



MAINE DEPARTMENT OF
Energy Resources

Assessing Maine's Renewable Portfolio Standard (RPS)

Public Stakeholder Webinar

June 17, 2026

Agenda

- Welcome
- Overview of DOER and RPS
Assessment Background
- Study Process and Timeline
- Benefit Cost & Impact
Methodology
- Q&A
- Next Steps



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Maine Department of Energy Resources (DOER)

Maine's cabinet-level energy department that leads energy policy, planning, and development for the State.

maine.gov/energy



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What is a Renewable Portfolio Standard (RPS)?

- Policy used in 29 states to incentivize the use of renewable electricity.
 - An RPS requires electricity suppliers to deliver a minimum amount of renewable electricity as a percentage of their total sales.
- Renewable Energy Certificates (RECs) are the accounting mechanism used to track and attribute renewable energy produced by generators and sold to customers.
- All New England states have an RPS.



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Maine's Renewable Portfolio Standard

The RPS was established in 1999 “to ensure an adequate and reliable supply of electricity for Maine residents and to encourage the use of renewable, clean, efficient and indigenous resources...” 35-A M.R.S. §3210.

Today, Maine's requires:

- 100% of Maine's electricity to be clean, including 90% renewable, by 2040.

Triennial Assessment of Maine's RPS

Maine law requires DOER, in consultation with the Public Utilities Commission, to review Maine's RPS every 3 years beginning in 2024 (35-A M.R.S. §3210 sub-§11).

The assessment is informed by public input and considers:

- Status and impacts of the implementation of the RPS requirements;
- Impacts of the RPS on energy prices; and
- Benefits, including, but not limited to, reduced greenhouse gas emissions and the economy of the State.

The 2024 study identified \$21 million in average annual ratepayer savings, \$100 million in investment, and >1,000 jobs.



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Assessment of Maine's Renewable Portfolio Standard: **Benefit Cost & Impact Methodology**

Sustainable Energy Advantage, LLC & EBP US, Inc.

In collaboration with the Maine Department of Energy Resources

June 17, 2026

Introductions

- SEA

- Consulting & advisory firm, founded in 1998.
- National leader in clean energy policy and market analysis.
- SEA has been conducting detailed analysis of the New England Renewable Portfolio Standard landscape on a continuous basis since 2005.



- EBP

- Consulting firm focused on evaluating economic performance and impacts.
- Nationally known for evaluating state and regional programs, with specific expertise in retrospective evaluation.
- SEA & EBP have collaborated successfully on multiple past projects, including the 2024 assessment of Maine's RPS.



RPS Assessment: Overview & Objectives

1. Regional (incl. Eastern Canada) comparison of RPS policy details.
2. Assess the status and impact of the Maine RPS *to date*...
 - a) Analysis of compliance activity
 - b) Benefit-Cost Analysis is one component of this (analysis rooted in actual RPS compliance data)**
 - c) Prior report: 2008 – 2022
 - d) This report: 2008 – 2024; focus = evaluation of new compliance data (i.e., 2023 and 2024 compliance years)
3. Discussion of current market dynamics and potential implications for region.



Schedule & Stakeholder Engagement

Tasks	Schedule	Stakeholder Engagement
<u>Methodology & Research Phase:</u> Develop draft BCA Methodology Develop regional RPS Summary	May – June	
Introduction of RPS study, BCA Methodology w/ Stakeholders <u>Stakeholder Webinar #1 (Today)</u>	June 17	Verbal comments today Written comments due on July 1
<u>Analysis Phase:</u> Assess the Status and Impact of the ME RPS to date; Cost, Benefits, and Economic Impact Assessment	July	
<u>Drafting Phase:</u> Compile Draft Report	August	
<u>Review Phase:</u> Draft Report available for review and comment <u>Stakeholder Webinar #2</u>	August - September	Requesting Verbal and Written Comments
Final Report	March 2027	



Approach to BCM

Overview

High-level steps of a BCM include:

1. Establish the “counterfactual(s)” (i.e., outcomes if the RPS did not exist)
2. Identify benefit/cost categories for analysis
3. Identify the perspective(s) for benefit/cost analysis
4. Select benefit/cost categories for each perspective
5. Calculate benefits/costs compared to the counterfactual, by category
6. Aggregate total net impact of costs and benefits for each perspective

Today's Discussion of Key Assumptions

Key modeling topics included in this presentation:

1. Define the counterfactual(s) → What alternative (theoretical) outcome are we comparing to?
2. Identify the analytical perspectives → Establishes the lens through which policy impacts will be assessed.
3. Select costs/benefits applied to each perspective(s) → Clarifies which impacts are included in each analysis.

