June 28, 2022 Connecticut 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:

- <u>a background report</u> 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

12:30-1:00	Sign-In, Coffee & Snacks
1:00-1:10	Welcome & Logistics
1:10-1:30	Briefing on Connecticut Climate Goals, Progress, Best Practices, and Barriers
1:30-2:20	Breakout Session #1: Idea Brainstorming
2:20-2:30	Break
2:30-3:20	Breakout Session #2: Force Field Analysis and Idea Prioritization
3:20-3:50	Wrap Up and Next Steps







DISCUSSION QUESTIONS

- 1. In addition to what is already underway, what else can be done to meet Connecticut's climate goals? How does equity fit in with these ideas?
- 2. What policies and programs need to be in place to support the development of equitable utility regulation and climate action in Connecticut?

CLIMATE GOALS & PROGRESS

Connecticut has a legally binding goal to reduce emissions by 45 percent below the baseline by 2030 and 80 percent by 2050. In recent years, Connecticut legislators increased the greenhouse gas emissions reduction targets and Renewable Portfolio Standards. The state also has an energy storage requirement and energy efficiency savings target of 1 percent of annual sales.

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Climate Goals		СТ	ME	MA	NH	RI	VT	
Greenhouse Gas Emissions Reduction Goals	Baseline	2001	1990	1990	None (Non- binding goal of at least 25-35% by 2030)	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)	39% (by 2035)	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: <u>https://www.synapse-energy.com/project/study-climate-action-and-public-utility-</u> <u>commissions-new-england-states</u>. Updated 5/2/2022. In 2018, Connecticut was less than halfway to its 2030 greenhouse gas emission reduction goal. Earlier this year the Department of Energy and Environmental Protec[®] on (DEEP) reported that the state is still not on track to meet its targets to reduce greenhouse gas emissions and noted that significantly reducing transportation emissions will require further improvements to fuel economy by increasing adoption of zero-emission vehicles and reducing vehicle miles traveled.



Figure 1: Connecticut Greenhouse Gas Emission Reductions, Compared to Other States and Goals

Source: Connecticut data from 2018 Connecticut Greenhouse Gas Emissions Inventory. (2021). Available at: https://portal.ct.gov/-/media/DEEP/climatechange/GHG_Emissions_Inventory_2018.pdf.

CONNECTICUT BEST PRACTICES

 Connecticut was the first state in New England to enact environmental justice legislation in 2008 which increased public participation in decisions regarding the siting and expansion of facilities such as power plants. In 2020, Connecticut lawmakers strengthened the law by requiring facility owners to improve public communication, conduct public hearings at a time and location that is convenient for residents, and provide funds to mitigate environmental impacts on communities located near facilities. In addition, the Public Utilities Regulatory Authority (PURA) initiated and made progress on several aspects of the Equitable Modern Grid Initiative which incorporates environmental, equity, and resilience into PURA's goals. Connecticut has a Governor's Council on Climate Change, which includes 23 members from state agencies, quasi-public agencies, businesses, local governments, and nonprofits. Also, the Energy Office, Environment Office, and PURA are part of the Energy Branch of DEEP. The legislature recently integrated the greenhouse gas emission reduction goals into the Comprehensive Energy Strategy and Integrated Resource Plan.

CONNECTICUT BARRIERS & CHALLENGES

- Efforts to build a regional Transportation and Climate Initiative fell through because of successful lobbying from opposition groups such as Yankee Institute for Public Policy and the Koch family, among others.
- In 2020, Eversource spent the second largest amount on lobbying within the state. Stakeholders representing customer, environmental justice communities, and environmental interests do not have the ability to meaningfully compete with coordinated and well-funded lobbying efforts, which can result in disproportionately greater utility influence and power for utilities at PURA and at the legislature.
- While the Equitable Modern Grid Initiative is a means through which PURA and other state agencies can develop programs to better align with state targets, it will likely need additional support to enable transportation-sector emission reductions. Also, PURA issued a final decision implementing a statewide electric storage program that offers incentives and programs in support of the state's goal of deploying 1 GW of energy storage resources by 2030. However, the state's interconnection rules exclude storage, which hinders streamlined connection to the electricity grid.
- Connecticut may also experience issues mentioned in other states such as a lack of technical support for decision-makers and low public awareness and participation in Public Utility Commission proceedings.

SOURCES AND ADDITIONAL RESOURCES

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- NH Department of Environmental Services. (2017). Greenhouse Gas Emissions Inventory. Available at: <u>https://www.des.nh.gov/climate-and-sustainability/climate-change/greenhouse-gas</u>.
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- 4. National Regulatory Research Institute. (2021). *Clean Energy Policy Tracker*. Available at: https://www.naruc.org/nrri/nrri-activities/clean-energy-tracker/
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- 8. RI Department of Environmental Management. (2022). Greenhouse Gas Emissions Inventory QuickFacts. Available at: <u>http://www.dem.ri.gov/programs/air/ghg-emissions-inventory.php</u>.
- American Council for an Energy Efficiency Economy. August 2020. Energy Efficiency Resource Standards. Available at: <u>http://www.database.aceee.org/state/energy-efficiency-resource-standards</u>
- 10. The State of Connecticut. June 16, 2021. An Act Concerning Energy Storage. Available at: http://www.cga.ct.gov/2021/ACT/PA/PDF/2021PA-00053-R00SB-00952-PA.PDF
- 11. The State of Maine Governor's Energy Office. June 2021. Energy Storage. Available at: <u>http://www.maine.gov/energy/initiatives/renewable-energy/energy-storage</u>.
- 12. Massachusetts Department of Energy Resources. December 12, 2018. Massachusetts Comprehensive Energy Plan. Available at: <u>http://www.merrimack.edu/live/files/3300-</u>massachusets-comprehensive-energy-plan-2018pdf.

GLOSSARY OF **T**ERMS

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
РТС	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:

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