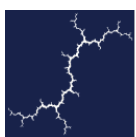
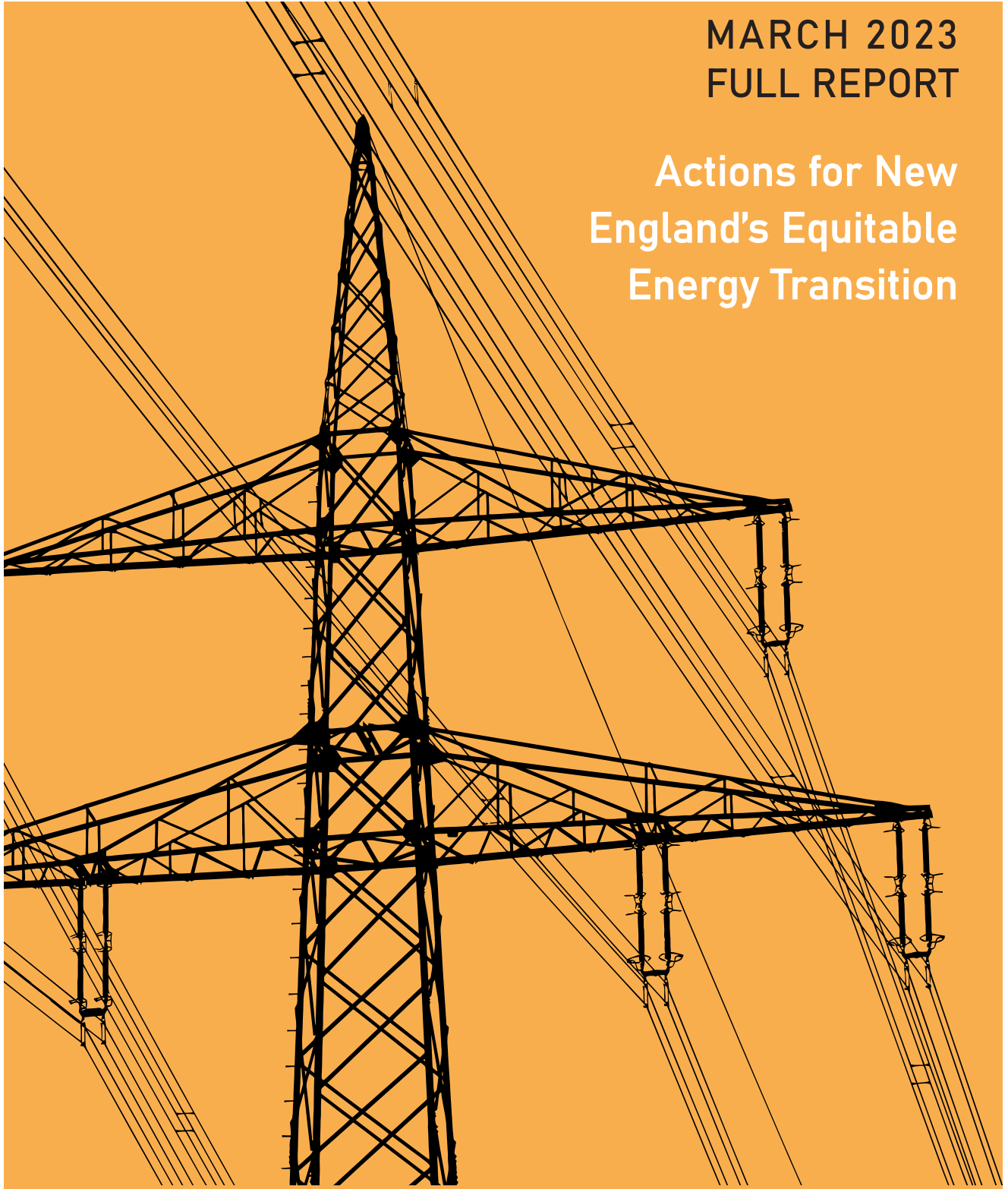


POWER PLAY

MARCH 2023
FULL REPORT

Actions for New
England's Equitable
Energy Transition



Synapse
Energy Economics, Inc.



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Foreword

Greetings to all interested in a better future for New England.

