

STRENGTHENING THE CLEAN ENERGY STANDARD

Stakeholder Meetings – January 11, 2024

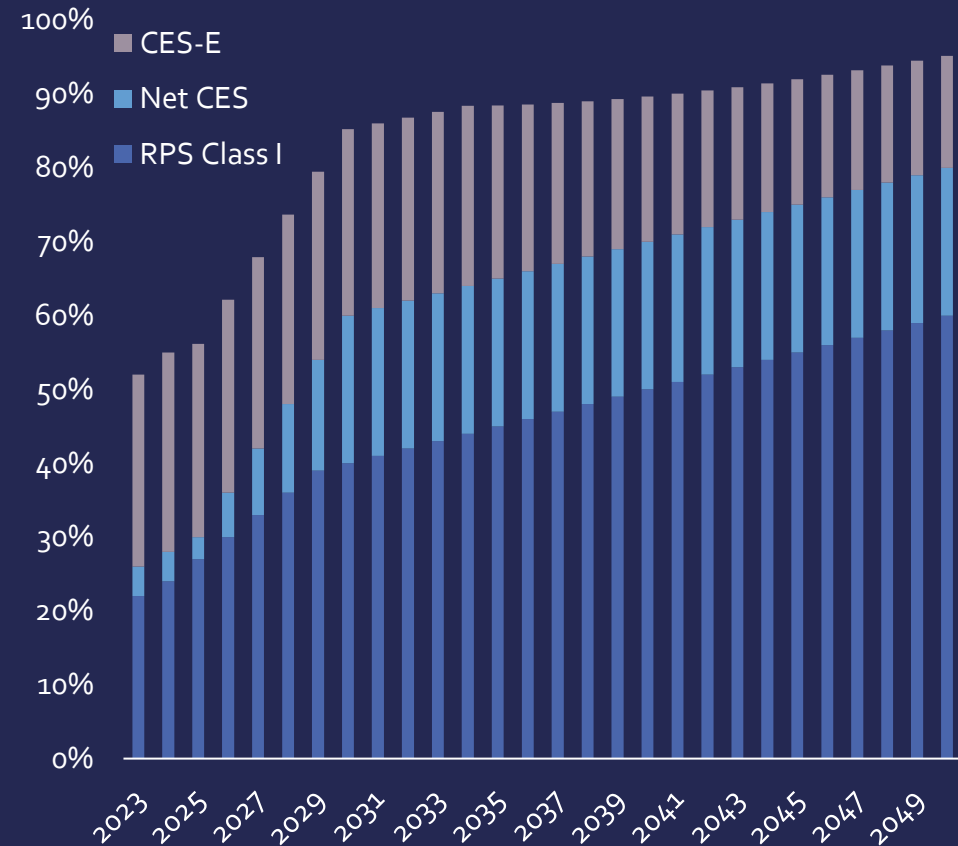


AGENDA

- Background
- Options for strengthening the standard
- Options for more comprehensive accounting
- Other options
- Next steps

