UNLOCK the GRID

POLICY TOOLS



LARGE-SCALE | SITING AND PERMITTING

CHALLENGE	POLICY TOOL	DESCRIPTION	WHO ACTS	IMPLEMENTATION LIFT	TIME TO IMPACT	LEVEL OF IMPACT	EXAMPLE STATE(S)
Restrictive and inconsistent local rules	**One-stop shop consolidated state permitting**	Consolidate state environmental review and siting into a single state office to issue one permit for large projects. That permit replaces separate state and local approvals and comes with uniform standard conditions and firm decision deadlines. Local governments and residents still take part in the state proceeding, and local rules apply unless the state finds them unreasonably burdensome.	Legislature				**New York:** The Accelerated Renewable Energy Growth and Community Benefit Act (Part JJJ of S.7508-B / A.9508-B, 2020) created the Office of Renewable Energy Siting (ORES). Renewable projects of 25 MW or more get a single siting permit with uniform standard conditions. ORES must decide within one year of a complete application, or the permit is deemed granted. ORES can waive local laws it finds unreasonably burdensome in view of the state's climate targets. The 2024 RAPID Act (L. 2024, ch. 58, Part O) moved ORES into the Department of Public Service, and added major transmission lines.
	Sensible siting standards	Set sensible statewide minimum standards for local zoning and siting rules (e.g., setbacks, height, noise, fees) so local rules aren't more restrictive; limit or bar local bans and moratoria. Give developers consistent rules across jurisdictions, and leave routine review local.	Legislature				**Michigan**: PA 233 (2023). Local governments keep siting authority over utility-scale solar (≥50 MW), wind (≥100 MW) and storage (≥50 MW / 200 MWh) if ordinances are no more restrictive than state standards; otherwise developers can seek a siting certificate from Michigan Public Service Commission as a state-level backstop. **Illinois**: HB 4412 (enacted Jan. 2023). Sets uniform county siting standards for commercial wind and solar. Bars counties from adopting more restrictive standards, bans, or moratoria.
	State backstop siting authority	Let state agency review and approve projects when local rules are overly restrictive or local government denies a compliant project or misses a deadline. Some states also allow state review for projects serving policy goals or the public interest. Others go further, with full state permitting under uniform standards that replace local zoning.	Legislature				**Illinois:** The Clean and Reliable Grid Affordability Act (SB 25, 2026). Developers of ≥50 MW wind, solar, or storage projects can petition the Illinois Commerce Commission (ICC) when a county denies or fails to act timely on a project complying with state siting standards; ICC may issue a state siting certificate in lieu of local approval.
Long and unpredictable review timelines	**Permit-by-rule for low-impact projects**	Treat projects meeting set criteria as permitted, without case-by-case review; enforce compliance with permit conditions afterward. For larger or more complex projects, limit review to ways a project departs from standard criteria rather than reopening every issue.	Legislature				**Virginia:** HB 2175 / SB 1347 (2009) gave the Department of Environmental Quality authority to permit-by-rule for small renewable energy projects; solar/wind size cap was raised from 100 MW to 150 MW in 2017. Covers state environmental permits only — applicants must still obtain local certification of land-use compliance.

