



June 20, 2024

Laws In Order

An Inventory of State Renewable Energy Siting Policies

Webinar

Please Note:

- All participants will be muted during the webinar
- Please submit questions via the Q&A window
- The webinar is being recorded and both that recording the slides will be shared on our website and via email after today



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Background and Collaboration

Basics of siting and permitting

- **Siting and permitting** describes both decision-making processes (siting) and their outcome (a permit or permits)
- **Permitting** is the process of acquiring permits for a project within the scope of zoning rules and standards
- **Standards** are rules and regulations that state and local governments use to regulate development and construction of solar and wind facilities (e.g., setbacks, tip heights, decibel levels)
- **Zoning ordinances** are regulations, enacted through law by local governments, that manage land use and development in the jurisdiction
- **State-level decision-making bodies** are often governmental or quasi-governmental bodies that provide oversight and regulate public utilities in their jurisdiction (e.g., public utility commissions)

The scope and scale of the challenge

The Princeton Net-Zero America Study modeling suggests within the next three decades the U.S. will need to:

- **Replace the entire electricity system**
- **Increase total generating capacity by a factor of four** from 1,100 GW to 4,000 GW
- **Increase annual wind and solar additions by a factor of five**, resulting in a wind and solar fleet with a peak capacity that is 3x today's total electricity system

Barriers to deployment are shifting from primarily techno-economic to sociopolitical in nature:

- **Local opposition** is a major impediment to siting renewable energy projects
- **Local and state permitting processes** are complicated to navigate, and may result in long permit approval timelines and cancelled projects

Renewable siting: a dynamic policy space

April 2020

New York
A9508 – B
Established a state-level siting office plus incentives and preemptions for siting

June 2022

Washington
HB 1812
Authorized opt-in, expedited permitting and one-stop-shop for renewable projects

January 2023

Illinois
HB 4412
Limited county authority over zoning and permitting renewable projects

November 2023

Michigan
HB 5120
Limited county authority and established pathway for state-level project permitting

July 2021

Ohio
SB 52
Removed renewable siting authority from the Ohio Siting Board and vested it with counties

October 2022

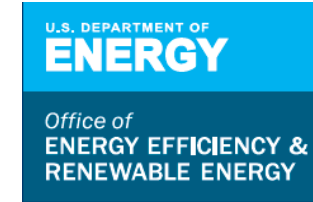
California
AB 205
Created opt-in/backstop permitting for large-scale renewable projects

April 2023

Washington
HB 1216
Establishes coordinating council, non-project EIS, and alternative permitting process

Early analytical efforts and collaboration

- Developed an early inventory with 9 states
- Categorized and grouped states by policy features
- Began collaborating with LBNL and DOE EERE to expand dataset, brought in ACP and CBI's effort
- RAP joined collaborative to deepen analysis and draft report
- Significant data gathering assistance from interns at CATF and CBI





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Report Motivation, Methods, Scope, and Interactive Map

Report Motivation

- State-level siting regulations, policies, and authorities are complex, varied, and differ widely with respect to technology type, size, and characteristics.
 - **State and local policies are undergoing change**, as states consider how best to meet their renewable energy goals in an equitable way.
 - **This report provides a census of the state-policy landscape** to help inform the consideration of novel policies that are best suited for addressing state and constituent needs.
 - **The report also enables novel research** opportunities related to how various policy configurations influence siting outcomes.

Literature Review and Methods

- Literature Review

- Kahn and Shields, 'State Approaches to Wind Facility Siting', NCSL (2020)
- Mills et. al., 'Solar Siting Authority Across the United States', University of Michigan (2020)

- Methods

- General internet searches plus Power Suite and EnerKnol databases
- Three steps for each state:
 1. Find recent articles and technical guides
 2. Identify supporting statutes
 3. Review regulations
- Timeline: June 2023 to February 2024

