





Building The World's Most Advanced Energy Economy: A More Ambitious Approach to American Energy Permitting Reform

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INTRODUCTION AND EXECUTIVE SUMMARY

America needs to build bigger and cleaner. Facing economic and regulatory headwinds that affect our ability to grow the economy, channel investment into clean energy, and scale up the technologies needed to prevent climate change, we can no longer accept the burden of a regulatory framework designed for different problems and offering then-current solutions half a century ago that now penalizes and delays cleaner projects in the name of environmental protection. Reforming this system of environmental reviews under the National Environmental Policy Act (NEPA) and the many types of permits issued by federal agencies that require a prerequisite NEPA review is a necessary shift in economic and climate policy that remains unfinished.

In 2021 and 2022, Congress passed a trio of much-needed laws designed to grow and update U.S. infrastructure, clean energy technology, and research and development. Allocating over a trillion dollars in funding across a wide range of policy tools, the bills included tax credits, grants, and loans; a wide range of technologies, including not just technology-specific boosts

like the hydrogen tax credits or grants for port modernization but also technology-neutral incentives for clean energy generation; and a wide distribution of benefits, both in geographic and socioeconomic terms.¹

Yet this funding cannot manifest as meaningful real-world construction under the current policy structure: According to data from the Federal Permitting Improvement Steering Council, the average time from formal start to final decision for projects under NEPA review averaged 4.3 years for transmission lines, 3.5 for natural gas pipelines, and 2.7 years for renewable energy generation projects.² In order to maximize the public return on investment and build public confidence in this program, projects will need to move out of the theoretical realm and into the ground to start providing people with tangible results in the form of cheaper, cleaner power, bigger and better factories producing clean new cars and appliances, and also new facilities to produce the materials and components needed for all of this new technology.

Policymakers on both sides of the aisle have an interest in fixing this issue. A deal between Senator Joe Manchin and Majority Leader Senator Chuck Schumer in the fall of

2022 secured support from nearly all Senate Democrats for permitting reform modeled on existing programs for transportation and other infrastructure. PPI endorsed that effort and issued a major report with further policy recommendations at the time, but the measure fell short for lack of Republican support. This spring, in addition to several new Democratic proposals from President Biden, Senator Tom Carper, and Representatives Sean Casten and Mike Levin, Republicans introduced several iterations of their own reforms.³ As part of an agreement to raise the debt ceiling reached between President Biden and the Republican-majority House in May, Congress passed a series of fiscal measures and included parts of Rep. Garret Graves' BUILDER Act as a first-pass set of permitting reforms. Specifically, these include:

- Streamlined interagency review process with a lead agency and coordinated timetables;
- 1-2 year "Shot clocks" to encourage faster environmental reviews;
- Sharing Categorical Exclusions across federal agencies;
- Minor changes to NEPA (National Environmental Policy Act) changes: Programmatic NEPA reviews are authorized for use in subsequent documents for five years without further study, Page limits are imposed for NEPA documents (not including citations or appendices), clear standards for levels of review for different actions, narrow changes for the consideration of project alternatives and impacts, including considering the environmental benefits of a project,

and authorizing a study on E-NEPA (improvements to the law's administrative technology suite);

- Other changes: giving energy storage projects eligibility for the FAST-41⁴ permit streamlining process, approving the Mountain Valley Pipeline, and authorizing a study on interregional transfer capacity for U.S. electric grids.⁵

These reforms, which line up with PPI's September 2022 recommendations, were negotiated under the severe pressure of default, and will unlock small but meaningful gains in permitting timelines and costs. They did not, however, include appropriately the ambitious changes required to fully modernize the sorely outdated American regulatory process and unleash clean energy deployment that can outcompete the rest of the world.