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Long and unpredictable review timelines	**Pre-approval / fast-track for priority development areas**	Pre-approve or fast-track designated locations and project types, such as existing grid connection points, brownfields, and other already-disturbed land. States can also prepare sites in advance (site studies, permits, grid connection) and proactively lease state-owned land.	Legislature, Siting Agency				**New York:** Accelerated Renewable Energy Growth and Community Benefit Act (Part JJJ of budget bill S.7508-B / A.9508-B, enacted April 2020), created the Build-Ready Program, which identifies previously developed sites (brownfields, landfills, former industrial/commercial and dormant generating sites); advances permitting, interconnection and host-community benefits; and auctions de-risked projects to developers.
	Resourcing for permitting agencies	Provide funding, staff, technical assistance (paid partly by reasonable permit fees) to state agencies and local governments. This helps fill capacity gaps, especially in small or rural jurisdictions, so siting and permit applications are reviewed on time.	Legislature				**Michigan:** Launched the Renewables Ready Communities Award in 2024 (pilot funded by one-time $30M state investment, expanded with $129.1M of federal funds in July 2024), giving flexible funding to local governments that approve and host utility-scale renewable and storage projects. The Renewable Energy Academy (announced 2024) provides technical assistance on planning, siting, permitting.
	Clear and reasonable timelines for review	Set clear review deadlines with defined consequences if missed, such as moving case to a state agency or treating permit as approved. Streamline and standardize court challenges, and allow straightforward permit extensions when grid connection or other outside delays push back construction.	Legislature, Governor				**California:** AB 205 (2022) created the Opt-In Certification Program — eligible projects (≥50 MW solar/wind, ≥200 MWh storage) can opt into state permitting, with environmental review due within 270 days after application is complete. **Michigan:** PA 233 (2023) — a local government with a compatible ordinance must approve or deny within 120 days (extendable up to 120 more days by mutual agreement); if it fails to act, the developer may apply to state energy regulators, which must decide within one year of a complete application."
Local opposition	**Community benefits frameworks**	Require or encourage host community benefits through community benefits agreements, development agreements, payments in lieu of taxes, or other ongoing revenue. Benefits work best when they are predictable, meaningful, and negotiated with the community.	Legislature				**Maine:** LD 1504 (enacted 2010 as part of Public Law 2009). Expedited wind energy developments must provide community benefits package worth at least $4,000 per turbine per year, averaged over 20 years (waived for projects under 20 MW or owned by public/nonprofit entities).
	Public mapping of lowest-impact, lowest-conflict development areas	Fund or direct state agencies, often with universities and local stakeholders, to map and publish areas with strong wind or solar potential and low conflict with farmland, habitat, cultural sites, and military uses. This helps developers target better sites early; maps can be tied to faster or programmatic environmental review in those areas.	Legislature, State Energy Office				**Washington:** 2021 state budget funded a Washington State University Energy Program least-conflict solar siting pilot for Columbia Plateau. E2SHB 1216 (2023) directs the Department of Ecology to consider findings in programmatic (nonproject) environmental review of Columbia Basin solar, and to factor least-conflict siting into coordinated permitting. **Oregon:** Oregon Renewable Energy Siting Assessment (ORESA) was funded by a $1.1M U.S. Department of Defense grant, approved by the legislature in 2019, and completed June 2022. State agencies in collaboration with Oregon State University built a public mapping and reporting tool showing siting opportunities and constraints to inform siting discussions but not designate where projects may or may not be built.

LARGE SCALE | CONNECTING TO THE GRID

CHALLENGE	POLICY TOOL	DESCRIPTION	WHO ACTS	IMPLEMENTATION LIFT	TIME TO IMPACT	LEVEL OF IMPACT	EXAMPLE STATE(S)
Lack of grid transparency	**Require actionable interconnection information**	Require utilities to publish and regularly update information helping developers identify potential interconnection locations and service options such as surplus and generator replacement. Information should identify relevant constraints, study assumptions, and status of pending projects that could affect available capacity.	Utility Regulator				**Michigan:** At the Public Service Commission's request, ITC Michigan published a transmission hosting-capacity study identifying potential interconnection locations where new generation could connect without costly system upgrades. The study evaluated 225 points of interconnection to help guide developers toward locations with available transmission capacity.
	Study interconnection replacement at retiring assets	Require utilities to evaluate reuse of retiring generators' interconnection rights before retirement, including replacement-resource options, required studies and upgrades, procurement timelines, and potential customer savings.	Utility Regulator				**Minnesota:** Before the coal plant Sherco Unit 2 retired, the state's Public Utilities Commission directed Xcel Energy to procure solar generation to reuse the unit's existing interconnection capacity. Resource planning and competitive procurement aligned replacement projects with retirement timelines, ultimately supporting approval of 710 MW of solar. The Commission also required development and cost evaluation of transmission options to reuse interconnections at the remaining retiring coal units.
	Evaluate surplus interconnection service (SIS) framework in the state planning processes	State utility regulators require utilities incorporate surplus interconnection planning into preexisting resource planning processes, such as Integrated Resource Plans.	Legislature, Utility Regulator				**Virginia:** FAST Act requires investor-owned utilities to assess how much interconnection capacity is available at existing sites. **Kansas:** A solar project that relied on Surplus Interconnection Service incurred $30,000 in interconnection costs, compared to $35 million for a comparable project. **PacifiCorp:** The utility has utilized Surplus Interconnection Service to add 320 MW of batteries at four existing solar sites.
Rigid interconnection and deliverability requirements	**Evaluate flexible interconnection opportunities for utilities**	Utility regulators direct investor-owned utilities to evaluate flexible interconnection of new generation to expedite new energy resource deployment. If deemed prudent, direct utilities to enter into non-firm generation power purchase agreements. Utility regulators should require utilities to update interconnection processes to provide faster interconnection services relying on the ERIS process (explained on page 9). Further, utility regulators can structure generation procurement to incentivize non-firm generation and require that utilities solicit proposals that allow for non-firm generation.	Utility Regulator				**Georgia:** Georgia Power's recent renewable procurement solicited non-firm resources. The procurement allows for a project to interconnect while it seeks additional transmission upgrades at a later date to resolve deliverability requirements.

