which is increasingly scarce;²⁶⁹
- **Correcting the Narrative:** Advocating for and demanding the acceptance of near-universally understood facts about our climate and energy landscape—namely, that the proposed buildout of fossil fuels would not only be

²⁶⁶ Unfortunately, recent actions undertaken by the Trump Administration have done the opposite. See Timothy Gardner & Valerie Volcovici, *Sweeping US Energy Department Layoffs Hit Offices of Loans, Nuclear Security, Sources Say*, REUTERS (Feb. 14, 2025), <https://www.reuters.com/world/us/sweeping-us-energy-department-layoffs-hit-nuclear-security-loans-office-sources-2025-02-14/> [<https://perma.cc/5RLY-F8N9>].

²⁶⁷ 42 U.S.C. §§ 4370m *et seq.* (2015).

²⁶⁸ Ohio's Cuyahoga River gained notoriety in the late 1960s for its severe pollution. The river, which was covered from oil from industrial discharge, caught fire numerous times and national coverage of a 1969 fire helped spur the creation of the Environmental Protection Agency. See Erin Blakemore, *The Shocking River Fire That Fueled the Creation of the EPA: When Cleveland's Cuyahoga River Burned, the Nation Noticed*, HISTORY (Oct. 4, 2023), <https://www.history.com/news/epa-earth-day-cleveland-cuyahoga-river-fire-clean-water-act> [<https://perma.cc/M7UV-F6XQ>].

²⁶⁹ See Tom Howarth, *Map Shows Water Supply for 30 Million Americans at Risk*, NEWSWEEK (Jan. 21, 2025), <https://www.newsweek.com/map-water-supply-30-million-americans-risk-2018390> [<https://perma.cc/86ET-5J9W>] (“Providing adequate water to meet the country's needs is becoming an increasingly difficult challenge across the country. For example, as of 14 January, 67 percent of the West was abnormally dry or worse, according to U.S. Drought Monitor. In the High Plains, that figure was 75 percent.”).

unsustainable for our planet and way of life, but it also would harm ratepayers, affordability, and the reliability of our grid.

Without a commitment to evidence, analysis, and coordinated governance, we risk building even more new infrastructure that fails to meet reliability, affordability, or decarbonization goals—and we risk deepening public cynicism toward energy policy and government structures. Only by uniting credible, fact-driven data with effective and targeted regulatory structures can we realize the full potential of clean energy abundance.

A. Training a New Wave of Energy Abundance Lawyers: Existing Models and Beyond

Achieving clean energy abundance will require lawyers equipped not only to streamline clean energy projects but also to uphold robust environmental and community safeguards. A promising approach is emerging through innovative law school clinics²⁷⁰ and nonprofit legal programs designed to tackle and eliminate the siting and permitting challenges that often slow renewable energy development.

One illustrative example is Columbia Law School's Renewable Energy Legal Defense Initiative ("RELDI"), which demonstrates how legal education, the private sector, and nonprofit support can work in tandem to advance clean energy projects.²⁷¹ RELDI launched in 2019 as a pro bono project by Columbia Law School's Sabin Center for Climate in partnership with the law firm Arnold & Porter to give free representation to local residents, community groups, and public interest organizations that *support* utility-scale and community-scale renewable projects in their area.²⁷² Unlike

²⁷⁰ Law clinics effectively train students through experiential education, though their primary pedagogical focus may limit their scope and case capacity. Notably, such proactive clean-energy-focused training as highlighted just below was largely unavailable to earlier generations of lawyers, this present author included.

²⁷¹ See *Renewable Energy Legal Defense Initiative*, SABIN CTR. FOR CLIMATE CHANGE L., COLUM. L. SCH., <https://climate.law.columbia.edu/content/renewable-energy-legal-defense-initiative> [<https://perma.cc/4DJR-CJPA>] (last visited Mar. 28, 2025).