Report Scope

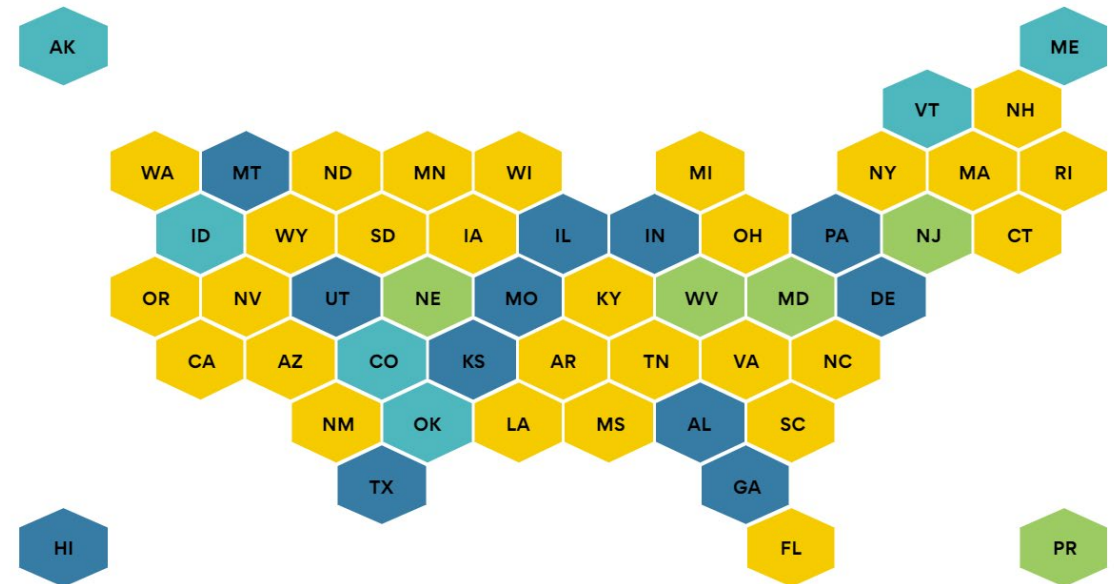
- Technology
 - Utility-scale **onshore wind and solar**
 - Policies **NOT** explored in detail: offshore wind, geothermal, hydro, battery energy storage, transmission, hydrogen, EV infrastructure, bioenergy
- Governmental jurisdiction
 - **State and/or local authorities** for siting and permitting
 - **NOT** local regs or ordinances
- Available information in statute and reports
 - How projects are **sited by law**
 - **NOT** in practice
- Key policy elements of this report
 - Primary siting and permitting authority
 - Standard-setting authority (who establishes ordinances and siting regulations)
 - Timelines for permitting approval and public engagement
 - Public involvement requirements
 - Published resources (model ordinances)
- Represents an **opportunity for future research** to expand upon our findings

Report feedback and map demo

We are interested in keeping the report information current and accurate.

- Send any comments or feedback, including sources and citations, to renewablesiting@ee.doe.gov
- Access the interactive map: <https://www.energy.gov/eere/siting-large-scale-renewable-energy-projects#map>

■ Local ■ State ■ Both ■ Contingent



"Laws in Order: An Inventory of State Renewable Energy Siting Policies" (2024)



