ACADIA CENTER EXPLAINS

Clean Energy Standard



Summary and Recommendations - Spring 2024

WHAT IS THE CLEAN ENERGY STANDARD (CES)?

A Clean Energy Standard (CES) is a policy mechanism that numerous states have employed to increase the share of clean electricity consumed by their state over time. States that have implemented a CES have relied on the policy as a central tool for driving a cleaner electricity portfolio and reducing emissions from the electric sector— which in turn will help decarbonize other sectors via electrification. CES policies frequently include a number of foundational elements:

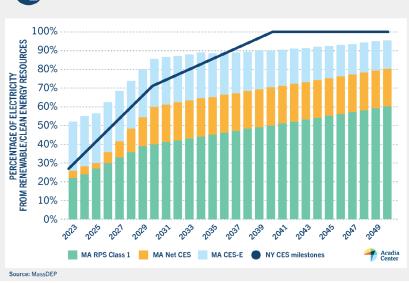
- <u>Upward trajectory</u>: Steady annual increases in a minimum percentage of electric load that must be met by generation from clean energy resources (e.g., solar, wind, hydroelectric).
- <u>Long-term demand signal</u>: Pre-established long-term targets in key years orient market response and state/utility planning (e.g., 70% by 2030 in New York, or 80% by 2050 in Massachusetts).
- <u>Tradeable credits/certificates</u>: Credits provide key revenue stream to clean resources for the "environmental attribute" of each MWh they produce, often procured via long-term contracts.
- <u>Multiple Resource Tiers</u>: Different program segments corresponding to resource characteristics, such as new resources, existing resources, specific technologies (e.g., offshore wind), and more.
- <u>Alternative Compliance Payments (ACP)</u>: Load-Serving Entities (LSE) must obtain and retire sufficient credits each year or face steep ACPs, which effectively set the ceiling on credit prices.
- <u>Ratepayer cost recovery</u>: Costs of purchasing CES credits or making ACPs are recovered by LSEs via small per-kWh charges in the supply portion of customers' electricity bills.

HOW IS IT SIMILAR AND DIFFERENT FROM A RENEWABLE PORTFOLIO STANDARD (RPS) OR A CLEAN HEAT STANDARD (CHS)?

Clean Energy Standards build on the model of the Renewable Portfolio Standard (RPS) policy, which has been employed successfully in more than half the states in the United States. RPS policies pioneered a substantially similar mechanism for helping drive renewable growth, and as their name suggests, they were more narrowly followed on new renewable resources like wind and solar, whereas CES policies often include a slightly broader set of resource eligibility rules for other clean/zero-emissions resources. Statewide RPS and CES policies have contributed to <u>44%</u> of total renewables growth in the 22-year timeframe the two standards have been in play.

Clean Heat Standards (CHS) have sought to emulate the RPS model, but they aim to increase the share of heating demand that is served by clean technologies, such as energy efficiency and electric heat pumps (and in some places,





Massachusetts and New York CES Trajectories

via low-carbon fuels). Check out Acadia Center's explainer on Clean Heat Standards and the benefits they can create.

WHERE IS A CLEAN ENERGY STANDARD (CES) IN PLACE, BEING CONSIDERED, AND BEING STRENGTHENED?

States in the northeastern U.S. have widely adopted RPS policies over the last two-plus decades. But only some of these states have supplemented or succeeded in their RPS policies with CES frameworks, including Massachusetts, New York, and New Jersey. MassDEP has recently solicited comments from stakeholders regarding opportunities to strengthen the Massachusetts CES further

(see Acadia Center comments). New York State approved its updated "70-by-30" CES in 2020 and has been procuring capacity annually toward fulfillment of that target.

Some states, like Rhode Island, have strengthened their RPS policy to achieve 100% renewable energy by 2033. Other states, like Connecticut, have existing near-term RPS policies, technology-specific authorizations to procure resources like offshore wind, and longer-term legal requirements to achieve a 100% zero-emission grid—but have no formalized CES policy.

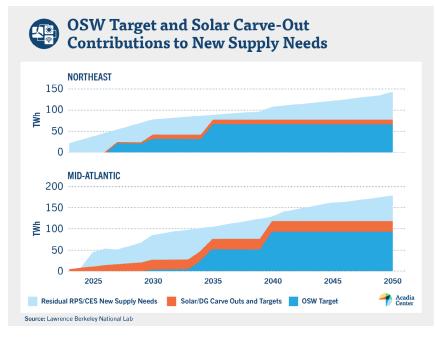


WHAT WOULD A REGIONAL, LONG-TERM CLEAN ENERGY STANDARD (CES) MEAN FOR CLEAN ENERGY AND EMISSIONS REDUCTIONS?

In its recent options **paper** (**slides**) for ways to strengthen the CES, MassDEP included one notable pathway that would expand the impact of the CES via regional coordination and long-term planning—a direction that we strongly support. Massachusetts has shown a willingness to engage in multistate clean energy procurements, as evidenced in the recent joint offshore wind procurement framework with Rhode Island and Connecticut. An updated regional CES with long-term planning requirements, a centralized auction process, and a contracting framework could be one means of cementing this type of multi-state/regional collaboration around procurements. —by working in harmony with the RPS in Massachusetts and other states. This could help drive new clean energy, more quickly, and affordably for all states involved.

HOW WOULD A CLEAN ENERGY STANDARD (CES) DRIVE LONG-TERM CLEAN ENERGY ADDITIONS?

In the northeast and beyond, it's clear that CES policies can drive considerable renewable capacity additions over the medium-to-long term as states move deeper into their decarbonization requirements. With a percentage-based standard, CES policies already ensure that a policy framework will be in place to continue growing renewable capacity additions as electricity demand begins to climb due to electrification-based load growth.



So, where do states go from here on their portfolio standards and clean energy procurements? It is clear that the current frameworks need some strengthening, and there are emerging new concepts under development in the Northeast to give agencies even more flexibility to procure clean energy credits, enter into contracts, and help get projects built faster. This is a major space to watch in 2024.

For Further Reading:

C2ES - Clean Energy Standards: State and Federal Policy Options and Considerations RFF - Exploring the options available for policymakers to implement a CES at the state or federal level. Climate Reality Project - <u>What Are Clean Electricity Standards?</u> NYSERDA (for New York's CES) - <u>https://www.nyserda.ny.gov/All-Programs/Clean-Energy-Standard</u> MassDEP (for Massachusetts' CES) - <u>https://www.mass.gov/guides/clean-energy-standard-310-cmr-77</u>

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