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Rigid interconnection and deliverability requirements	**Establish flexible load interconnection and service options**	Direct utilities to evaluate and propose service options allowing new loads to connect under certain operating limits while necessary grid upgrades are completed. Evaluate how resources can be matched to flexibly meet demand.	Utility Regulator				**California:** State utility regulators directed PG&E and Southern California Edison to establish standard flexible service connection offerings that allow customers to energize under defined load limits while awaiting distribution upgrades. PG&E's related Flex Connect program demonstrates dynamic implementation, using day-ahead hourly power limits to accommodate new demand within available grid capacity.
Slow studies and uncertain upgrade costs	**Coordinate utility resource, transmission, and large-load planning**	Require utilities to evaluate generation, transmission, and large-load service needs together under alternative load-growth scenarios. Plans should identify opportunities to use existing interconnection capacity, upgrades required to serve new resources and loads, expected costs and timelines, and proposed responsibility for those costs. Where regional processes govern transmission planning or interconnection, utilities should identify regional decisions needed to implement plans.	Utility Regulator				**Nevada:** NV Energy's Western Nevada and Apex master plans evaluate the combined grid impacts of anticipated large-load clusters and identify phased transmission and substation investments aligned with projected demand, customer commitments, and service timelines. States can direct utility regulators to evaluate combined expansion plans emphasizing clarity on grid interconnection costs and timing, to better align grid upgrades and address cost-allocation issues related to new large loads.
	Advance coordinated planning and upfront cost contributions	States engage in regional stakeholder and federal regulatory processes to coordinate transmission planning with generator interconnection and establish predictable contributions toward network upgrades. Frameworks should clarify how contributions are calculated, allocate costs among beneficiaries, and accommodate changing generation and load needs.	Utility Regulator				**SPP:** The Consolidated Planning Process (CPP) and Grid-C mechanism provides framework for coordinated transmission and generation interconnection procedures. The CPP integrates long-term transmission planning and interconnection processes into recurring 3-year cycles. The Grid-C mechanism establishes a per megawatt contribution towards system upgrades identified in the planning process, providing upfront cost certainty.
	Evaluate third-party interconnection software	Direct utilities to evaluate and implement third-party software tools to improve efficiency and speed of interconnection analyses.	Utility Regulator				**MISO:** Adoption of modeling software from Pearl Street Technologies enabled MISO to perform automated power flow analysis, constraint identification, and network upgrade selection. An initial benchmarking analysis identified 99% of constraints identified in original analysis. MISO and Pearl Street reported completing Phase 1 study work in 10 days, compared with more than 600 days for original process.

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State / Regional Transmission Organization (RTO) Engagement	**State capacity to engage at RTOs**	Provide funding and technical assistance to support state utility regulators and relevant energy agencies to engage in RTO processes where necessary.	Legislature, State Energy Office				**Minnesota:** Statute authorizes Department of Commerce to assess utilities up to $1 million per year to participate in regional and national energy planning processes.
	Engage in regional flexible interconnection policy	Pressure regional market operators to implement robust and standardized flexible interconnection processes, including energy-only interconnection with narrow studies and limited grid upgrade costs. States and load-serving entities can decide if flexible interconnection services still meet their state's needs.	Utility Regulator, State Energy Office				**Southwest Power Pool (SPP):** Established an Energy Resource Interconnection Service (ERIS) process that provides flexible pathway for generators to interconnect and participate in energy market. **Other RTOs and non-market regions**, including the Southeast, are exploring opportunities to accelerate ERIS offerings and expedite study processes in order to get energy resources online faster.
	Regional Surplus Interconnection offerings at RTOs	States leverage RTO stakeholder processes to push streamlined Surplus Interconnection processes, including grid visibility, transparent study processes, and relevant market participation changes.	Utility Regulator, State Energy Office				**Midcontinent Independent System Operator (MISO):** Allows surplus interconnection when project does not trigger material upgrades. MISO received nearly 8 GW of surplus requests in 2025.