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Report Findings

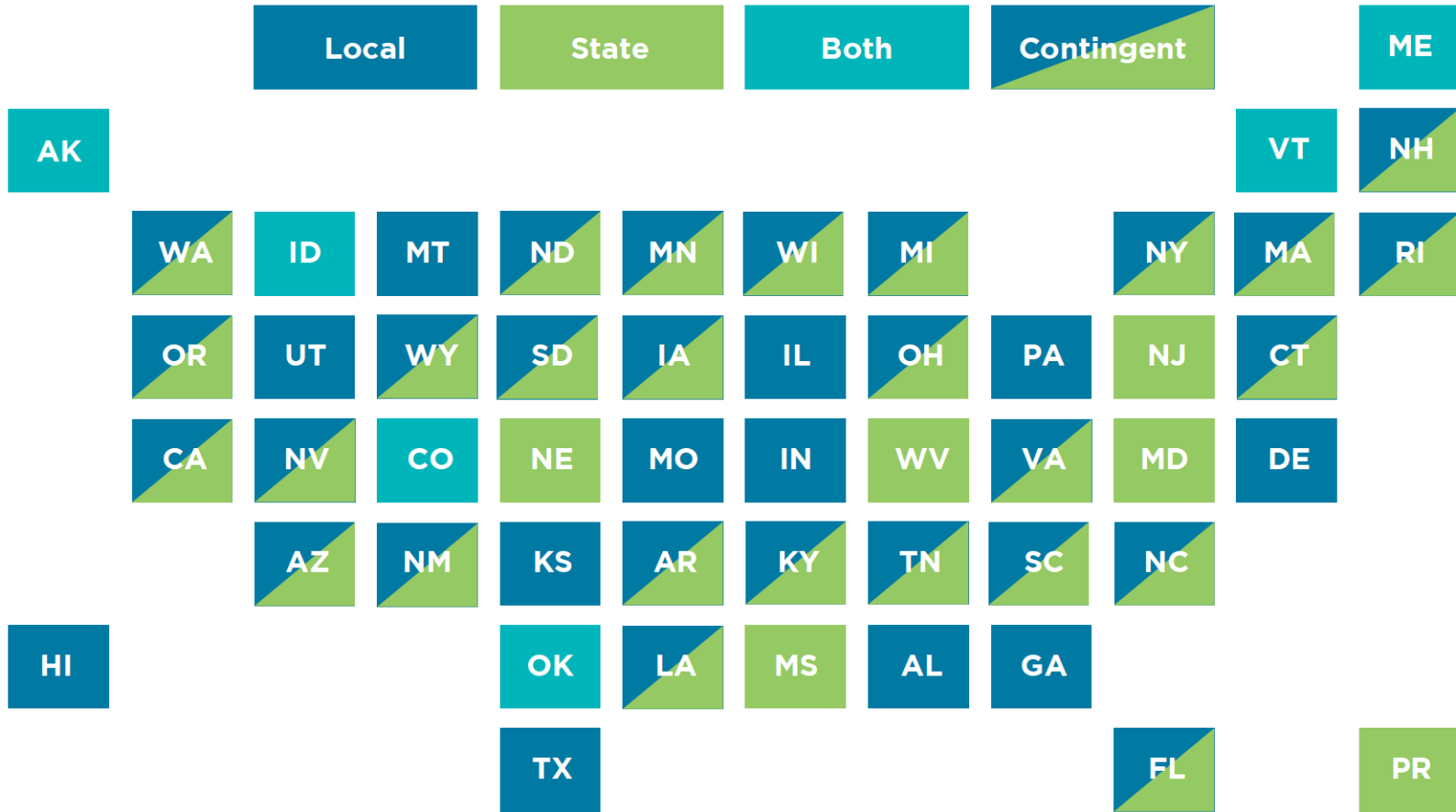
Principal authority categories

principal (noun): a person who has controlling authority or is in a leading position, most important or influential

Category	Description
Local (12 states)	Local governments have principal jurisdiction.
State (6 states)	State or territorial government has principal jurisdiction.
Both (6 states)	“Both/and” scenarios in which both the state and the local government have some authority.
Contingent (27 states)	“Either/or” scenarios in which either the state or local government has principal authority, nearly always depending upon the size of the project.

Note: These categories add up to 51 because Puerto Rico was treated and counted as a state throughout the research.