This presentation provides a proposed approach for stakeholder comment.



Counterfactual

Overview of Counterfactual Considerations

- Assessing the benefits/costs of the ME RPS requires answering the question ***“compared to what”*** → need to define the outcome assuming there was no ME RPS (this is called a “counterfactual”)
 - Requires quantifying which MWh and MW are attributed to the RPS → **this analysis uses actual RPS compliance data to assign attribution (see next slide)**
- Net benefits of RPS = Net benefits under RPS (actual) – Net benefits under “no RPS” counterfactual (theoretical)
- Forming a counterfactual involves judgment calls → A common approach is to **present multiple scenarios to bound results**
- Objective = balancing conceptually meaningful cases with data availability and analysis schedule

Counterfactual Approaches

- The consulting team proposes to adopt two counterfactuals:
 - **Full Attribution Counterfactual:** Assumed any MWh retired for compliance is attributed to the RPS, and would not be present under the counterfactual
 - Represents the theoretical upper bound
 - Approach taken by 2024 RPS BCA
 - **Partial Attribution Counterfactual:** Review asset types used for RPS compliance and consider which may have been (at least partially) driven by other policies or market dynamics
 - Represents a lower bound
 - Use asset category-specific determinations to adjust compliance-based MWh to produce an adjusted counterfactual
 - Examples: (a) refurbishments (Class II → Class I) or (b) Class II resources operating at pulp & paper mills
 - Proposal = Apply 2 counterfactuals: a full and a partial.
 - See later slides for details.

Benefit/Cost Categories & Perspectives

Costs/Benefits Categories

The consulting team proposes to include the following components:

- **Cost of Compliance:**

- Costs associated with fulfilling RPS compliance obligation (i.e., RECs/ACPs)

- **Wholesale Price Suppression (Ratepayer Savings):**

- Savings in Wholesale Energy/Capacity Costs (e.g., Demand Reduction Induced Price Effect (DRIPE) impacts)

- **Economic Benefits (Income Generated from Investments in Renewables):**

- (A) Construction, (B) Operation, (C) Reduced Monetary Outflows
(not applicable under a strict ratepayer perspective)

- **Value of Emission Reduction Benefits:**

- Reduced Emissions (not applicable under a strict ratepayer perspective)