LARGE SCALE | MOBILIZING INVESTMENT

CHALLENGE	POLICY TOOL	DESCRIPTION	WHO ACTS	IMPLEMENTATION LIFT	TIME TO IMPACT	LEVEL OF IMPACT	EXAMPLE STATE(S)
Planning process not designed for rapid growth	**Improve demand forecasts to screen out speculative requests; update frequently**	Base large-load forecasts on firm commitments, such as signed service agreements, financial deposits, or construction milestones; pair them with large-load tariffs so speculative requests don't inflate projected demand. Update forecasts more often to keep pace with fast-changing conditions and inform procurement. More reliable forecasts give investors more confidence that new generation will be needed and paid for.	Utility Regulator				**Virginia:** In its 2025 biennial review, the State Corporation Commission accepted a Dominion Energy forecast built on executed electric service agreements and construction authorizations for large loads, and created a new large-load rate class (GS-5). HB 892 (2026) directs the Commission to investigate load forecasting practices across its utilities by March 1, 2027.
	Use all-source competitive procurement to identify new resources	Meet identified system need through competitive solicitation open to all resource types and to utility-owned and third-party projects, overseen by an independent evaluator. Bids reveal real-world costs and performance, which then feed into planning.	Utility Regulator				**Colorado:** The Public Utilities Commission's (PUC) Electric Resource Planning rules require utilities such as Xcel Energy to acquire new resources through all-source competitive solicitation, open to both utility-owned and third-party bids and overseen by an independent evaluator. Xcel's 2022 all-source solicitation under its 2021 Clean Energy Plan drew more than 1,000 project proposals.
	Mitigate fuel price risk through robust planning practices	Require resource plans to test how alternative portfolios perform across a range of fuel price and demand scenarios, so preferred plan holds up under different futures. Pair with ratemaking that shares fuel price risk with utilities, giving them a reason to reduce customer risk.	Utility Regulator				**Michigan:** SB 502 (PA 231 of 2023) updated the state's integrated resource planning process. Under these laws, the Public Service Commission sets modeling parameters utilities must use, including sensitivities for high natural gas prices and high load growth.
High levels of uncertainty	**Procurement targets**	Set specific, quantitative procurement targets for clean technologies, especially those that need help getting established or overcoming commercial barriers. Clear targets and defined procurement process let developers and suppliers invest at scale. Procurements can run through utility requirements or a state agency.	Legislature				**Illinois:** The Clean and Reliable Grid Affordability Act (SB 25, 2026), directs Illinois's Power Agency to procure 3 GW of grid-scale energy storage, with projects online by 2030. The first procurement, targeting about 1 GW, was held in August 2026, and cleared roughly 600 MW of storage.
	Clean transition tariffs and other Bring Your Own New Clean Energy (BYONCE) arrangements	Let large customers sign long-term contracts for new clean energy projects that serve their demand, either directly or through their utility, with customer covering costs to protect other ratepayers. This puts large customers' willingness to pay to work bringing new projects, including emerging technologies, onto the grid.	Utility Regulator				**Nevada:** The PUC approved NV Energy's Clean Transition Tariff in 2025. Under it, Google is buying 115 MW of enhanced geothermal power from Fervo Energy's Corsac Station, paying project costs so other customers don't bear them.

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Alternative capital sources are not used to their full potential	**Wholesale market expansion**	Expand utility participation in organized wholesale electricity markets (RTOs). Larger markets let more independent projects connect and sell power; they dispatch generation more efficiently across a wider area than a single utility territory.	Legislature				**Colorado:** SB21-072 (2021) requires transmission utilities to join organized wholesale market by 2030, unless the PUC finds no viable market or that joining isn't in public interest. **Nevada:** SB 448 (2021) requires transmission providers to join a regional transmission organization by 2030, unless the PUC grants a waiver or delay.
	Low-interest loans	Offer low-interest loans and other financing for large-scale generation through state green bank or similar entity. This can supply capital cheaper than utility balance sheets, lowering customer costs and drawing private investment.	Legislature				**New York:** NY Green Bank was created by Public Service Commission order in 2013 and capitalized with $1 billion in ratepayer funds. It lends to clean energy projects, including solar and energy storage, and recycles repayments into new investments.
	Ratepayer-backed bonds	Let regulators approve low-cost, ratepayer-backed bonds to refinance remaining investment in retiring plants (securitization). This cuts financing costs for customers and frees up utility capital for new generation.	Legislature				**New Mexico:** The Energy Transition Act (SB 489, 2019) lets utilities that retire coal plants recover remaining costs through ratepayer-backed "energy transition bonds" approved by a commission financing order. It directs 5.5% of the bond amount to state funds for displaced workers, economic development, and tribal communities. PNM, the state's largest utility, issued $343.2 million in bonds in November 2023 for the retirement of the coal-fired San Juan Generating Station.
Alternative capital sources are not used to their full potential	**Public development authorities**	Authorize public power authorities or other public agencies to issue bonds and use low-cost financing to develop, own, or co-invest in new large-scale generation, particularly where private development is falling short of state goals.	Legislature				**New York:** The Build Public Renewables Act, enacted in 2023–24 state budget (S.4008-C), authorizes and directs the New York Power Authority to plan, finance, build, and own renewable generation where private development isn't on track to meet state targets.