My Climate and Development Lab at Brown University recently received some funding from an alum to advance “solutions to climate change.” Having worked at the state level here in Rhode Island advancing climate action, and after conducting research across the region, I decided to focus on a key piece of the problem of transition that was barely studied, and completely below the radar for most people: the state government commissions set up to regulate electrical and gas utilities. To get the project done well, I hired the two top consulting groups to help: the technical firm Synapse Energy Economics and Climable, a women-run outreach and technical translation nonprofit. Together we planned and conducted 12 workshops with interested stakeholders, one in person in each of New England’s state capitals, and one online for each. The workshops included a wide variety of stakeholders, including Public Utility Commission (PUC) staffers, legislators, utilities, renewable energy companies, environmental advocates, environmental justice organizations, and Tribal Nations.

These were interesting, exciting, and heartening events, and they provided us with piles of ideas and inputs from people in each state about how we might move forward. This report is a distillation of those ideas, organized by which actors can help: legislators, governors and their state agency staffers, public utility commissions, and communities—the interested public. One can read the report front to back, or (more likely), flip to the target group you care about or identify with.

We want to express our gratitude to all who attended workshops and shared their ideas. We consider this report a work-in-progress. We’d love your response, and inputs on how to improve it, and how we can all move forward on this crucial transition. Thanks!

Timmons Roberts
Director, Climate and Development Lab,
Institute at Brown for Environment and Society

Dear Readers,

The enormous importance and critical timeliness of climate action by states is a function of its context: climate change issues must be addressed tangibly now and public utility commissions have a key role in having this happen. Yet public utility commissions are essentially new to this kind of work.

Public utility commissions are a product of the Progressive era—think of Teddy Roosevelt and Woodrow Wilson. Think of the need to get a handle on geographically based monopolies, electricity, wires-based telephone systems, trolleys, and drinking water supplies. Public utility commissions were set up as quasi-judicial entities, and as they evolved rate-making was a core concern. Their formation during the second industrial revolution was driven by electrification and internal combustion engines, which together shaped the modern life of the twentieth century. The operating paradigm in the second industrial revolution was centralized/concentrated production of a good or service, and then distribution on a “one-way street” out to the end consumer. Consumers paid the bill. The function of these commissions was to assure reliability and continuing viability of the utility service, with rates that were adequate and affordable to consumers. In fact, the impacts on consumers were established as a primary concern, with great sensitivity to near-term rate increases. Short-term thinking became nearly predominant.

But we are now in the third industrial revolution, the digital age of “information and communication” (Robert Gordan’s definition) characterized by its pivotal years from 1994–2004. Now smart grids are possible, two-way flows to and from consumers are readily facilitated, and distributed generation can be accommodated (and in some instances can alleviate the need for additional electrical distribution capacity).

The period 1990 through 2015 was also a time of a profound shift in electrical generation capacity from nuclear power, oil, and coal being dominant to natural gas meeting more than half of the generating capacity need. This brought power plant emissions down, especially from coal-fired plants. But natural gas is a fossil fuel, and it too must be retired if greenhouse gas emission reduction goals are to be met.

The shift away from natural gas could well involve fundamental systems change. Such a shift could be characterized as fracturing the “equilibrium” of the energy system that evolved during the fossil fuel era. A new equilibrium, with net zero greenhouse gas emissions, needs to be achieved. For public utility commissions, development of the new equilibrium—with its own processes of continuing evolution—could in effect constitute regime change. This would be a sharp movement from the second industrial revolution basis of thought into a new one organized on third industrial revolution capabilities.

This is the challenge now faced by New England, a region that for a good century or so has considered energy issues on a regional basis. The early 1970s saw the organization of the New England Power Pool (NEPOOL). ISO-New England came into being in the later 1990s to run the wholesale electricity markets, and it began functioning as a “regional transmission organization” in 2005.

Yet in key respects, there isn't one New England: there are three. First, there is a northern New England of rural poverty, especially in Maine. Second is the New England of old industrial cities which no longer have a powerful and vibrant manufacturing base, and which now have diverse immigrant populations.

And third, there are the knowledge economy and financial powerhouses of the Boston and the New York metropolitan areas. At the street level, it often appears that these three New England's understand each other little and communicate with each other almost not at all. Each has its own tempo of daily life and value systems. The latter of the three is immensely rich and powerful, even by global standards.