 ***Net Benefit = \$ Benefits – \$ Costs***



BCA Perspective Overview

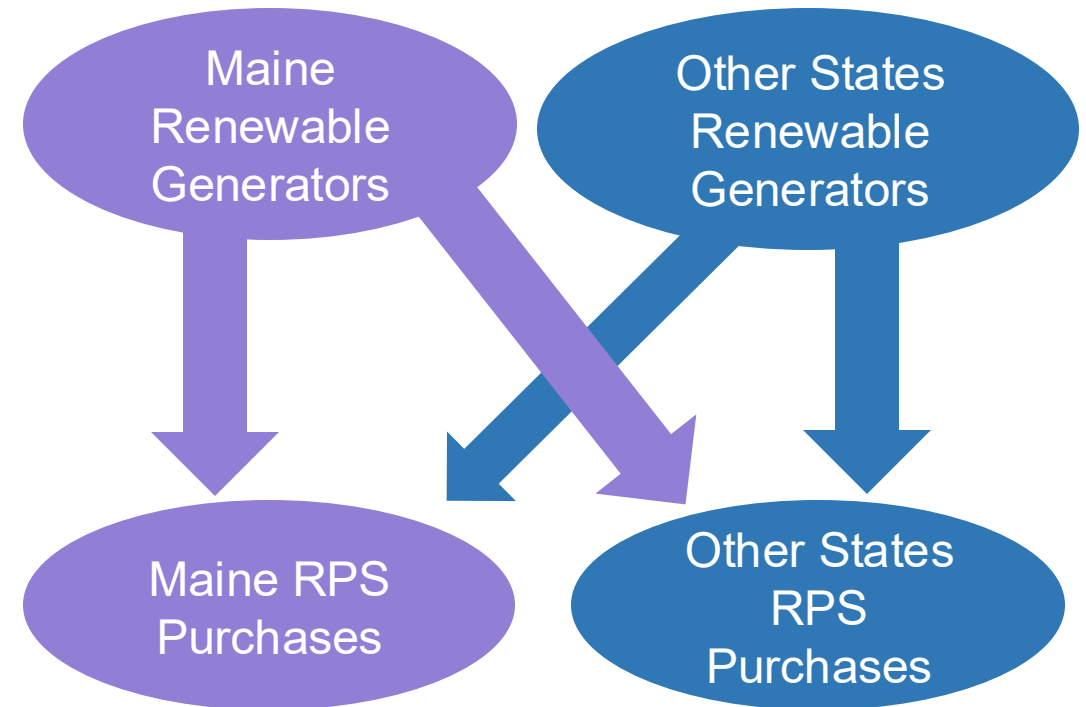
- An assessment of net benefits of any policy change begs the question “**from what perspective?**”
 - **Forms the foundation that determines which benefits/costs count**
- Consulting team proposes **adoption of the following perspectives:**
 - **Ratepayer Perspective** – Only quantifying costs/benefits realized in dollar terms by ratepayers
 - **Maine Economy Perspective** – Ratepayer perspective + wider economic impacts from the RPS in-state
 - **Societal* Perspective** – Includes out of state (but within region) economic/price impacts and emission reduction benefits (globally)
- Multiple perspectives warranted as each offers applicability to interests/contexts utilizing a RPS BCA analysis

**This analysis will not include out of state indirect/induced economic impacts.*



Regional Interactions

- RPS requires Renewable Energy Certificate (REC) retirements in Maine, but it cannot control where renewable certificates originate → Maine's RPS drives out-of-state development, and neighboring states' RPS policies drive in-state development
- **Implication:** limiting perspectives to only look in-state excludes a material portion of benefits which would be counted under a region-wide RPS BCA



Overview of Modeling Cases

- Taken together, the two counterfactuals and three perspectives form for six sets of results (cases)
- Objective = Leverage range of findings to discuss how to maximize the potential benefits of Maine's RPS.

Counterfactual → Perspective ↓	Full Attribution Counterfactual	Partial Attribution Counterfactual
Ratepayer Perspective	Case 1	Case 2
Maine Perspective	Case 3	Case 4
Societal Perspective	Case 5	Case 6



Summary of Net Benefits:

By Perspective and Attribution

- The impacts of each category will be rolled up, by perspective and attribution, to determine the final net costs/benefits of the RPS under each case

Full Attribution	Perspective	RPS Compliance Cost	Wholesale Price Suppression	Economic Benefits	Emission Reduction Benefits	Geographic Scope of Benefits
	Ratepayer Perspective	Included	Included	Excluded	Excluded	In-State Only
	Maine Economy Perspective	Included	Included	Included	Excluded	In-State Only
	Societal Perspective	Included	Included	Included	Included	Region-wide

Partial Attribution	Ratepayer Perspective	Included	Included (Partial)	Excluded	Excluded	In-State Only
	Maine Economy Perspective	Included	Included (Partial)	Included (Partial)	Excluded	In-State Only
	Societal Perspective	Included	Included (Partial)	Included (Partial)	Included	Region-wide





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Questions?

Help Shape the Assessment

- Feedback on Benefits – Cost
Methodology
Broader feedback to inform RPS
Assessment
Are there any data or information
sources we should consider?

Next Steps

- First round of comment - due July 1, 2026 to doer@maine.gov
- Slides and summary to be posted: maine.gov/energy/current-studies/rps
- Next meeting and public comment – Sept. 2026
- Final Report due March 31, 2027





Help Shape the Next Energy Plan

maine.gov/energy/plan

- DOER is preparing the 2027 Maine Energy Plan
- Request a meeting or a presentation with DOER staff
- Sign up for email updates to stay informed of the plan
- Share your feedback using the online survey



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Thank You

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