Principal authority categories

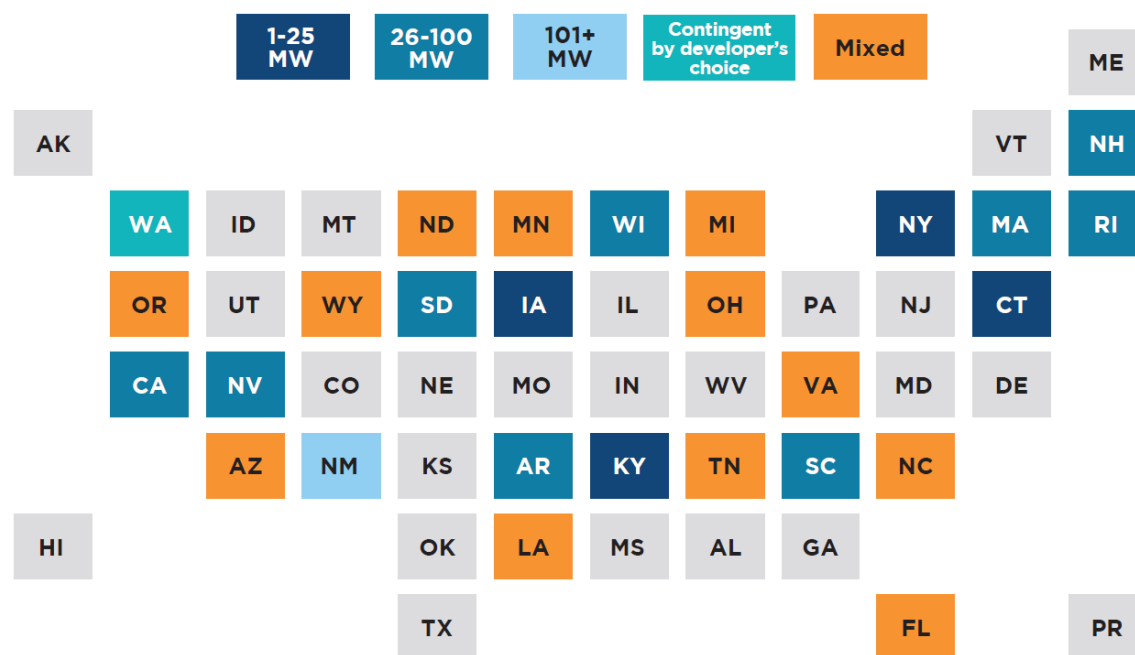


#1: Principal siting authority is often contingent on project size

Project size often determines who holds principal siting authority

- States have different project size thresholds
- State entities typically have authority over larger projects
- Some states have different wind and solar thresholds

