

Renewable Portfolio Standard

Description:

One of the oldest and most successful advanced energy strategies, renewable portfolio standards (RPSs), specify a percentage of utility sales or a specific megawatt hour (MWh) capacity to be provided by renewable resources by a specific date.

Discussion of the Policy:

RPSs usually set a standard of a specific percentage of renewable electric generation by a specific date along with incremental targets to meet that goal. In regulated states, standards place the contracting of renewable power into the portfolio of the utility, meaning the utility needs to plan for incorporation of renewable energy, issue requests for proposals for projects, and/or contract for power purchases. In restructured states, competitive retail providers typically demonstrate compliance through the purchase and retirement of renewable energy certificates. Some states have implemented voluntary renewable energy goals instead of mandatory standards. These renewable energy targets are non-binding and typically do not penalize utilities that do not meet the goal.

RPSs usually favor large-scale renewables and historically favored wind resources. For this reason, portfolio standards may have specific carve-outs for different technologies and / or for smaller scale projects. See [Distributed Generation / Solar Carve-Out](#). Some states have established different tiers or classes of qualifying resources. This may be to separate out different incentives or different percentages of the overall standard to enhance the diversity of resources used to achieve compliance. Other states simply rely upon market forces to find the technology that is most cost effective. An emerging policy option is a [clean peak standard](#). Clean peak standards mandate that a minimum percentage of retail electricity sales during peak periods be met with clean generation resources or load reductions.

In the past, many states have included multipliers to encourage investment in certain types of renewables or to encourage locating renewable energy projects in certain areas. One of the more common multipliers, in-state multipliers, have come under legal challenge in numerous states. The in-state multiplier generally states that if renewables are generated in state, they will get additional credit above that provided to an out of state resource. Depending on how these types of conditions are structured, they may be on shaky legal ground based on a potential violation of the commerce clause of the U.S. Constitution. For more information, you can read a summary of the issue by the [Clean Energy States Alliance](#).

A final consideration is timing. [The Consolidated Appropriations Act of 2016](#) phases out both the production tax credit (PTC) - primarily used for wind projects - and the investment tax credit (ITC) - primarily used for solar - by 2020 and 2022 respectively. The PTC is reduced by 20% per year until phase out in 2020. This means that wind can be developed at a lower cost for those states that choose to develop the resources faster. Similarly, solar that is developed prior to 2022 will have a significant (30%) cost reduction relative to resources developed after that date. As a result, states may want to accelerate compliance in order to maximize the financial benefit to their ratepayers.

Example State Programs:

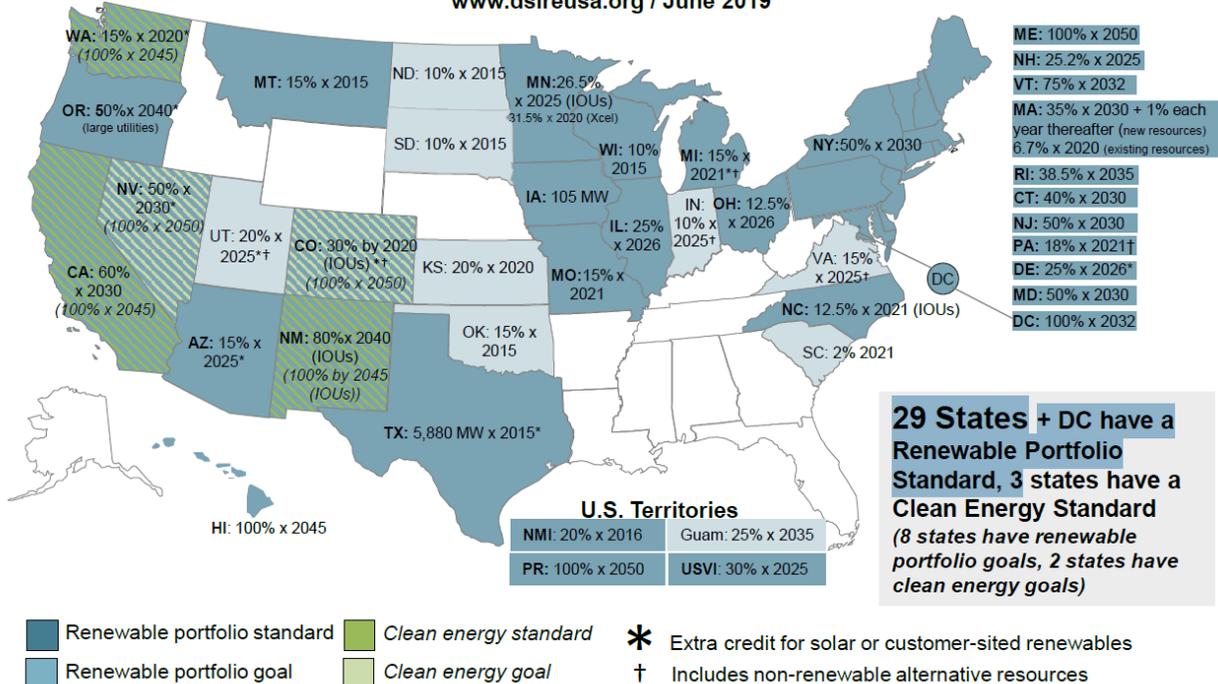
Mandatory RPSs and clean energy standards have been adopted by 29 states and the District of Columbia. Eight states have set voluntary goals (see map, below).

- California's Renewables Portfolio Standard: <https://www.cpuc.ca.gov/rps/>

- Hawaii's RPS:
<https://programs.dsireusa.org/system/program/detail/606>
- Massachusetts Clean Peak Energy Standard:
<https://www.mass.gov/service-details/clean-peak-energy-standard>
- New York's Clean Energy Standard:
<https://www.nyserda.ny.gov/All-Programs/Programs/Clean-Energy-Standard>

Renewable & Clean Energy Standards

www.dsireusa.org / June 2019



Source: [DSIRE](https://www.dsireusa.org)

Key Components:

- A list or definition of qualifying energy technologies.
- A cost cap, which limits incremental costs of clean or renewable energy technologies.¹
- An RPS or clean energy standard may apply to all investor-owned utilities, cooperative utilities, municipally owned utilities, and / or competitive retail electricity providers.
- End target and date and interim targets and dates.
- Requirements for annual compliance reporting and for some states, annual RPS procurement plans.

¹ This was common in early RPS policies; however, with decreasing prices it may not be as common in the future.

- Designation of a system to issue, record, track, and retire renewable energy certificates (RECs).
- Technology or distributed generation carve-outs.

More Information:

- Lawrence Berkeley National Laboratory, Renewables Portfolio Standards Resources:
<https://emp.lbl.gov/projects/renewables-portfolio/>
- Database of State Incentives for Renewables and Efficiency (DSIRE):
<https://www.dsireusa.org/>
- National Renewable Energy Laboratory (NREL): Including Alternative Resources in State Renewable Portfolio Standards, Current Design and Implementation Experience, Report:
www.nrel.gov/docs/fy13osti/55979.pdf
- National Conference of State Legislatures (NCSL): State Renewable Portfolio Standards and Goals:
<http://www.ncsl.org/research/energy/renewable-portfolio-standards.aspx>