CUSTOMER AND LOCAL | PERMITTING

CHALLENGE	POLICY TOOL	DESCRIPTION	WHO ACTS	IMPLEMENTATION LIFT	TIME TO IMPACT	LEVEL OF IMPACT	EXAMPLE STATE(S)
Inconsistent permitting requirements	**Require standardized automated permitting**	Reduce variation between municipalities in applications, documentation, and code interpretations to create clarity for installers and customers. Require localities use standardized, automated tools like SolarAPP+ to accelerate projects.	Legislature, State Energy Office				**Maryland:** SB 783 (2024) required all localities to use solar permitting software such as SolarAPP+, and provided implementation funding, followed by HB 1532.
	Allow plug-in solar and batteries	Give explicit permission to use plug-in resources like balcony solar and small batteries without permit or utility interconnection process.	Legislature				**Utah:** HB 340 (2025) made "portable solar generation devices" exempt from utility interconnection and net metering requirements.
	Allow remote and third-party inspections	Permitting processes often require an inspection be performed at a customer's house; allow remote inspections via photograph to make the process cheaper, smoother, and faster.	Legislature				**Florida:** HB 683 (2025) included solar and energy storage within single-trade inspections and review, and allowed providers to perform inspections virtually or using software.
Restrictive building codes and HOA requirements	**Prohibit arbitrary restrictions**	Disallow homeowners association restrictions and set statewide fire codes and setback requirements to prioritize safety while increasing consistency across municipalities.	Legislature				**Massachusetts:** Proposed H. 3496 (2026) to build on existing solar access bill and make it illegal to have homeowner association or deed provisions that forbid or restrict solar. 2024 climate law also prohibits EV charging restrictions.

CUSTOMER AND LOCAL | GRID CONNECTION

CHALLENGE	POLICY TOOL	DESCRIPTION	WHO ACTS	IMPLEMENTATION LIFT	TIME TO IMPACT	LEVEL OF IMPACT	EXAMPLE STATE(S)
Lack of data transparency	**Require public hosting capacity data**	Typically, utilities are the sole arbiter of information on where available capacity exists on their systems. Make this information easily available to the public, which is critical to understanding where customer and local energy projects can be connected quickly. Best practices include using utility grade topology, downloadable basis, frequent refreshes, high granularity.	Legislature, Utility Regulator				**California:** AB 327, passed in 2013, required utilities to identify optimal locations for distributed energy resource deployment; state utility regulators expanded on this to develop "integration capacity analysis" requirements including maps and integration into interconnection decisionmaking process **Colorado:** In 2021, the Public Utilities Commission required the utility PSCo to make load and generation hosting capacity maps public and include hosting capacity analysis in distribution planning. In 2026, the PUC required further improvements to transparency and data granularity.
	Require public grid utilization data	Increasing distribution grid throughput is key to get more resources online quickly. But utilization is not well understood. The first step to identifying opportunities for optimized utilization is to make data publicly available so regulators, third-parties, and utility can identify opportunities to improve utilization.	Legislature, Utility Regulator				**California**: SB 905 (2026) requires utilities to publicize distribution grid utilization data and evaluate utilization as part of distribution planning.
Misaligned incentives	**Provide incentives for interconnection timelines**	Create performance incentive mechanisms (PIMs) to reward or penalize utilities for reaching certain performance threshold, in this case interconnecting customer and local resources on faster timeline when compared to historical data.	Utility Regulator				**Hawai'i:** Established "interconnection approval" PIM in 2021 measuring average number of days it takes to connect small-scale energy system and has decreased timeline each year. Utility can earn a reward if they meet the timelines or have to pay a penalty if they fail.
	Allow third-party interconnection studies	Utilities performing interconnection studies leads to a single bottleneck; allow third parties to perform studies can create a faster interconnection pathway. Data transparency with third-parties is essential for this to work, as well as a standardized process to qualify a third-party study.	Utility Regulator				**Virginia:** In 2009, state utility regulators revised interconnection regulations to allow third-parties to perform interconnection studies with utility approval, but updates in 2026 made it more viable including dispute resolution and transparency into technical requirements.
Costly grid upgrades	**Allow flexible grid connections**	Allow flexible grid connections to quickly connect customer and local clean energy resources (generation and load), enabling better use the grid by connecting valuable resources even if there are grid constraints during peak times. Instead of requiring upgrades before connection, this option curtails generation and load during times of constraint, either set at a static limit or in a dynamic way.	Legislature, Utility Regulator				**Colorado:** SB 24-218 (2024) required Xcel Energy to create tariffs that allow flexible grid connections that enable new generation and load to connect before upgrades are performed by agreeing to import and export limits.

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Costly grid upgrades	**Establish interconnection cost sharing**	A single customer bearing the burden for an interconnection upgrade can be prohibitively expensive even as connection may contribute to accelerating small-scale deployment and providing larger grid benefits. Establish shared costs across multiple customers to decrease this barrier.	Utility Regulator				**Connecticut:** The state's utility regulators established a cost-sharing mechanism for residential transformer upgrades in 2023, replacing the requirement that individual customers pay the full cost of distribution transformer upgrades. The policy spreads costs across participating applicants and utility ratepayers.
	Provide automatic or streamlined approvals	Fast track approval for small project(s) that connect to the grid in areas with high headroom, designated in hosting capacity maps.	Utility Regulator				**Illinois:** State utility regulators' interconnection rule updates created "non-export" and "limited-export" categories so storage-paired projects can skip most burdensome studies.