This reality, such as it is, makes the issue of environmental justice much more than something to be defined primarily as procedural fairness. Substantive fairness and equity are basic issues, as are identity and the reality of different communities; these must be recognized and honored and a full respect for their agency must be established.

Public utilities commissions have their own distinct political culture. They are comfortable dealing with the entities they regulate: utilities. They speak the same language. In many respects, this is a natural outcome and a good thing. But it can also anchor thought and decision-making processes in the present.

Law professors Brooks, Jones, and Virginia in their classic book *Law and Ecology* observe how fundamentally different ecology and environmental law and policy are. The former seeks to understand interdependencies in nature, while the latter is pragmatic and built on incremental decisions by courts, legislatures, and agencies. The professors ask: "How can these two very different disciplines be joined within one ecosystem regime" (page 365).

The questions posed by this project, at its core, ask you to participate in this joining of disciplines, and do this in a context that faces climate change realities. These workshops and reports are much needed; they provide us a rare opportunity to bring a range of voices to this transformative task of building a new equilibrium with net zero greenhouse gas emissions.

Yours is exciting work!



With best wishes,

Kenneth F. Payne, President
Civic Alliance for a Cooler Rhode Island

AUTHORS

Synapse Energy Economics, Inc.

Jennifer Kallay, Lamia Hossain, Tim Woolf

Climable

Jen Stevenson Zepeda, Sophie Kelly

Brown University Climate and Development Lab

Timmons Roberts, Grace Austin, Jared Hearn, Pilar McDonald, Juliana Merullo, Callie Rabinovitz, Susan Tang, Emma Vernarde

ACKNOWLEDGMENTS

We would like to thank the hundreds of participants who joined us in person across the six New England states (and online) over the last 12 months. This study would not be possible without them. And thank you to the Climate Solutions Initiative at Brown University for supporting this work.

Suggested citation:

Synapse Energy Economics, Climable, Brown University Climate and Development Lab. 2023. *Power Play: Actions for New England's Equitable Energy Transition*. Full report. [Climable.org](https://climable.org).

Executive Summary

Progress towards reducing greenhouse gas emissions is slow-going but picking up. In recent years, legislatures in most New England states passed ambitious targets for reducing their greenhouse gas emissions. Multiple states have enacted legislation establishing public utility commission (PUC) authority to achieve greenhouse gas emission reduction goals, but only some PUCs have reflected this authority in their mission and vision statements and many consider this responsibility secondary to goals of safety, reliability, and cost. Public understanding and appreciation of PUC roles and responsibilities with regards to climate action is low and the ability of the public to access and influence PUCs remains limited. All these factors are significant barriers to climate action, and as a result of these barriers, no state appears to be on track to achieve its 2030 greenhouse gas emission reduction goals.

Electric and gas investor-owned utilities and the state PUCs that regulate them are central players, given utilities' major role in the production of greenhouse gas emissions and the need to switch to renewable, zero carbon energy. Further, the role of electric utilities is slated to expand rapidly as electrification of the heating and transportation sectors increases the electricity use of all existing customers and absorbs uses that were once served by other fuels such as oil, gas, gasoline, and diesel.

In late 2021, the Brown University Climate and Development Lab partnered with Synapse Energy Economics and Climable to collect feedback from New Englanders on what could be done to help each state meet its climate goals. While the effort included actions by all types of regulatory agencies, decision-making bodies, and stakeholders, the effort placed particular attention on the actions of PUCs. An initial report with background research provided context for workshop participants on areas of progress and barriers to date.

From March 2022 through November 2022, the team traveled around New England state capitals to host in-person and virtual workshops with a wide variety of stakeholders, including Public Utility Commission (PUC) staffers, legislators, utilities, renewable energy companies, environmental advocates, environmental justice organizations, and Tribal Nations. These workshops generated the actions and examples from stakeholders that are summarized in this final report.

Through this workshop series, themes emerged regarding key next steps on meaningful climate action. This report groups the actions by four key actors: Legislators, Governors, Public Utility Commissions, and All of Us. Tables summarizing the actions by actor follow. Each table indicates states with examples of or ideas for each action, to contextualize the variety of ways the actions could be implemented. Additional detail on each action and example comprises the remaining pages of the report.