²⁷² See RADHIKA GOYAL ET AL., OPPOSITION TO RENEWABLE ENERGY FACILITIES IN THE UNITED STATES 2 (2021), <https://climate.law.columbia.edu/sites/climate.law.columbia.edu/files/content/RELDI%20report%20updated%2009.10.21.pdf> [<https://perma.cc/VG3W-NWYG>]; Nancy Anderson, *DEE-fense!*, SALLAN FOUND. (June 1, 2019),

more traditional environmental litigation, which is often aimed at blocking harmful projects, RELDI's mission is to defend and expedite clean energy development—advocating for wind and solar installations in court, administrative, and local zoning proceedings, and fighting against unreasonable local restrictions on renewables.²⁷³

A notable case was RELDI's representation of Flint Mine Solar, a coalition of thirty farmers and landowners in upstate New York.²⁷⁴ These landowners had agreed to host 100 megawatts of solar farm on their properties, only to be thwarted by a local ordinance banning solar on most land.²⁷⁵ With RELDI's backing, Flint Mine Solar sued the town and lost in court, but won their desired outcome by navigating the state process for siting energy projects to request a certificate for the solar project, which was granted—overriding the restrictive local solar law.²⁷⁶ The RELDI model of pro bono legal advocacy in defense of pro-clean-energy communities helps counteract local and politically fueled opposition and procedural roadblocks, enabling more renewable energy projects to be deployed.

Law clinics at other schools are also recalibrating their strategies toward clean energy abundance. For example, the University of Minnesota Law School's Environmental and Energy Law Clinic

<https://www.sallan.org/Torchlight/2019/06/defense.php> [<https://perma.cc/7HLE-3CF7>].

²⁷³ *See id.*

²⁷⁴ *See* Amicus Brief of Friends of Flint Mine Solar et al. in Support of Respondents/Defendants-Respondents at 2–3, *Town of Copake v. N.Y. State Off. of Renewable Energy Siting*, 191 N.Y.S.3d 181 (App. Div. 3rd Dep't 2023) (No. 534318), <https://climate.law.columbia.edu/sites/climate.law.columbia.edu/files/content/57%20Amicus%20Curiae%20Brief.pdf> [<https://perma.cc/G7RR-8C2C>].

²⁷⁵ *See id.* at 3–4.

²⁷⁶ *See* Decision and Order at 22-23, *Friends of Flint Mine Solar v. Town of Coxsackie*, No. 19-0216 (N.Y. Sup. Ct. Sep. 13, 2019), https://cdn.climatepolicy-radar.org/navigator/USA/2019/friends-of-flint-mine-solar-v-town-board-of-coxsackie_8b48e787b99ffc701c96256e1d9e9018.pdf (granting defendant's motion to dismiss); *Flint Mine Solar, LLC.*, No. 18-F-0087 at 2 (N.Y. Bd. on Elec. Generation Siting & Env't Aug. 4, 2021), <https://climate.law.columbia.edu/sites/default/files/content/%7B56D67AAD-242F-49CF-84C4-A28AC4D4A88D%7D.pdf> [<https://perma.cc/9CS7-6TL2>]; *Research Projects: Renewable Energy Legal Defense Initiative*, COLUM. CLIMATE SCH., <https://people.climate.columbia.edu/projects/view/2149> (describing RELDI as joint initiative with Arnold & Porter, which provided legal representation).

partners with a local nonprofit advocacy group, the Minnesota Center for Environmental Advocacy, to represent clients in regulatory and legislative proceedings.²⁷⁷ The clinic has advocated before the Minnesota Public Utilities Commission for three transmission line projects in Minnesota that would allow for more renewable energy generation resources such as wind and solar.²⁷⁸ These additions are crucial to the goals of Minnesota's 100% Law, which requires state utility companies to provide their customers with 100% carbon-free electricity by 2040.²⁷⁹ Vermont Law School's Energy Clinic has worked with communities to develop solar projects that both reduce the local carbon footprint at an affordable cost as well as benefit the local economy, recently providing legal and policy assistance for a grant that will fund a 10.7-kilowatt solar array in the Town of Tunbridge.²⁸⁰ The University of Chicago's Abrams Environmental Law Clinic has worked to promote renewable energy access in low-income communities of color, providing opportunities for students to partner with a local community organization in Highland Park, Michigan, to advocate before the Michigan Public Service Commission on issues relating to energy democracy, such as low-income access to renewable energy, affordability, community and stakeholder involvement, and distribution safety and reliability.²⁸¹ Students from Harvard Law School's Emmett Environmental Law

²⁷⁷ See *Powering Change: The Environmental and Energy Law Clinic's Role in Minnesota's Clean Energy Transition*, MINN. L. (Nov. 15, 2023), <https://law.umn.edu/news/2023-11-15-powering-change-environmental-and-energy-law-clinics-role-minnesotas-clean-energy> [<https://perma.cc/VH76-M27A>].