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Lack of proactive planning	**Require distribution system planning**	Customer and local clean energy resources may need proactive investment in distribution grid to support them, or they may be able to help utilities avoid some investments. Require comprehensive distribution system planning to help ensure investments are prudent and aligned with goals. Include grid utilization analysis and goals within planning to increase transparency and identify targets.	Utility Regulator				**Minnesota:** Started Integrated Distribution Planning in 2018 following a grid modernization requirement from the legislature. The IDP required transparency into the utilities distribution investments, and is now evolving into a process for proactive planning and integrating grid utilization into decision making.
	Require consideration of local resources in Integrated resource planning	Customer and local clean energy resources can provide value at all levels of the grid, but siloed decision making can hamper their contribution. Include them in integrated resource or system planning to break through these silos.	Utility Regulator				**Hawai'i:** Integrated Grid Planning process requires IRPs include small-scale resources as able to meet capacity, energy, and reliability needs.
Unclear and insufficient compensation mechanisms	**Create customer-facing programs and education**	Create a single statewide information platform housing standardized consumer disclosures, consolidated program information, and help customers identify what will work best for them. This will build education and trust around customer and local clean energy resources.	State Energy Office				**Massachusetts:** Mass Save, the state's energy efficiency and building electrification program, serves as a central education hub on incentives, programs, and understanding available technologies.
	Create time varying rates with export compensation	Create rate design that encourages customer and local clean energy resources to consume or provide energy back to the grid in accordance with grid needs. This will relieve pressure on the bulk and distribution system, and help finance small-scale resources.	Utility Regulator				**Hawai'i:** Smart DER Tariff was initiated by PUC, with first iteration approved in April 2024. It includes a rate for non-exporting and exporting customers that compensates customers who export to the grid in accordance with time-varying value of that export.
	Clarify participation in markets and programs	Where wholesale markets exist, allow aggregations of customer and local resources to participate in energy, capacity, and ancillary services markets. This is key to compensating resources and maximizing grid value. FERC Order 2222 requires this access, but states have a role in enabling participation.	Utility Regulator				**California:** Rules 24 and 32 by the PUC define what utilities and aggregators are responsible for, and PUC has created dual-participation principles clarifying that two programs (i.e., utility programs and wholesale market aggregators) can enroll the same resource if being compensated for different value such as energy vs. capacity.
	Create compensation programs	Create specific programs to provide customer and local resources with compensation for reducing demand during peak times; provide ancillary services; and mitigate local distribution constraints. This will create a financial environment to bring more projects on the grid and coordinate their use for maximum impact.	State Energy Office, Utility Regulator				**Massachusetts:** ConnectedSolutions, funded by ratepayer funds, pays aggregators and individuals to reduce demand during peaks in grid demand, providing cost reductions to the whole system.

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Unclear and insufficient compensation mechanisms	**Allow and modernize competitive retail offerings**	Allow competitive retailers to coordinate local resources so the same company that provides electric plan can also manage rooftop solar batteries, thermostats, and EV chargers. This helps resources compete in retail markets. Modernizing retail markets is the next step to capturing full value of local resources, including enabling negative peak load contributions for capacity charges, and requiring utilities to use smart meter data at 15 minute intervals when determining compensation.	Legislature, Utility Regulator				**Texas:** SB 1699 expanded competitive retail choice to allow retailers to aggregate distributed energy resources directly **Illinois:** The Climate and Equitable Jobs Act (2021) mandated expanded net-metering and tariff structures recognizing full capacity contribution of customer-sited solar and energy storage. This led to the utility ComEd filing a tariff change at FERC that allowed recognition of negative peak load contributions.
Insufficient financing	**Require consideration of local resources in all-source procurement**	All source procurement is a technology neutral utility procurement process that bids out a specific need and receives proposals for any resource that can meet the need, but has typically been limited to utility-scale resources	Utility Regulator				**Washington:** In 2025, the utility Avista allowed distributed resources to compete with conventional utility-scale resources for energy and capacity needs identified in their Integrated Resource Plan; 40 MW of demand response was selected, which was over 10% of total capacity procured.
	Require procurement of distributed capacity	Utilities have not traditionally procured distribution grid capacity; doing so can prioritize non-wires solutions for distribution upgrades or capacity needs on a specific area of the grid to realize locational value of small scale resources	Utility Regulator				**Colorado:** The Aggregator Virtual Power Plant (AVPP) program allows utilities to pay third-parties to coordinate small-scale resources for capacity needs at a standard rate. **Minnesota:** The recently approved (April 2026) distributed capacity procurement process was initiated by Xcel Energy's 2024 IRP, and in 2026, the Capacity*Connect program was approved, which allowed the utility to procure and own storage.
	Allow large load procurement	Bring-your-own-distributed-capacity is increasing as a strategy for large load companies to free up headroom on the grid so they can bring new load online faster through clean transition tariffs that allow them to procure resources that would not otherwise be procured, such as customer and local resources	Utility Regulator				**Michigan:** While clean transition tariff is still in progress, Google and the utility DTE Energy are working to enable Google to fund batteries and demand response programs in the state. **Kansas:** Clean energy choice rider, which is effectively a clean transition tariff, explicitly allows distributed resources as an option.
	Create a demand-reduction contracting process	Large loads have started to look to demand-side options to provide capacity they need to connect to the grid. A demand reduction trading program provides a pathway for these loads to contract directly with coordinated local resources.	Legislature				**New Jersey:** The Data Center Fair Share Act (2026) establishes process for utilities to contract with third-parties that coordinate local resources to provide capacity instead of relying only on large scale generation.
	Create a green bank	Green banks can help customers finance customer and local energy projects at homes and businesses by helping buy down interest rates, bundling projects together, creating standardized loans, and using public dollars to help deploy projects. They can also act as a central coordinator to combine financing with other incentives and programs.	Legislature				**Connecticut:** Established the Connecticut Green Bank by Public Act 11-80 in 2011. The bank provides standardized loans at low cost for small-scale resources, and administers an Energy Storage Solutions program to provide incentives and ongoing payments for batteries.