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The imperative to deploy clean energy as quickly and cheaply as possible has not changed, but with Congress split and only part of the task complete, the political calculus has. Policymakers on both sides of the aisle have proposed crucial pieces of an even more ambitious reform package, and both need the other's support to accomplish their own self-defined goals. While many progressive Democrats opposed reform last September,

even their stance may be shifting as stalwart environmentalists like Bill McKibben, previously a dedicated activist focused on stringent supply-side fossil fuel restrictions, have come out in favor of shaking up the permitting system at least for the cleanest and most urgent projects for climate progress.⁶ The Republican-led House and Democratic-majority Senate will need to avoid polarizing themselves out of a deal that would bring substantial, meaningful wins to both their base constituencies on their own terms. Both sides must realize that a permitting and transmission deal will provide huge benefits to all major constituencies and stakeholders such that policy compromises will be rewarded politically rather than punished.

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Agreement is not yet assured, but it is possible if a deal contains both broader reforms of permitting under NEPA than the debt ceiling deal, along with better coordination of compliance with other relevant environmental laws and appropriately scaled changes to the process of planning, siting, and paying for crucial electricity transmission. Both elements — NEPA reforms and transmission expansions — will be necessary for legislation to bring about a true renaissance in the U.S. energy economy that will provide unprecedented economic benefits to consumers, workers, and businesses while

boosting U.S. competitiveness and reducing emissions.

SUMMARY OF POLICY RECOMMENDATIONS

We argue that Democrats and Republicans alike should be able to reach a pragmatic and ambitious agreement to adopt the following reforms:

- Structural changes to the administration of NEPA reviews by federal agencies that include improvements for all forms of energy:
 - » Programmatic Reviews Over Project Reviews: Instead of lengthy case-by-case single-project reviews, agencies should increasingly use Programmatic Reviews (that study groups of projects) across wide geographic or technological scope to proactively identify and map places with significant clean energy potential and known issues that may require mitigation measures.
 - ◆ Produce publicly available and technologically up-to-date maps that will enable faster reviews for agencies and create transparency for all stakeholders by identifying low-income and energy communities, known habitats for vulnerable wildlife, climate resilience risk, and other statutory requirements.
 - ◆ Coordinate between these programmatic and technologically modernized reviews and transparent

mitigation standards for statutory obligations regarding clean air and water, endangered species, historic preservation, and other permits.

- » Automatic, by-right approvals for low-impact technologies such as utility-scale solar panel facilities, wind turbines, and geothermal test wells in qualifying areas;
 - » Proactive development of general permits and NEPA Categorical Exclusions with clear, objective criteria for projects with known low-impact characteristics;
 - » Earlier, more representative forms of public engagement along with a streamlined process for judicial review.
- Federal authority equivalence under FERC for gas pipelines and interstate high-voltage electric transmission lines, hydrogen, and carbon dioxide pipelines;
 - Parallel State and local reforms for respective “Mini-NEPAs” and improved coordination across levels of government.

NEW REGULATORY REFORMS FOR A NEW ENERGY ERA

Our current environmental regulations were established in an era when we lacked the industrial and technological capability to build much of today’s clean and affordable infrastructure and machinery at scale and understand its interaction with the natural environment. As a consequence of that historical moment in the late 1960s and early 1970s when air, water, and chemical pollution was rampant and undermining public health and quality of life for most Americans, the U.S. regulatory

system oriented itself toward evaluating and preventing negative external impacts from energy development; a generation of activists, bolstered by the courts, organized around these regulations to slow or stop developments where they could.⁷

Now, the priority environmental problem is preventing the externalities of *inaction* if we fail to deploy sufficient clean energy technologies that have been invented and commercialized in the intervening half-century. Adapting this incumbent system to meet new environmental goals will require acknowledging both the newly available and affordable clean energy technologies that are vital for mitigating greenhouse gas emissions and new scientific and regulatory tools that can assess and map out potential concerns of energy project development in a more systematic way. Leveraging these modern technologies and regulatory procedures can help the clean energy transition avoid the mistakes of deployments past, whether stakeholders are concerned about health and economic impacts on minority communities, damage to natural environments and wildlife, or high economic costs to society as a whole.

