

October 25, 2022 Vermont Workshop: Opportunities to Improve How Regulatory Agencies Address Climate Change

Workshop Goals & Outcomes

Brown University engaged Synapse Energy Economics and Climable to host a series of workshops in New England states. The purpose of these workshops is to collaborate and crowdsource ideas from stakeholders on the opportunities and challenges for regulatory agencies implementing lasting and equitable climate and energy solutions.

The effort includes:

- [a background report](#) to summarize research about best practices, barriers, and opportunities across New England states.
- [public workshops](#) in each state to gather stakeholder input and facilitate collaboration on solutions.
- a final report to accumulate and enable action on lessons learned and next steps for all New England states.

WORKSHOP AGENDA

3:00-3:05	Welcome & Logistics
3:05-3:25	Briefing on the Project and Vermont's First Workshop
3:25-4:10	Breakout Session #1: Brainstorm on Public Utility Commission (PUC) Actions
4:10-4:55	Breakout Session #2: Brainstorm on Support for Other Stakeholders
4:55-5:00	Wrap Up, Next Steps, & Distribute E-Survey

SUMMARY OF PRIORITIES AND ACTIONS FROM THE PREVIOUS WORKSHOP

The following is a summary of the priorities and actions from the in-person workshop in your state. Please note that the summary is two pages.

Priorities	Actions
Promote Equity and Environmental Justice	A. Performance metrics should include housing and equity improvements.
	B. Vermont needs guiding principles for equity and environmental justice and these principles should be integrated into program planning and design.
	C. The Public Utility Commission (PUC) needs staff that focus solely on equity.
	D. Bottom-up planning is needed to ensure representation and accessibility for low- and middle-income residents and workers.
	E. Existing low-income programs, such as Green Mountain Power's community solar program, need to evolve to truly support low- and middle-income residents.
	F. Education on green jobs should expand outside of technical colleges and reach middle and high school youth.
Strengthen Leadership and Coordination	G. Vermont's Climate Action Plan should be updated to focus on electrification, especially transportation.
	H. State agencies addressing the environment, housing, and labor should coordinate with a common purpose.
	I. The PUC needs to conduct more outward engagement and communicate better.

Priorities	Actions (cont'd)
Increase and Sustain Funding	J. Maximum income brackets for incentives need to be higher so more people can afford the transition to clean energy sources.
	K. Tax increases should be implemented and target those with additional homes in the state and live in Vermont part-time.
	L. Financing is needed to defer upfront costs and encourage diverse participation.
	M. Electric vehicles should be accessible to low- and middle-income residents.
	N. Weatherization programs need to address renters.
	O. Municipalities need state support, especially rural municipalities with limited staff capacity and local energy commissions.

DISCUSSION QUESTIONS

This workshop is designed to further develop the actions shown in the table above. Please reference this table as you work with others to develop responses to these questions.

1. What steps should the Public Utility Commission (PUC) take to address the actions equitably?
2. Please select a few actions from the table. How can stakeholders (outside of the PUC) be empowered to meaningfully engage and lead on these actions?

CLIMATE GOALS & PROGRESS

Vermont adopted climate goals, but they are less stringent than other New England states. Vermont has made little progress towards its 2030 greenhouse gas reduction goal. Key challenges include Vermont’s transportation and thermal (heating fuel) sectors which represent more than 70 percent of greenhouse gas pollution. Also, some people are critical of the state’s reliance on wood and wood waste for electricity generation and heating.

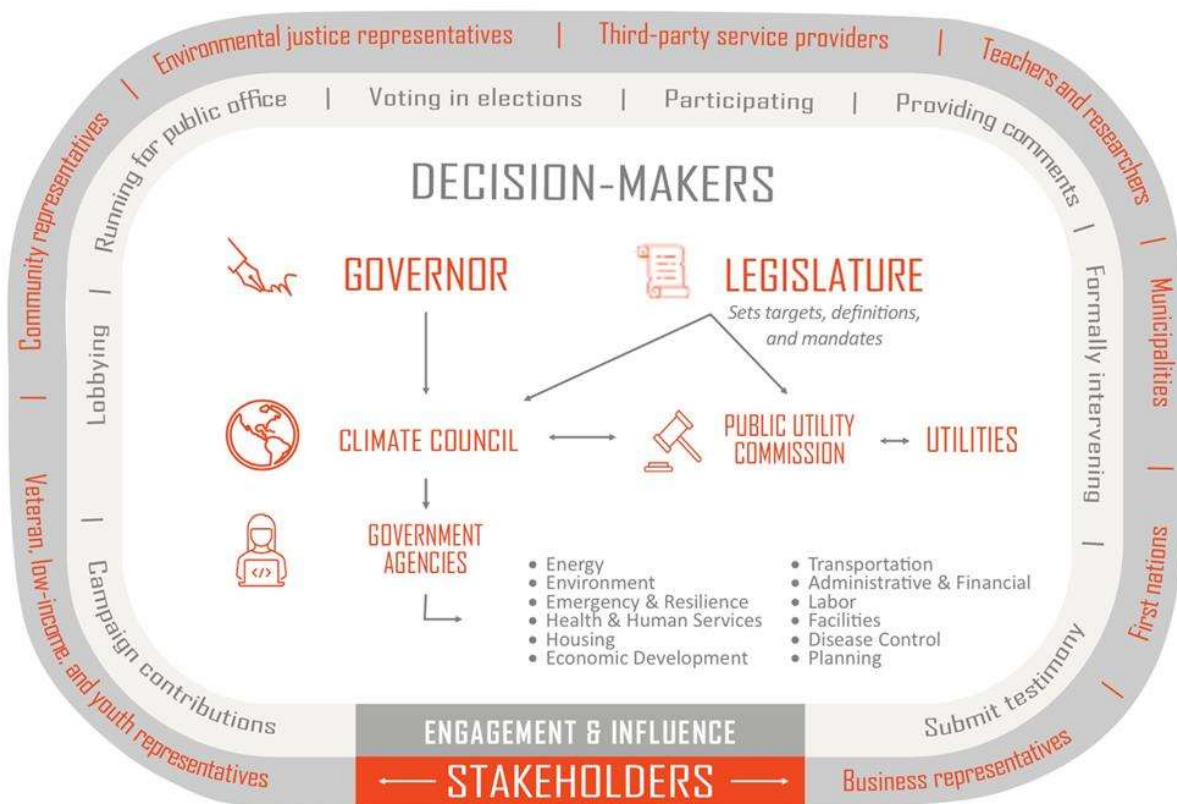
Table 1: New England State Climate Goals and Achievements