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Inconsistent evaluation of advanced transmission technologies (ATTs)	**Conduct technology potential assessments and pathways to deployment**	Direct state Public Utilities Commission (PUC) or other planning entity to conduct assessment of technology potential and pathways to deploy new transmission technologies. Require utilities to provide necessary data and models to assist PUC analyses.	Legislature, Utility Regulator				**Maine:** Department of Energy Resources completed a transmission study in September 2026 at the state legislature's direction. The study highlights potential applications of ATTs, among other items. Other PUCs have commissioned similar reports, such as Indiana's ATT study requirement under Senate Enrolled Act 422.
	Evaluate storage to relieve transmission constraints	Evaluate opportunity for strategic, distribution-sited or behind-the-substation battery storage to avoid transmission system upgrades.	Utility Regulator				**Maine:** Evidence suggests battery storage strategically sited on the distribution system can mitigate transmission constraints and avoid substantial transmission upgrades. The Boothbay nonwires alternative pilot combined battery storage, thermal storage, and other measures to reduce local peak demand and avoid a transmission-line rebuild.
Inconsistent evaluation of ATTs	**Approve prudent future-proofing investments**	Provide flexibility in rate regulation to allow investments in "future-proofing" designs. These are project additions with high optionality relative to marginal cost increase to the overall project (such as double-circuit capable poles, future voltage conversion capability, or larger structures to allow bundling of cable).	Utility Regulator				**Minnesota:** In 2009, the PUC approved the utility Xcel's request to build a new transmission line that was double-circuit capable, in case future need ever arose to increase the line's capacity. Fifteen years later, second-circuit expansion was approved and completed at far lower cost and physical impact, due to PUC foresight in future-proofing the project.
	Require alternatives analysis in planning and approvals	Require evaluation of ATTs in integrated resource planning (IRP) processes. Establish a regulatory framework that enables PUCs to require alternatives analysis when a utility pursues a permit for a traditional grid upgrade. PUCs could reject proposals in which lower-cost alternatives were not sufficiently considered.	Legislature				**Utah:** HB 212 (2025) requires utilities to evaluate cost-effectiveness, potential benefits, and implementation timelines of grid enhancing technologies (GETs) or ATT alternatives to traditional transmission investments in IRPs. **Ohio:** HB 15 (2025) requires utility to consider cost-effective ATTs in any transmission siting application. The law similarly requires recurring ATT evaluation and congestion-mitigation and implementation planning. At least 20 states have passed ATT or GETs legislation.
Fragmented planning across jurisdictions	**Disclose congestion and relief opportunities**	Require reporting on grid constraints, customer costs, and solutions. Congestion data enables stakeholders to frame the scale of opportunity, representing how historically undersized transmission systems have increased congestion and costs for consumers.	Legislature, Utility Regulator				**Minnesota:** SF 4942 (2024) requires transmission owners to identify areas of congestion and ratepayer cost, as well as a GETs implementation plan to relieve that congestion.
	Ensure ATT evaluation in regional planning	Long-term transmission planning processes, including those conducted by RTOs or regional planning entities, should explicitly consider advanced technologies in planning pathways.	Utility Regulator				**Federal Energy Regulatory Commission (FERC):** Order 1920 (2024) requires consideration of ATTs in long-term planning, but appropriate implementation and analysis requires dedicated staff and expertise to evaluate RTO proposals. **Massachusetts:** The 2024 Climate Act required an independent investigation of ATTs, including their cost-effectiveness and jurisdictional and cost-sharing barriers in federally regulated transmission applications.