"The major environmental challenge of our time is that we need to build many new technologies and projects to prevent catastrophic climate change, and to do so rapidly, at low cost."

Indeed, the major environmental challenge of our time is that we need to build many

new technologies and projects to prevent catastrophic climate change, and to do so rapidly, at low cost. While certainty and precision in such a complex endeavor can be elusive, the National Academies report *Accelerating*

Decarbonization of the U.S. Energy System lays out the current consensus among scientists for the required deployment between now and 2030 in order to set ourselves on track for a net-zero economy by 2050:

Clean Energy Technology	Net-Zero Target New Buildout by 2030
Utility-Scale Solar	280-360 Gigawatts
Wind	250-300 Gigawatts
Transmission Capacity	120,000 Gigawatt-Miles (60% increase from current system)
Storage	10-60 Gigawatts
EV Chargers	2-3 million Level 2 Chargers

Source: "Accelerating Decarbonization of the U.S. Energy System," National Academies of Sciences, Engineering, and Medicine, 2021, <https://doi.org/10.17226/25932>.

The scale of deployment required is large, and expands when taking into account not just the new zero-carbon generation technologies we will need in the form of wind turbines, solar panels, the transmission upgrades required to bring their power to users, and other forms of generation including geothermal wells and advanced nuclear reactors, but also the new end-use technologies like electric vehicles and bikes, home appliances like heat pumps and induction stoves, and changes in other systems including carbon capture, utilization, and storage, direct-air capture, decarbonized hydrogen production and transportation, and refactored industrial heat processes. Upstream from all of these new machines lie their supply chains, the expansion of which will require hefty investments in raw materials

like copper and lithium, newly decarbonized production methods for basic materials like steel, aluminum, and cement, the technological inputs like semiconductor chips required to operate increasingly complex machinery, and the facilities to produce all of the above.

The good news is we now have the technical capacity to make these things happen. However, this new energy innovation, investment, commercialization, and deployment must also occur at a rapid and accelerating pace to prevent the worst of climate impacts. The fact that today large-scale inter-regional electricity transmission takes years to review at the federal level — longer than gas pipelines, and must wait for independent permits from each state (and

occasionally from counties and cities) that cannot weigh the total public benefits a project will bring – and that renewable energy projects vital for mitigating emissions take nearly three years to receive approval, demonstrates that deploying hundreds of gigawatts of clean new generation and over a hundred thousand gigawatt-miles of transmission over the next seven years simply will not be possible unless we undertake major regulatory and administrative overhaul. Even the debt ceiling deal's review deadlines, while faster than current practice, do not rise to this challenge.

We argue that major progress speeding up the processes of environmental review, siting, and permitting can be achieved without sacrificing meaningful environmental protection, but only by investing sufficient resources and power in a new, substantially reorganized system of compliance that is also committed to rapid processing of new applications. Yet the gains for energy consumers, energy producers, and the climate from an ambitious deal to modernize the administration of environmental reviews at federal agencies are so large and broadly distributed that, rather than bickering over non-starters, both parties should be working to construct a productive deal and claim joint credit for their accomplishments.

Faster and more certain review and permit processes are crucial for connecting the cheapest new sources of energy to growing sources of demand, lowering the costs of uncertainty and delay that prevent projects from getting built or even from being proposed in the first place, channeling investment into a sector that brings numerous public benefits, and creating opportunities for people of all

levels of income and education. To forfeit so much potential economic growth, consumer cost reduction, and decarbonization progress because of bureaucratic inertia or blind adherence to yesterday's regulatory status quo would be tragic.