Climate Goals		CT	ME	MA	NH	RI	VT
Greenhouse Gas Emissions Reduction Goals	Baseline	2001	1990	1990	None	1990	1990
	By 2030	45% (18%, 2018 act.)	45% (18%, 2017 act.)	50% (22%, 2018 act.)		45% (-2%, 2018 act.)	40% (0.51%, 2019 est.)
	By 2050	80%	80%	100%		100%	80%
Renewable Portfolio Standards		40% (by 2030)	80% (by 2030) 100% (by 2050)	40% (by 2030)	25% (by 2025)	100% (by 2033)	75% (by 2032)
Energy Efficiency Savings Targets (% of Total Sales)		1.1% (2019-2021)	2.3% (2020-2022)	2.7% (2019-2021)	0.6% (2022 est.)	2.5% (2018-2021)	2.4% (2018-2020)
Energy Storage Requirements		1,000 MW (by 2030)	300 MW (by 2025) 400 MW (by 2030)	1,000 MWh (by 2025)	None	None	None

Source: Synapse Energy Economics. (2022). A Better New England Regulatory Framework for Mitigating Climate Change. Available at: <https://www.synapse-energy.com/project/study-climate-action-and-public-utility-commissions-new-england-states>. Updated 8/31/2022.

CLIMATE DECISION-MAKERS AND STAKEHOLDERS AND THEIR ENGAGEMENT AND INTERACTIONS

During this discussion, it will be important to consider the entities in each state that have power and influence, what their sphere of influence is, and what mechanisms they use to exert their influence. The figure below provides a generalized depiction of the various entities that may be involved in climate decision-making. It is important to note that this figure is not state-specific, and some entities such as Climate Councils may not be present in every state. One of the key points shown here is that Public Utility Commissions, the core regulators of electricity and gas utilities, are central to state climate action.



Source: Synapse Energy Economics. (2022). A Better New England Regulatory Framework for Mitigating Climate Change. Available at: <https://www.synapse-energy.com/project/study-climate-action-and-public-utility-commissions-new-england-states>.

GLOSSARY OF TERMS

Acronym	Name	Definition
DER	Distributed Energy Resource	Technology for generating and managing electricity at the place of consumption
DR	Demand Response	Reducing energy consumption on the consumer side during peak demand
DSM	Demand-Side Management	Managing demand for energy on the consumer side to reduce overall consumption
DSP	Distribution System Planning	Planning for the incorporation of DERs into the grid, oftentimes by improving grid flexibility
FERC	Federal Energy Regulatory Commission	An independent agency that regulates the interstate transmission of electricity, natural gas, and oil. FERC also reviews proposals to build liquefied natural gas (LNG) terminals and interstate natural gas pipelines as well as licensing hydropower projects.
FIT	Feed-In Tariff	A policy guaranteeing a price for each unit of renewable energy generated
ISO	Independent System Operator	An independent organization that coordinates, controls, and monitors the operation of the electrical power system. New England's system operator is ISO New England (ISO-NE)
PIM	Performance Incentive Mechanism	A policy that encourages utility performance in areas such as reliability, safety, customer service, and energy efficiency
PTC	Production Tax Credit	Federal tax credit that incentivizes renewable generation
REC	Renewable Energy Certificate	Certificate representing renewable energy generation that utilities must purchase to fulfill RPS requirements
RGGI	Regional Greenhouse Gas Initiative	A cooperative, market-based effort among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Virginia to cap and reduce CO2 emissions from the power sector
RPS	Renewable Portfolio Standard	A regulation requiring increased production in renewable energy, usually involving a percentage goal by a specified year

Sources:

1. Harvey, Hal, Robbie Orvis, and Jeffrey Rissman. *Designing Climate Solutions: A Policy Guide for Low-Carbon Energy*. Island Press. November 2018. Available at: <https://islandpress.org/books/designing-climate-solutions>
2. American Council for an Energy Efficient Economy website. Available at: www.aceee.org
3. Synapse Energy Economics website. Available at: www.synapse-energy.com
4. Regional Greenhouse Gas Initiative website. Available at: www.rggi.org
5. King, Dawn. *Energy Policy and Politics*. Brown University Class.