²⁷⁸ See *id.*

²⁷⁹ See *id.*

²⁸⁰ See *Energy Clinic Focuses on Community Solar Projects*, VERMONT L. & GRAD. SCH. (July 31, 2017), <https://www.vermontlaw.edu/news-and-events/energy-clinic-focuses-community-solar-projects> [<https://perma.cc/GB86-3LB2>]; *Vermont Law and Graduate School's Institute for Energy and the Environment to Provide Oversight in Solar Array Development*, VT. L. & GRAD. SCH. (Feb. 6, 2025), <https://www.vermontlaw.edu/news-and-events/tunbridge-receives-grant-to-fund-energy-efficiency-project> [<https://perma.cc/GS2U-CDMH>].

²⁸¹ See University of Chicago Law School, *Promoting Energy Justice from the Local to the Global*, at 5:53–10:21 YOUTUBE (Oct. 27, 2020), https://www.youtube.com/watch?v=afM_Uz_b1-A.

Clinic have worked with the Yurok Tribe to support its renewable energy development plans.²⁸²

All of the foregoing examples underscore a significant shift in environmental legal training—complementing the traditional role of litigating against polluters with a new role of shepherding clean energy projects to fruition. This is only the beginning, however—we need sustained, proliferating investment and opportunities in law schools and clinics across the country to train the next generation of environmental lawyers who will foster energy abundance.

B. *Fostering Clean Energy Abundance in Practice*

Outside of academia, established environmental law organizations are expanding their portfolios to include legal support for clean energy deployment and regulatory innovation, aligning with the goals of clean energy abundance. This includes the Southern Environmental Law Center (“SELC”), my current employer, national groups like the Natural Resources Defense Council’s (NRDC) Sustainable FERC Project,²⁸³ and numerous other regional and community-based groups. NRDC’s Sustainable FERC Project works “to expand the deployment of clean energy resources into America’s electricity transmission grid and to reduce and eventually eliminate carbon pollution from the U.S. power sector.”²⁸⁴ In the primarily politically conservative Southeast region of the United States, SELC²⁸⁵ and allies engage heavily with state PUCs, state and federal regulators, and policymakers to accelerate renewable energy deployment, reform regulatory practices, and confront entrenched fossil fuel interests.²⁸⁶

²⁸² See *Emmett Environmental Law and Policy Clinic*, HARV. L. SCH., <https://hls.harvard.edu/clinics/in-house-clinics/environmental-law-and-policy-clinic/> [<https://perma.cc/K6GN-ZXNM>] (last visited Jan. 25, 2026).

²⁸³ See *About the Project*, SUSTAINABLE FERC PROJECT, <https://sustainable-ferc.org/about-the-project/> [<https://perma.cc/3PED-YDQF>] (last visited Mar. 27, 2026).

²⁸⁴ *Id.*

²⁸⁵ See *About Us*, S. ENV’T L. CTR., <https://www.selc.org/about-us/our-history/> [<https://perma.cc/6JZQ-Z488>] (last visited Mar. 28, 2025).

²⁸⁶ See, e.g., *Climate Change*, S. ENV’T L. CTR., <https://www.selc.org/our-focus/climate-change/> [<https://perma.cc/4BA5-LCRE>] (last visited Mar. 27, 2026); *Resources for Engaging at the Georgia Public Service Commission*, S. ENV’T L. CTR., <https://www.selc.org/campaign/ga-psc/> [perma.cc/G2PQ-DM79] (last

At the state level, and operating almost exclusively within monopoly utility states,²⁸⁷ SELC routinely intervenes in utility IRP proceedings—the long-term energy plans that utilities must get approved by regulators—to scrutinize inflated demand forecasts and advocate for more modern and affordable alternatives to yet more fossil fuel infrastructure.²⁸⁸ In South Carolina, for example, SELC’s intervention contributed to a 2024 decision where the state Public Service Commission ordered Duke Energy to work with stakeholders on improving its IRP—steps that could “expand opportunities for solar energy and battery storage and reduce reliance on risky and polluting fossil fuels,” as the commission itself noted.²⁸⁹ SELC attorneys actively scrutinize Georgia Power’s proposed energy strategies, questioning the utility’s omission of its existing plans to construct new gas-burning units, and raising concerns about transparency and the utility’s commitment to transitioning to cleaner, more modern energy sources.²⁹⁰