NEXT STEPS FOR NEPA REFORM

Adding a More Systematic Approach for Programmatic Reviews

Building up the administrative capacity to conduct programmatic, system-level reviews of locations and energy technologies will allow agencies, project developers, and community members to coordinate in advance on any known issues that require mitigation. Then, individual projects can be approved either automatically or with very quick individual studies depending on the level of impact and existing information base. This transition from only a case-by-case adjudication approach to a comprehensive system for some locations and project types is the shift that can make a huge volume of much faster project approvals feasible to enable a major new energy technology buildout. Such a comprehensive programmatic review process would allow agencies to conduct a sort of triage by naturally dedicating their resources to the broad goal of deployment and spending additional time only on the most pressing issues for follow-up studies.

This systemic approach would not be built entirely anew. Programmatic reviews have been recommended by the Council on Environmental Quality (CEQ) for use where applicable for 20 years, with subsequent legislation like the MAP-21 Act and WARDA-2014 reinforcing support for the method.⁸ The debt ceiling agreement

included a small section clarifying the timeline and procedure for the use of programmatic reviews, but it missed the opportunity to establish them as the method of choice for large-scale, repetitive technology deployments and clarifying that they can serve as a sufficient replacement for many case-by-case reviews for low-impact projects like utility-scale renewable generation.⁹

Other existing programs like the FAST-41-based Federal Permitting Improvement Steering Council (FPISC or the “Permitting Council”) help larger infrastructure projects coordinate simultaneous reviews under a designated lead agency and provide additional assistance to shepherd reviews through the process. FPISC-hosted tools like the Permitting Dashboard, Review Inventory, and developer-aid technologies like the RAPID Toolkit have helped move in this direction.¹⁰ So have other agency and interagency programs like the EPA’s RE-Power program,¹¹ the Bureau of Land Management’s (BLM) Solar Energy Zone program,¹² and the interagency working groups on geothermal and minerals permitting — all of these have helped create the building blocks for a more comprehensive, technology-fluent process across the whole federal government. The Solar Energy Zone (SEZ) program’s first iteration encountered difficulties in identifying sites with adequate resources and transmission infrastructure that developers could actually use, so more projects ended up getting built in “variance” areas than greenlit SEZ sites; the programmatic review is currently undergoing a promising update, so learning from past experience and allowing solar developers to contribute their practical knowledge to the process will be important for ensuring future success with this method.¹³

Taking the E-NEPA component of the Fiscal Responsibility Act to the next level will involve synthesizing the lessons learned from all of these initiatives into a comprehensive system to map out all of the known, studied features of technologies and places to make them transparently navigable for developers and the public. Because of the variety of information types included in such a massive enterprise, a variety of formats will be needed to compile all of it, but documents should be supplemented with technological tools like GIS mapping and data dashboards. Issues of concern should be extended to include information regarding compliance not just with NEPA but with the whole suite of laws for which agencies issue permits: endangered species habitats, bird migration patterns, national historic sites, and clean air and water issues among others. As discussed below, state and local governments should be given a voluntary pathway to add information to the E-NEPA platform as well.

In addition to this new high-level systemic approach for some qualifying projects, there are many smaller changes that the federal government can make to speed up reviews. Existing proposals to share Categorical Exclusions (CEs) across federal agencies and actively develop new CEs will ensure that projects well understood by one arm of the administration are not being held up by the other. Bringing tools like a system of general permits, already used for many water-related requirements like stormwater discharge from construction sites, to clean energy projects in built-up areas, brownfields, and pre-studied areas can help establish objective criteria for compliance to relatively standard project types that could then be approved by-right.

MAKING SHOT CLOCKS WORK

Firm deadlines for permit decisions can play a helpful role in reducing uncertainty and ensuring that decisions are made one way or the other, allowing construction to commence or scarce resources to be deployed elsewhere. Deadlines have helped spur progress in the context of other rapid technology deployments such as the telecommunications sector, so applying them to the clean energy transition where speed is paramount is a sensible extension of this strategy. Declaring by fiat, however, that a decision must be reached by a certain time does not guarantee that agencies will be able to fulfill all of their statutory obligations and work out thorny technical questions in that window. The success of the permitting deadlines enacted in the debt ceiling deal will depend instead on the innovative development of the tools discussed in the above sections: identifying high-potential sites, known issues, and options for mitigation.