Figure 3. Thresholds in states with contingent authority

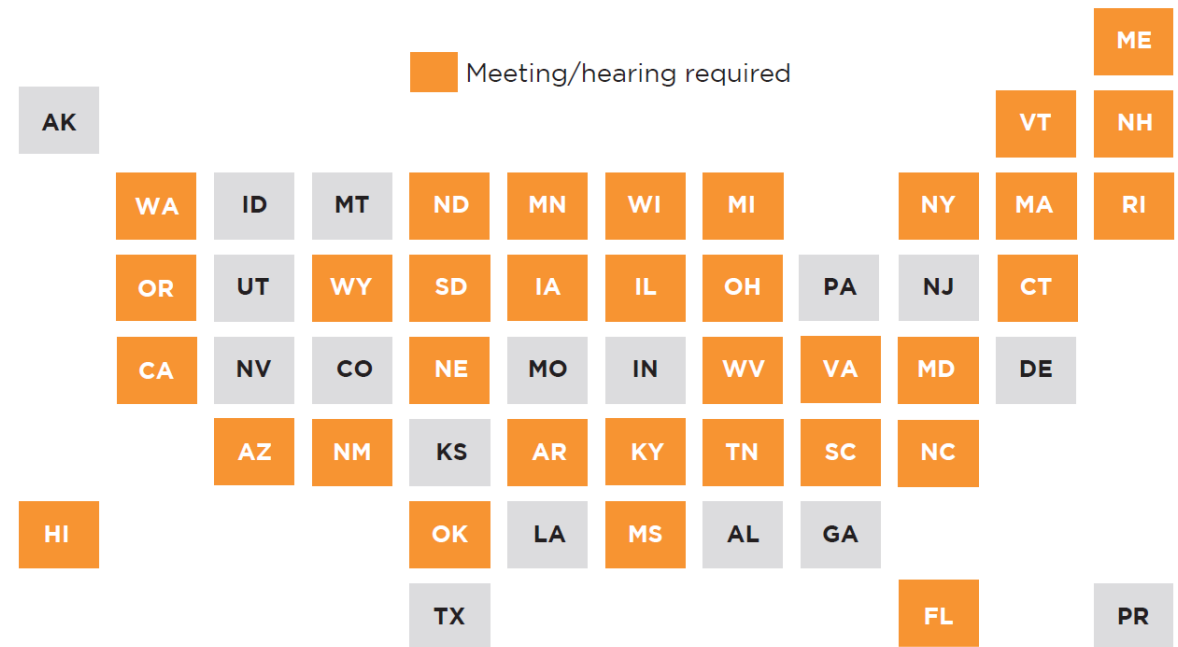


#3: Most states have public involvement requirements

Most states (34) require public meetings or hearings

- Public engagement requirements were most typical when states held principal authority over siting
- Public notification and public hearings were the most common types of public engagement required

Figure 5. States requiring public involvement

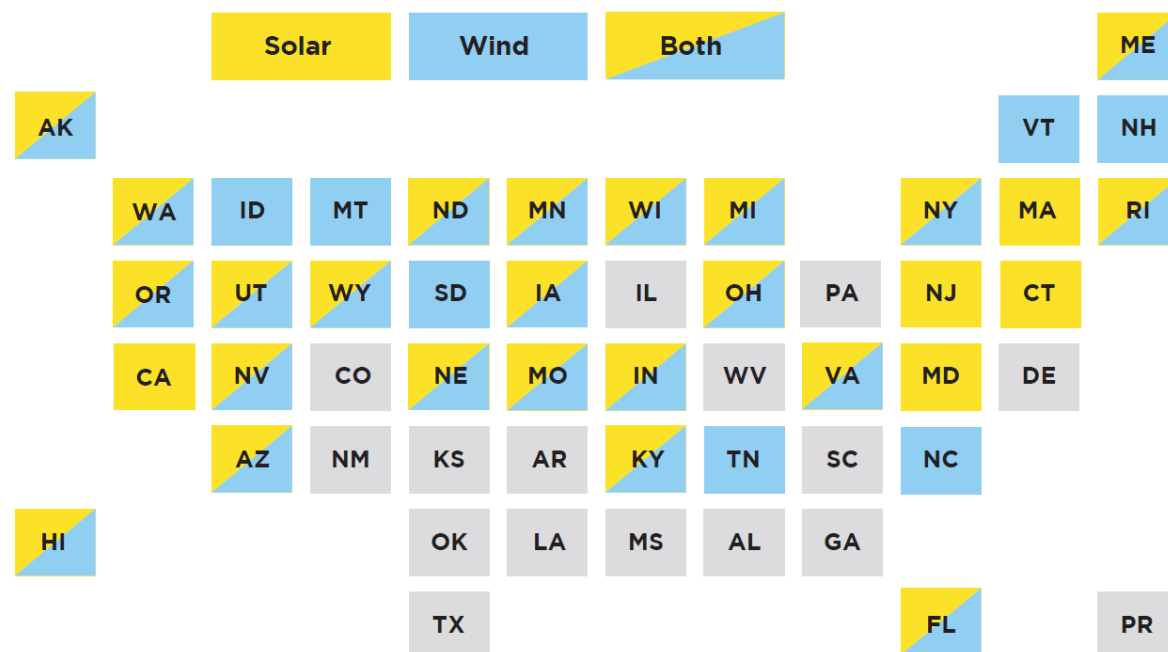


#4: Published guidance is available in many states

Almost half of all states (23) publish both wind and solar guidance

- Guides typically summarize the siting and permitting process
- Many guides are published by state agencies while some are published by non-profits or working groups