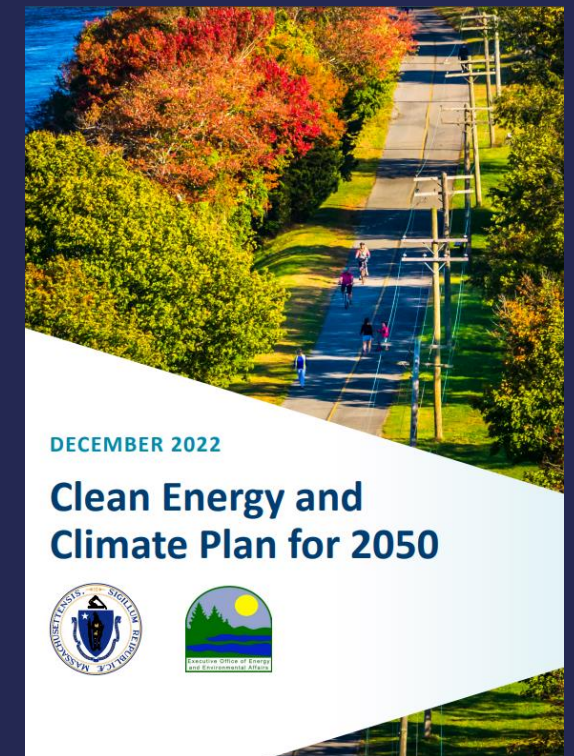
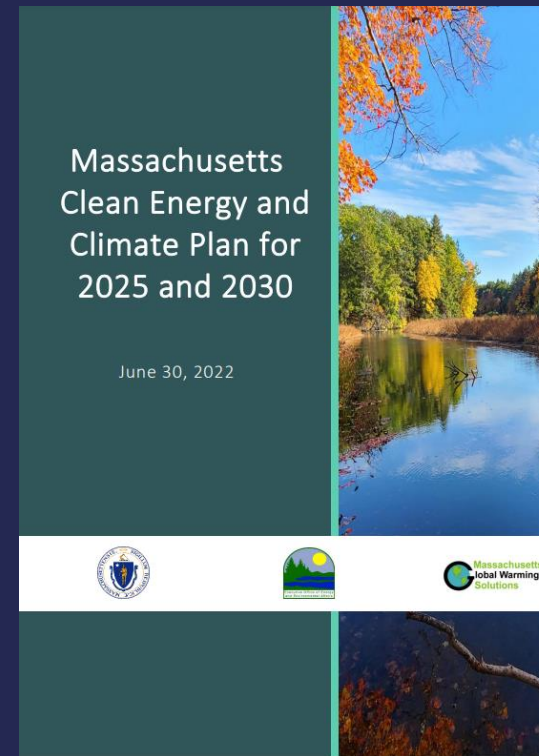
BACKGROUND

- Starting in 2018, Clean Energy Standard (CES) sets a minimum percentage of electricity sales that must come from new (post-2010) clean energy sources
- Renewable Portfolio Standard (RPS) Class I compliance counts towards the CES requirement
- In 2020, MassDEP finalized the CES-E, requiring a set amount of electricity from existing (pre-2010) clean energy resources starting in 2021



BACKGROUND

- A CES program review was completed in 2021
- Since that time Massachusetts has published the Clean Energy and Climate Plan for 2025 and 2030 (2025/2030 CECP), the 2050 CECP, and sector based GHG emissions limits for electric power in 2025 and 2030
- MassDEP is initiating a supplemental program review to consider options for strengthening the ability of the CES to support clean energy development in line with the latest CECPs and GHG emission sublimits



STRENGTHENING THE STANDARD

DEDICATE ACP FUNDS TO NEW CES-ELIGIBLE PROJECTS

Context

- When there is not enough clean energy in a particular year, obligated electricity suppliers comply by making Alternative Compliance Payments (ACPs) to MassDEP instead of purchasing CECs from clean energy generators
- Funds that would otherwise support clean electricity may be spent on clean energy projects or other projects or programs with greenhouse gas benefits

Potential changes

- Award competitive grants to project developers in exchange for future CECs that would be retired to make up for the CEC deficit that led to the ACP payment
- Include a general requirement that ACP funds be retained by MassDEP for use by MassDEP to purchase additional CECs (i.e., above the CES requirement) in future years when CECs are available at lower prices

STRENGTHENING THE STANDARD

INCREASE THE CES ACP RATE

Context

- MA CES ACP rate is the lowest in the region

State – Class I	2023 ACP (\$/MWh)
MA CES	\$35.00
MA RPS	\$40.00
CT	\$40.00
ME	\$50.00
NH	\$59.58
RI	\$76.53

Potential change

- Raise the CES ACP rate
 - Raising the ACP rate could increase the market price of clean energy certificates (CECs), which would tend to support development of additional clean energy
 - Raising the ACP rate would better ensure that when the regional supply of clean energy increases due to MA's clean energy contracts, the increase in regional supply is fully counted toward MA's clean energy goals vs. those of other states with higher ACP rates

STRENGTHENING THE STANDARD

NEW PROJECT REQUIREMENT

Context

- The CES does not distinguish between energy generated early in the operational life of a facility and energy generated later in that facility's operational life
- The ability to recoup construction costs more quickly after reaching commercial operation could facilitate the deployment of new clean energy resources