REFORMS FOR THE GRID, HYDROGEN, AND CO₂ INFRASTRUCTURE

Upgrading the electricity grids of the United States is an absolutely critical task for achieving decarbonization, improving reliability in the face of increasingly extreme weather impacts made worse by climate change, changing generation mixes, and connecting consumers with the cheapest new sources of power. Studies of the IRA's impact on emissions have estimated that up to 80% of the bill's emissions reductions, and large parts of its cost reductions, could be forfeited by a failure to deploy new transmission lines at an accelerating rate.¹⁴

But the regulatory system for planning and permitting the types of high-voltage, long-distance transmission lines needed to solve these issues is grievously unsuited to the task.

Similar roadblocks await the new infrastructure needed to build out nascent clean hydrogen and carbon capture industries, because both will require new pipeline networks to transport their products from where they are made to where they can be safely used or stored.

Innovative clean energy projects that take a linear form are more challenging to fit into the streamlined permitting framework laid out in the last section. Because pipelines and transmission lines cross long distances to connect different markets, they often traverse multiple states and other political jurisdictions that may have different requirements. Faster reviews, more staff, and interagency coordination can all help, but the true difference maker for interstate linear clean energy projects would be to place them on par with natural gas. Interstate natural gas pipelines are sited and permitted at the federal level by the Federal Energy Regulatory Commission (FERC), so while states are consulted, the projects do not fall prey to interminable conflicts in the same way. Proposals to level this disparity, like Senator Sheldon Whitehouse's SITE Act¹⁵ and the more recently introduced FASTER Act¹⁶ from Senator Martin Heinrich, have also included strategically welcome changes to the transparency and compensation process for eminent domain landowners and community benefit agreements, helping fix a frequent complaint with the siting process.

An additional wrinkle for transmission deployment is not in the permitting and paying steps of the process but rather in the planning phase. Regional and interregional planning look quite different across the country depending on state-level regulations and electricity market structure, but the BIG WIRES Act sponsored by

Senator John Hickenlooper and Representative Scott Peters would help ensure robust transfer capacity between existing regional grids to ensure reliability and better connectivity which can help bring cheap new power sources to customers in congested service areas.¹⁷

On the regulatory front, the executive branch has two efforts underway to advance transmission permitting under existing authority in Section 216 of the Federal Power Act (as amended by the Energy Policy Act of 2005 and the IIJA), one being a Notice of Proposed Rulemaking at FERC over backstop siting authority and the other a recently announced new interagency Memorandum of Understanding for the Department of Energy (DOE) to serve as a lead agency coordinating other non-FERC permits for transmission facilities, coordinating NEPA review, federal permits, and publishing timelines on the Permitting Dashboard.¹⁸ PPI supports these steps, but DOE and FERC should coordinate on implementing them in complementary ways rather than on separate tracks and, in any case, the speed of deployment required to achieve our climate and economic goals depend on an even faster pace that calls for developing stronger tools.

In September 2022, PPI endorsed Senator Joe Manchin's plan to empower FERC in this regard and called for the inclusion of the SITE Act in a comprehensive permitting deal. Sen. Manchin's transmission proposals were cited by Republicans as a major point of disagreement in last year's negotiations and the debt ceiling debate, but we believe that refusing to modernize our transmission regulations while the EU and China outpace our deployment by tens and hundreds of gigawatts respectively, is an

untenable position.¹⁹ If Democrats have shown themselves willing to explore major changes to NEPA, even beyond those agreed to in the Fiscal Responsibility Act, Republicans should be willing to adopt sensible pro-market reforms to transmission policy. This is the essence of the political and policy compromise — and both policies are needed to bring full economic and environmental benefits.