CHALLENGE	POLICY TOOL	DESCRIPTION	WHO ACTS	IMPLEMENTATION LIFT	TIME TO IMPACT	LEVEL OF IMPACT	EXAMPLE STATE(S)
Fragmented planning across jurisdictions	**Strengthen PUC technical capacity to evaluate ATTs**	Provide targeted funding or consultant support to expand PUC capacity to evaluate ATTs, conduct technical potential studies, and evaluate utility modeling.	Legislature, Utility Regulator, State Energy Office				**Indiana:** Pursuant to SEA 422, Indiana utility regulators retained an engineering consultant to develop an ATT study, including technical screening procedures, modeling approaches, and a framework for evaluating deployment. **FERC:** Order 1920 includes a technical assistance program that provides technical assistance to PUCs and State Energy Offices. Individual states can provide funding and directives to support local entities on ATTs.
Permitting challenges on existing corridors	**Define exemptions for qualifying grid upgrades**	Allow any advanced conductor project developed on existing right of way to receive a categorical exclusion from certain environmental or other agency review.	Legislature				**California:** SB 529 removes certain permit requirements for extensions or upgrades to existing transmission facilities, helping speed up transmission expansion projects. States could go further and provide exclusions to certain environmental review or narrow scope of potential litigation to speed up certain transmission projects.
	Streamline agency review and consolidated permitting process	Empower state agencies with additional staff and resources to streamline reconductoring project review and simplify permitting processes. Require projects outside of approved plans to demonstrate need and evaluation of alternatives.	Utility Regulator				**California:** GO 131-E process includes measures for pre-filing consultation and clearer review timelines for project documents to streamline approval of transmission expansion and upgrade projects.

CHALLENGE	POLICY TOOL	DESCRIPTION	WHO ACTS	IMPLEMENTATION LIFT	TIME TO IMPACT	LEVEL OF IMPACT	EXAMPLE STATE(S)
Low accountability for efficient grid utilization	**Require utilization measurement and reporting, and grid-utilization performance incentives**	Require grid utilization metrics to encourage deployment of solutions that make the system more efficient and flexible. Appropriate incentives can target solutions to address inefficiencies on the grid, such as ATTs, battery storage, or demand flexibility. This should be combined with effective long-term planning, system expansion, and interconnection reform.	Legislature, Utility Regulator				**Virginia:** SB 621 requires investor-owned utilities to develop grid utilization metrics and requires state utility regulators to evaluate the metrics and include utilization in future capital investment reviews.
Perverse incentives related to new infrastructure	**Establish shared-savings incentives**	Enable utilities to retain a percentage of savings derived from GETs deployment, incentivizing utilities with some amount of cost-recovery in lieu of traditional grid upgrades.	Legislature				**Federal Energy Regulatory Commission (FERC):** The proposed SURGE Act would direct FERC to establish shared-savings framework allowing utilities to recover some portion of line loss savings from high performance conductor deployments. The Act would provide funding for states to establish their own shared-savings incentive programs **United Kingdom:** Ofgem, the United Kingdom's energy regulator, provides a shared-savings incentive to reward transmission owners for reducing congestion. Transmission owner receives 10% of the forecasted savings. Ofgem has specifically cited advanced power flow technologies as solutions to reduce congestion and additional grid upgrades.
	Reward cost-effective ATT deployment	Establish tax or performance incentives tied to meeting ATT/GET deployment targets, aligned with states legislative or regulatory requirements. One such example is a capacity per right-of-way performance incentive, which rewards utilities for how much capacity it can deliver via existing right of way.	Legislature				**Massachusetts:** The 2024 climate law dictates utilities may propose performance incentive mechanisms rewarding cost-effective deployment of ATTs.

CHALLENGE	POLICY TOOL	DESCRIPTION	WHO ACTS	IMPLEMENTATION LIFT	TIME TO IMPACT	LEVEL OF IMPACT	EXAMPLE STATE(S)
Limited access to financing	**Clarify cost recovery for ATTs**	Empower regulators with the explicit authority to grant cost recovery to ATT projects.	Legislature				**Ohio:** HB 15 grants state utility regulators authority to approve cost recovery for ATT alternatives in transmission siting applications.
	Enable state transmission finance authorities	Delegate authority to a state-level transmission authority to plan, develop, finance, own, or facilitate transmission assets, including advanced technologies.	Legislature				**Colorado:** State transmission authorities have authority to plan for and finance transmission grid upgrades, including GETs and ATTs. Colorado Electric Transmission Authority's (CETA) statewide transmission study evaluates GETs and ATTs, and its project selection framework scores projects on incorporation of ATTs.