Figure 6. Permitting guides available

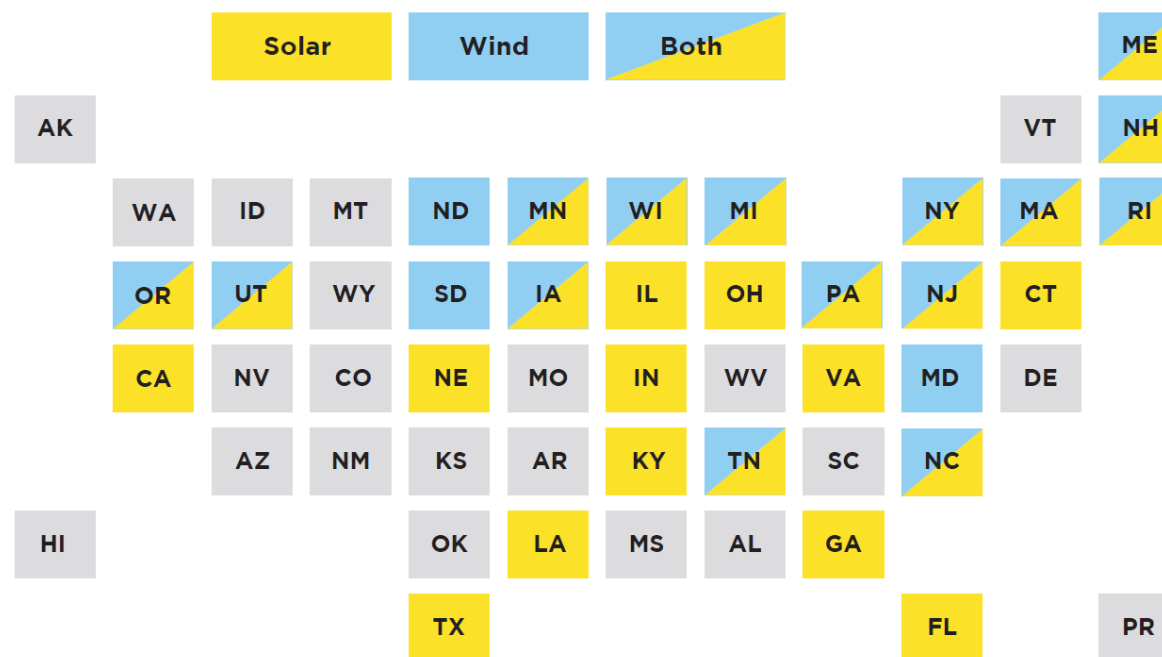


#5: Model ordinances are available for many states

Many states publish model ordinances for renewable energy siting and permitting; 27 for solar & 18 for wind.

- Even in states where the state is the principal siting authority, local governments often have a role in siting through zoning
- Model ordinances may be promulgated by a state agency or originate from other sources