BETTER COMMUNITY ENGAGEMENT AND FASTER JUDICIAL REVIEW

One major concern expressed during the permitting reform debate in 2022 was Environmental Justice: how could faster reviews square against the need to empower communities hosting new energy projects? We argue that the supposed tradeoff between speed and engagement is a false binary. Just like earlier, proactive identification of high-resource and low-impact locations can leverage new administrative capacity to map issues early, so too can earlier, better-equipped community outreach and technical assistance programs already in place or newly funded by the IRA²⁰ to help the public and especially low-resource communities register their input during pre-filing procedures, or before project designs or environmental review documents are finalized. Encouragement for project sponsors to engage early and negotiate community benefit agreements with good-faith community representatives will help ensure that problems are identified and resolved, and host communities can secure tangible benefits in exchange for their role hosting vital infrastructure.

Litigation, by contrast, can only begin after these decisions are made and can run the risk of exacerbating existing inequalities because of the expense required to sustain it. Maintaining the rights of the public to access the courts is an important goal – thankfully we can make meaningful changes to help energy projects reach legal decisions and any affected parties secure remedies faster without abrogating those rights. First, requiring the submission of meaningful, substantive comments in the newly enhanced public engagement process will help potential plaintiffs demonstrate good-faith concern and crucially will notify agencies of issues early in the process so that they can be fixed before final decisions are made without court intervention. Establishing a clear and time-limited process for judicially mandated solutions to fix agency documents and reassess final decisions, and ensuring that lawsuits get sent to one designated appellate hub for review, like the DC circuit court, can also help to strike the appropriate balance. These changes build on existing reforms from the FAST-41 process, so they should not be viewed as anathema to those interested in a broad and ambitious bipartisan agreement.

CRITICAL MINERALS AND OTHER SUPPLY CHAIN BOTTLENECKS

The shift to clean energy is a shift in the materials required to maintain and expand our energy systems.²¹ Where critical mineral resources crucial to the energy transition are available domestically, we should attempt to develop them responsibly and provide ample community benefits while maintaining stringent substantive protections for the rights of Tribal nations, the natural environment, and other stakeholders including members of the public. Global supply chains for transition materials will

continue to play a crucial role in meeting U.S. demand, but to the extent that U.S. policy can help diversify and expand worldwide capacity of these materials, it should be reformed to do so. In a country where we can implement these policies responsibly, we will be able to expand the available supply of cutting-edge energy technologies with lower carbon intensity, more ecological protection and remediation, and stronger labor and human rights protections than many currently available suppliers of these minerals. We cannot meet the objectives of climate or environmental justice policy by offshoring these harms when we have the opportunity to build transparent, environmentally friendly supply chains domestically and in partnership with global allies to meet growing global demand.

Mining is much more complex and impactful than other clean energy projects, so reforms in those sectors can play a complementary role for critical mineral projects by ensuring that agency resources are dedicated to analyzing the most important and impactful issues at hand. Thankfully, the trio of IIJA, IRA, and CHIPS also created several mining-specific programs including funding for programs across many areas of the sector including workforce, research and demonstration funding, and resource mapping updates.²¹ The permitting process is treated directly by IIJA Section 40206, which created an Interagency Working Group (IWG) on Mining Regulations, Laws, and Permitting now operating, but that section also required adoption of an efficient permitting process with clear standards, coordination, and timelines and a report on the current mining permit processes and suggestions for further reform which is now more than a year overdue.²² Any of these

programs in need of further appropriations should be fully funded, and the IWG should release its report and recommendations.