visited Mar. 27, 2026); News Release, S. Env’t L. Ctr., Rejected: State Denies Chickahominy Pipeline Plan for 83-mile Unregulated Gas Line (Jan. 7, 2022), <https://www.selc.org/news/rejected-chickahominy-pipelines-plan-for-83-mile-unregulated-gas-pipeline/> [perma.cc/QPW4-TADC]. To learn more about SELC’s founding and history, see *About Us*, S. ENV’T L. CTR., <https://www.selc.org/about-us/our-history/> [perma.cc/V7SM-34KD] (last visited Mar. 27, 2026). For the most recent news updates across SELC’s program areas, see *Press Center*, S. ENV’T L. CTR., <https://www.selc.org/press-release/> [https://perma.cc/U2DX-7WUB] (last visited Mar. 27, 2026).

²⁸⁷ The IOU section above is especially pertinent in SELC’s six-state region. See *supra* Section II.A.1.

²⁸⁸ See, e.g., S. Env’t L. Ctr., *George Power Asks to Burn More Risky, Polluting Fossil Fuels* (Jan. 31, 2025), <https://www.selc.org/press-release/georgia-power-asks-to-burn-more-risky-polluting-fossil-fuels/> [https://perma.cc/RJA7-QFHC].

²⁸⁹ Press Release, S. Env’t L. Ctr., *Duke Energy SC Plan Approved with Recommendations from Environmental Groups* (Nov. 5, 2024), <https://www.selc.org/press-release/duke-energy-sc-plan-approved-with-recommendations-from-environmental-groups/> [https://perma.cc/6D7W-EEHL].

²⁹⁰ See Drew Kann, *Georgia Power Grilled About Possible Gas Units Not Mentioned in Long-Range Plan*, THE ATLANTA JOURNAL-CONSTITUTION (Mar. 28, 2025), <https://www.ajc.com/news/business/georgia-power-grilled-about-secretive-plans-for-more-gas-coal-extensions/GBSRR7DZT5ASBLJTF2EBXAB3DU/> [https://perma.cc/7EZ6-LXNN] (SELC Attorney Jennifer Whitfield noted as questioning Georgia Power why the Plant Bowen units were not mentioned in its filings, and asking how stakeholders are supposed “to judge the economics of this mix of resources”).

SELC's policy advocacy is equally impactful: attorneys in Virginia have fought over the last few years to expand the Commonwealth's shared solar program, open up access to solar leasing, and remove interconnection barriers to small-scale solar projects.²⁹¹ SELC helped facilitate the unanimous passage of the Energy Freedom Act to accelerate the growth of solar in South Carolina in 2019.²⁹² South Carolina generated a little less than 1,000 MWhs of solar at the time of the law's passage in 2019.²⁹³ Five years later, by 2024, the state nearly tripled its solar generation to 3,200 MWhs.²⁹⁴ Coalitions of environmental and community organizations, including SELC, successfully blocked a redundant, harmful, and unnecessary 600-mile gas pipeline.²⁹⁵ This work illustrates how legal institutions and nonprofits can drive energy abundance. By enforcing fair rules and dismantling obstacles, advocates help ensure that clean energy can flourish at all levels, bringing us closer to a modern grid that is cleaner, more abundant, and more equitable.

To achieve clean energy abundance, emerging academic and professional models such as those highlighted above must be replicated and scaled nationwide to build a robust network of lawyers fluent in clean energy law. First, law schools can institutionalize this focus by creating more energy-transition clinics and interdisciplinary programs. Combining legal training with engineering, environmental science, and policy coursework can make attorneys more comfortable with technical detail and innovative problem-solving.

²⁹¹ See Josephus Allmond, *Solar at All Scales in Virginia*, S. ENV'T L. CTR. (Jan. 2, 2025), https://www.selc.org/wp-content/uploads/2025/01/Solar-At-All-Scales-in-Virginia_0125.pdf [<https://perma.cc/36WP-HFDS>].