Figure 7. State-specific model ordinances available

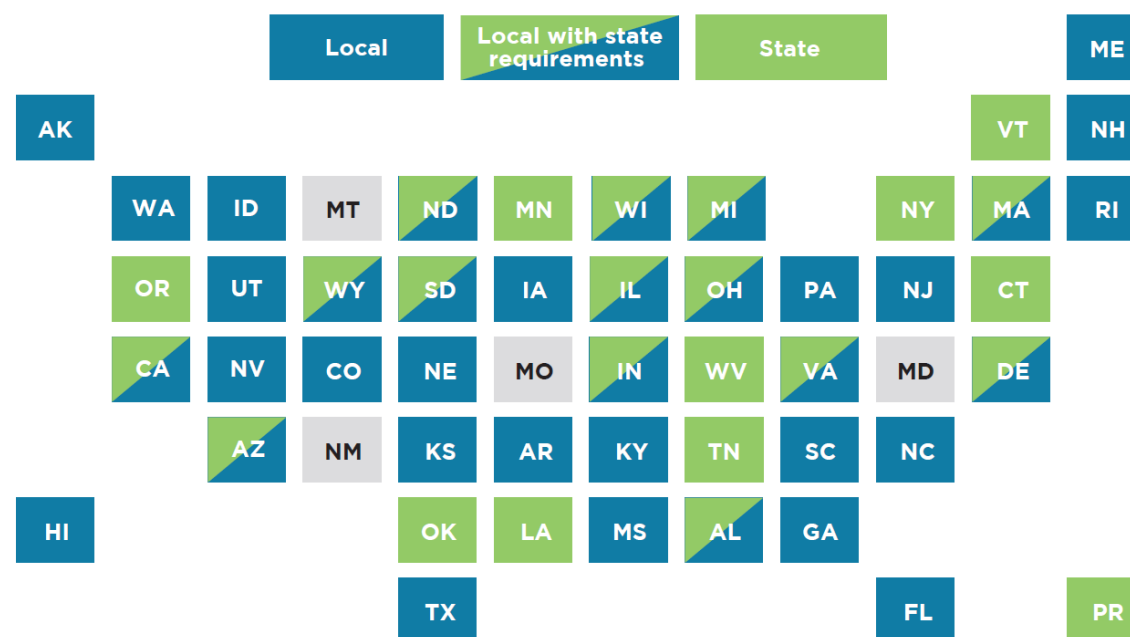


#6: Local authorities typically control siting standards

Most states (37) give local governments authority over siting and permitting standards

- Siting standards are rules and regulations projects must meet to receive a permit
- Some states (14) maintain local authority over siting while mandating siting standards
- A minority of states (10) set siting standards at the state level

Figure 8. Standard-setting authority in states with siting standards



State profiles

A snapshot of the siting and permitting landscape is provided for each state, including:

- An “at a glance” header
- Summary of the jurisdictional authorities
- Details regarding timelines, public involvement, and published resources
- Citations to statute, rule, or resources

California			
Principal authority category	Relevant timelines	Public involvement	Published resources
Contingent State ≥ 50 MW	Yes	Public meeting(s)	Solar: Yes Wind: Not found

Choose another state

Authority summary

Siting authority is based on project size. Generally, authority to approve projects rests with counties. However, project developers may opt in to the California Energy Commission (CEC) siting process for projects of at least 50 MW. Opting in gives principal and preemptive authority to the CEC.

Local authority details: The County Board of Supervisors oversees local siting of renewable energy projects unless the developer of a large project opts in to review by the state. State planning law requires each city and county to adopt a long-term plan that includes a section on land use setting forth objectives, principles, standards, policies, maps that include data and analysis and mitigation measures (Cal. Government Code § 65000 et seq.).

State authority details: The CEC oversees state siting for renewable projects. The CEC has opt-in siting authority over solar and wind projects of at least 50 MW. The CEC's approval of an opt-in application enables the construction and operation of the project and explicitly supersedes local permitting requirements and local ordinances. The CEC is the lead agency for the California Environmental Quality Act (CEQA) (Cal. Public Resources Code § 25545 defining the facilities subject to CEC review; § 25545.1 explaining that issuance of a certificate by the CEC supersedes any local requirements; § 25545.7 explaining that the CEC is the lead agency for CEQA review).

Relevant timelines: Details

Under the CEC opt-in process, the CEC has 270 days to approve a project application permit, along with interim timelines for application completeness, public

engagement and interagency consultations. Any legal appeals must be resolved within 270 days of filing (Cal. Public Resources Code § 25545.4; § 25545.13).

Public involvement: Details

Projects less than 50 MW are subject to county code for public involvement. (Our research didn't determine if they are subject to state law, as well.) Projects of at least 50 MW may opt in to the CEC process, which requires multiple public meetings of differing scope and scale (Cal. Public Resources Code § 25545.7.2 requiring public meetings on application; § 25545.7.6 requiring public meetings on environmental review).

Published resources: Details

Siting and permitting guides

Solar: Solar Permitting Task Force, Governor's Office of Planning and Research. (2019). *California solar permitting guidebook*. https://opr.ca.gov/docs/20190226-Solar-Permitting_Guidebook_4th_Edition.pdf

Model ordinances

Solar: California County Planning Directors Association. (2012). *Model solar energy facility permit streamlining ordinance*. <https://www.ccpda.org/resources/docs/energy/4-model-solar-energy-facility-permit-streamlining-ordinance/file>

Questions & comments

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For more information

- Download the report: <https://emp.lbl.gov/publications/laws-order-inventory-state-renewable>
- Access the interactive map: <https://www.energy.gov/eere/siting-large-scale-renewable-energy-projects#map>
- Sign up for LBNL's email list: <https://emp.lbl.gov/mailing-list>

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