Issues in the supply chains crucial for decarbonizing and growing U.S. energy systems are not limited to raw materials. Affordable and reliable electricity is crucial for all forms of manufacturing but especially for decarbonizing energy-intensive manufacturing. New energy technologies will require more semiconductors, more complex grid components like inverters and transformers, and more processed materials from mature sectors like concrete, steel, aluminum, and copper in addition to transition minerals like lithium and cobalt. Nor should we limit supply chain policies to their upstream segment: recycling, still an expensive and complex type of operation but one that looks increasingly promising for certain high-value battery materials, and efficiency of material use across all applications, will also help manage demand in the context of rapidly growing, resource-constrained markets. Only certain manufacturing facilities will ever need federal permits and a NEPA review, but ensuring that the clean energy manufacturing boom is not bogged down by especially stringent requirements²³ to serve unrelated policy areas but instead prioritized for deployment (and supported by generally applicable regulations like labor market protections) will be crucial. States and localities eager to host clean manufacturing booms should also ensure that their permitting process for manufacturers is aligned with their economic and climate goals.

STATE AND LOCAL POLICY REFORMS

Permitting reform is not an exclusively federal problem. Because so many key clean

energy projects either require state or local permits in addition to federal permits, or fall solely under state or local jurisdiction with no federal role at all, these sub-federal reforms will be especially important when the federal bottleneck eases following successful reform. Across the U.S., state and local governments should adopt reforms that parallel our recommendations for the federal government: streamlining the requirements for known low-impact projects, proactively studying places ripe for development or with known areas of concern, and bolstering the administrative capacity to process applications efficiently. State and local governments should also be given a way to contribute information to the federal government's E-NEPA knowledge base about their permitting process, requirements, and geographic information about potential resources and conflicts in their jurisdictions.

At the state and local levels, different jurisdictions take quite different approaches to environmental review requirements, siting procedures, permits, and standards. This patchwork multiplicity creates an additional set of challenges for continental-scale clean energy deployment. The latest research from Columbia Law School's Sabin Center for Climate Change Law compiled a rapidly growing list of restrictive regulations on renewables development that includes 9 state-level restrictions and 228 local rules across 35 states, along with 293 specific projects that have aroused major opposition.²⁵ This problem, worsening just as federal incentives should be driving deployment across the country, requires major reforms in state legislatures and beyond.

First, variation in rules between states, and especially America's fragmented local jurisdictions, adds complexity for project developers trying to comply with all the requirements imposed in each location and level of government. Secondly, making decisions at a hyperlocal level can cut out the more geographically diffuse effects, whether beneficial or costly, that large-scale energy and infrastructure projects often bring to the public. By failing to consider projects at the geographic scope where all of the full costs and benefits can be tallied up, this type of decision-making process proliferates the opportunity to say no while excluding constituencies that stand to benefit from these projects.

Two states, New York and Washington, have recently adopted exciting reforms that should serve as models for other states eager to deploy clean energy and benefit from its investment and job creation. In New York, a new Office of Renewable Energy Siting was established in 2020 to serve as a "one-stop shop" for green projects, coordinating and expediting their reviews and allowing the State to overrule "unreasonably burdensome" local restrictions.²⁶ The main implementation rule created by ORES was sued under SEQRA, New York's NEPA equivalent, highlighting the conflict between the incumbent environmental legal system and the reforms needed to unleash the new energy technologies needed to solve the most pressing current environmental problems; thankfully, the lawsuit failed and ORES has approved 13 projects across New York so far.²⁷

In Washington HB 1216, supported on a bipartisan basis by a majority of both Democratic and Republican legislators in the state, was signed into law on May 3, 2023, and

created multiple new avenues for more efficient reviews and permits.²⁸ Most promising is the process established for a series of statewide programmatic reviews for solar, wind, green hydrogen, and associated battery storage projects. Under this provision, state regulators will proactively identify and study potential sites for deployment statewide, noting any possible negative impacts and suggesting mitigation measures where necessary. Individual projects will be able to adopt those reviews or cite them and study only additional impacts of concern, saving much time, effort, and duplication while maintaining high standards and giving project developers and communities transparency and clear objectives upfront.