Potential changes

- Add a "recent vintage" requirement that would:
 - Require a fraction of each year's compliance obligation be met with CECs from generation with a commercial operation date in the prior three years
 - Have a relatively high ACP rate, thereby allowing new projects to quickly recoup construction costs

STRENGTHENING THE STANDARD REQUIRE LONG TERM PLANNING

Context

- The certainty associated with longer-term planning could facilitate the deployment of new clean energy resources

Potential changes

- Add some form of planning requirement, such as a requirement that a certain percentage of the compliance obligation be met via multi-year contracts with clean energy generators
- One option for implementing such a requirement could be the creation of an organized regional or Massachusetts-specific auction process for advance purchases from planned projects

COMPREHENSIVE ACCOUNTING

ADJUST FOR BTM GENERATION

Context

- CES compliance obligations are based on how much electricity is sold, not how much is used
- Behind-the-meter (BTM) generation, such as rooftop solar, may be credited toward compliance, but the portion of the electricity used on site is not included in the basis of the compliance obligation because it is never sold

Potential changes

- Include an adjustment to each year's compliance obligation to better capture electricity consumption at sites with BTM generation
- E.g., if this energy is estimated to account for 5% of total electricity consumption in the state in a year, retail electricity sellers could adjust their sales upward by 5% when calculating their CES compliance obligations

COMPREHENSIVE ACCOUNTING

REDEFINE THE NUMERICAL PERCENTAGE

Context

- CES includes the CES and CES-E as additive requirements, each expressed as a percent of electricity sales
- CES standard is set in regulation as a particular percent each year
- CES-E percent is established using electricity sales from four years before the compliance deadline to maintain the contribution of existing generators over time on a MWh basis

Potential changes

- MassDEP could specify the total amount clean energy contributed by both program requirements further in advance
- For example, a total standard of 95% could be established in regulation for a future year; then, if the CES-E contribution was determined to be 22% in that year based on electricity sales, the CES would automatically be set at 73% so that the sum of both components would equal 95%

COMPREHENSIVE ACCOUNTING

COUNT RPS CLASS II HYDROPOWER IN CES-E

Context

- Hydropower is generically recognized under the CES-E as clean energy, but hydropower used to comply with the MA Renewable Portfolio Standard (RPS) Class II program is not currently counted toward CES-E compliance

Potential changes

- Count MA RPS Class II compliance towards CES-E compliance
- Increase the CES-E standard accordingly to avoid reducing the combined impact of RPS Class II and CES-E

COMPREHENSIVE ACCOUNTING

IMPROVE TEMPORAL MATCHING

Context

- Clean electricity counted under the CES does not need to be generated when there is corresponding demand for electricity in Massachusetts

Potential changes

- Exclude clean energy generated during periods of negative wholesale electricity prices from generating CECs. This would avoid rewarding the production of clean electricity when it is not needed
- Implement quarterly or monthly compliance periods such that the clean electricity used for compliance would need to be generated in the quarter or month when the electricity sales occurred

OTHER OPTIONS

UPDATE ELIGIBILITY CRITERIA

Context

- For resources that do not qualify for RPS, CES eligibility requires a 50% reduction in GHG emissions relative to an existing efficient natural gas-powered facility on a lifecycle basis
- Biomass energy that does not qualify for the RPS Class I program cannot qualify for the CES, but this is not clearly stated in regulation

Potential changes

- Increase the benchmark for resources that do not qualify for RPS Class I to a 90% reduction, consistent with recently proposed [EPA standards](#) for natural gas-fired facilities
- Clearly state that biomass energy that does not qualify for the RPS Class I program and not eligible for CES

OTHER OPTIONS

JUST TRANSITION FEE

Context

- There are not currently fees associated with CES qualification, CEC transfers, or CEC retirements for compliance

Potential changes

- Fee required of some or all qualifying clean energy resources
- Fee associated with CES qualification, transfers of CECs, or the use of CECs for compliance
- The fees collected would be used to support equitable siting of CES-eligible projects, such as solar on rooftops in low-income communities



Submit comments to
climate.strategies@mass.gov by
[DATE]



CES Website:
<https://www.mass.gov/guides/clean-energy-standard-310-cmr-775>

NEXT STEPS