²⁹² See *New South Carolina Law Keeps Solar Working for Palmetto State*, S. ENV'T L. CTR. (May 20, 2019), <https://www.selc.org/news/new-south-carolina-solar-law-keeps-solar-working-for-palmetto-state/> [<https://perma.cc/S9FG-EN3N>].

²⁹³ See *Electric Power Monthly, Table 1.17.B. Net Generation from Solar Photovoltaic by State, by Sector, Year-to-Date Through October 2019 and 2018 (Thousand Megawatthours)*, ENERGY INFO. ADMIN. (Dec. 2019), <https://www.eia.gov/electricity/monthly/archive/december2019.pdf>.

²⁹⁴ See *Electric Power Monthly, Table 1.17.B. Net Generation from Solar Photovoltaic by State, by Sector, Year-to-Date Through October 2024 and 2023 (Thousand Megawatthours)*, ENERGY INFO. ADMIN. (Dec. 2024), <https://www.eia.gov/electricity/monthly/archive/december2024.pdf>.

²⁹⁵ See *Dominion and Duke Energy Abandon Atlantic Coast Pipeline*, S. ENV'T L. CTR. (July 5, 2020), <https://www.selc.org/news/victory-dominion-and-duke-energy-abandon-atlantic-coast-pipeline/>.

Making such clinics a permanent part of the curriculum (with dedicated funding and faculty) will ensure that each graduating class includes advocates who have *already navigated* real renewable projects or utility cases as students.

Second, the RELDI model of partnerships between academia and practice can be expanded. Other law schools could partner with law firms or nonprofits in their region to set up legal defense initiatives for renewables, mirroring RELDI's pro bono collaboration. For instance, a sun-rich state's law school might launch a "Solar Legal Defense Fund" with local attorneys, or a windy plains state could establish a wind energy siting clinic. Philanthropic funding and government grants could accelerate this opportunity by supporting fellowships for young lawyers who commit to working on clean energy deployment issues in the public interest, whether during or after law school. Creating an "Clean Energy Abundance Legal Corps"—analogous to medical residencies or Teach for America—might be another avenue: new lawyers could serve term-limited stints with public agencies, nonprofit clinics, or community groups focused on renewable energy projects and grid improvements, bolstering state and local capacity while giving attorneys invaluable experience.

Third, existing environmental nonprofit and advocacy organizations can dedicate program resources for energy infrastructure facilitation. Some have already pivoted in this direction, but scaling up means hiring more attorneys with expertise in energy regulatory law, environmental permitting, and community engagement to guide clean energy initiatives.

Finally, it is crucial to build a learning community from these various efforts. Regular conferences, resource-sharing platforms, and joint training sessions (perhaps coordinated by seasoned groups such as the Sabin Center or the Energy Bar Association) would help standardize best practices, for example, in overcoming permitting logjams or negotiating stakeholder consensus. By institutionalizing these models in universities, law firms, nonprofits, and government, we can create a self-replenishing pipeline of "abundance lawyers" passionate about clean energy. Over time, this growing cadre will populate agencies, legislatures, courts, and corporate offices, continually reinforcing the legal architecture needed for a rapid yet just energy transition.

CONCLUSION

Ultimately, the path toward energy abundance is not a question of whether to deregulate or obstruct, but how to integrate both approaches—strategically inhibiting harmful fossil expansions and enabling the clean energy infrastructure we genuinely need. Such an approach is the future of energy and climate law: an emergency merger of traditional environmentalist and regulatory reform strategies, embodied by lawyers, policymakers, and stakeholders who can combine the best of both.

Reclaiming true energy abundance demands nothing less than a paradigm shift—both in how we conceptualize our energy future and in the legal tools and advocatess we deploy to achieve it. It means concurrently saying “no” to unnecessary fossil fuel projects and emphatically saying “yes” to critical clean energy ones, refining our legal frameworks to swiftly, equitably, and effectively achieve both goals. By committing to the training and empowerment of a dedicated cadre of lawyers, we invest in our legal institutions and our collective capacity to build and sustain resilient clean energy infrastructure. The path forward, though challenging, is clear and achievable. By rejecting partisan ideology and centering fact-based good governance, we can deliver on the promise of a reliable, clean, and affordable energy system. Through strategic legal advocacy, bold policy innovation, and a deep commitment to long-term sustainable outcomes, we can—and must—secure a genuinely abundant, equitable, and clean energy future for all.