Community input, especially for federally recognized Tribal Nations and overburdened Environmental Justice Communities, is given added prominence in the process by requiring meaningful early engagement (a forum for agricultural and rural stakeholder input is also established under a separate section of the bill). On top of these changes, a new permit coordinating council parallel to FPISC will help coordinate and expedite complex reviews, serve as a liaison for local and federal reviews, and support reviews for streamlined clean energy projects of statewide importance.

Washington's framework represents the cutting edge of pro-deployment regulation and should be adopted by other ambitious state governments across the country looking to grow their clean energy sector. Not all states have embraced this shift. In wind-wealthy Kansas and Iowa, stringent restrictions on wind energy imposed by many local governments risk barring further development in large swathes of their respective states.²⁹ Texas, long known as an eager hands-

off host to all types of energy development and praised as an early pioneer of wind deployment, is exploring imposing a new NEPA-style environmental review process on all renewable energy in the state — including retroactively on existing renewable facilities, a step backward.³⁰

This problem is not restricted to red or purple states. In California, the California Environmental Quality Act has stopped or slowed good green projects for years, from a major high-speed rail line to urban bike lanes and infill housing.³¹ The California legislature recently passed a set of incremental permitting reforms for clean energy, water, transportation, and semiconductor projects that include a shortened window for CEQA litigation proposed by Governor Gavin Newsom, passing over the opposition of a coalition of the Sierra Club of California and over one hundred other environmental organizations (though environmental opposition was not unanimous, as the NRDC supported the final package).³² Hopefully, this set of bills will serve as the beginning of a more thorough review along the lines of the Washington or New York models.

A similar dense housing reform in the city of Minneapolis was sued under the Minnesota Environmental Rights Act (MERA).³³ The Council on Environmental Quality lists at least 20 sub-federal equivalents to NEPA and includes a memorandum comparing each to the federal law.³⁴

Encouragingly, the National Governors Association's Energy and Infrastructure Working Group has called for a bipartisan agreement at the federal level to spur growth and speed up project delivery in addition to reforms in the states.³⁵ The National League of Cities

"As a singular basis for an international standard to compel emissions reductions from other nations, both the U.S. and EU emissions reduction policies have serious challenges."

also endorses federal permitting reform in its 2023 policy platform, demonstrating additional support for reform at the local level that should be extended to address permitting requirements within their own jurisdictions (especially for city-specific climate and growth investments like dense housing and pedestrian, bike and bus infrastructure).³⁶ As place-based policies like funding for Hydrogen and Carbon Management hubs are taking off, partnerships between neighboring states to submit applications could pave the way for tighter cooperation at the regional level to establish coordinated schedules and standards for environmental reviews.³⁷ With models like Washington and New York, all states can take meaningful action to improve their own permitting process and engagement with federal agencies on projects they host. Indeed, many crucial clean energy projects will never reach a federal nexus, so a race to the top among eager host states and localities will be key to achieving our goals.

CONCLUSION

Following the passage of the 2009 American Recovery and Reinvestment Act, President Barack Obama lamented that "there's no such thing as shovel-ready projects."³⁸ As we exit the COVID-19 pandemic and look to the future of the American economy, we should take concrete steps to ensure that we do not weigh ourselves down with burdensome bureaucracy

but instead leverage innovative technologies and administrative methods to build back not only better, but faster too.

After all, even our national pastime, Major League Baseball – which has been played largely unchanged for almost a century and a half – this year recognized the need for a pitch clock to speed up play with great success. Can't Congress help America do the same for the energy system that is the lifeblood of our economy and quality of life?

The clean energy transition offers a promise of renewed growth, the reduction of climate change, and a chance to bring new economic opportunities to communities across the country, from cities to rural areas, for all workers and families alike. Congress, the president, and all states must do everything they can to help quickly build the energy projects and remarkable new technologies that will bring tremendous economic and environmental benefits to all Americans.

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