Each action identified represents a significant step forward from current practice. Taken together, the actions are transformative and can help New England states to achieve their climate goals. We invite readers to be inspired to implement the actions summarized in this report, and to propose and act on additional ideas. To facilitate action and outreach, we created an accompanying quick-start guide, entitled *Power Play Playbook*, that some of you may find useful. When you pursue any of these actions, please be sure to keep us and others in the loop by using #PowerPlayNE on social media to tag your progress. If you know of a conference or meeting where we should present these findings, please get in touch. We look forward to working with all of you on implementation.

Actions for Legislators

| Actions | Description | State Examples | | | | | |
|---|---|----------------|----|----|----|----|----|
| | | CT | MA | ME | NH | RI | VT |
| 1. Create authority and accountability | Stakeholders identified the need for additional legislation to provide clear direction on roles and responsibilities, establish more detailed goals, and enact penalties. | | | | | | ● |
| | Stakeholders supported legislation to provide Climate Councils with the authority and resources to act and ensure a distinct purpose and the right membership for the purpose. | | | ● | | ● | |
| | Stakeholders expressed a desire to create more rapid change by funding more incentives to drive action, as well as new positions to support people in applying for additional incentives. | | ● | | | | |
| 2. Amp up equity | Stakeholders generally agreed that climate action must consistently and seamlessly identify and address inequities by enacting legislation that integrates equity outcomes into existing policies and practices. | | | | | ● | ● |
| | Stakeholders generally agreed that equity and climate action are interconnected and should be well coordinated in Climate Councils. | | | | | | |
| | Stakeholders agreed that climate programs should be designed to prioritize serving people who have not been served to date. | | | | | | ● |
| 3. Create community agency | Stakeholders expressed concern with the current balance of power and supported a shift in power from utilities to communities. Examples include: community choice aggregation, building performance standards, fossil fuel infrastructure bans, municipalization, and statewide energy data repositories. | ● | ● | ● | ● | ● | ● |
| 4. Fight fake news | Stakeholders highlighted misinformation as a key barrier in mobilizing the public to act and agreed that legislation is needed to hold bad actors accountable on climate misinformation. | | ● | | | | |

Actions for Governors

| Actions | Description | State Examples | | | | | |
|-------------------------------------|---|----------------|----|----|----|----|----|
| | | CT | MA | ME | NH | RI | VT |
| 5. Coordinate communications | Stakeholders supported a centralization of climate action information and communications at the state level. | | | | | ● | |
| 6. Cooperate regionally | Stakeholders expressed interest in what other states were doing, how they were doing it, and the degree to which experiences and challenges are shared across states. | ● | | | | ● | ● |

Actions for Public Utility Commissions

| Actions | Description | State Examples | | | | | |
|--|--|----------------|----|----|----|----|----|
| | | CT | MA | ME | NH | RI | VT |
| 7. Improve stakeholder experience | Stakeholders supported overhauling PUC processes, policies, and practices to improve equitable communication and participation. Stakeholders also wanted PUCs to dedicate time and training towards eliminating bias and preference, sharing knowledge, and building trust. | ● | | ● | ● | ● | ● |
| 8. Phase out gas | Stakeholders recommended PUCs open gas phase-out planning dockets with the goal of providing a roadmap for a dramatic reduction of gas use, along with timing and key milestones for limits on new investments and system phase-out. Since the phase-out of gas has implications for an increased need for and reliance on electricity, alternatives to current gas utility business models also need to be identified and pursued in these dockets and efforts need to be well coordinated with electric grid planning. | | ● | | | ● | |
| 9. Realign utility goals | Stakeholders noted that utility goals are not currently well aligned with state climate and equity goals. Many stakeholders commented that PUCs do not give environment, safety/health, and jobs equal consideration as rates and reliability. And, equity is not defined consistently by states and PUCs. | | | ● | | | |

Actions for All of Us

| Actions | Description | State Examples | | | | | |
|---|---|----------------|----|----|----|----|----|
| | | CT | MA | ME | NH | RI | VT |
| 10. Organize around appointments | Stakeholders noted many drawbacks of the appointment processes for important positions such as on PUCs, Climate Councils, boards, and committees. | | ● | | | ● | |
| 11. Expand stakeholder network | Stakeholders in several states discussed the critical role of community networks and expanding those to engage more supporters. They defined critical stakeholders. | | ● | | ● | | ● |
| 12. Activate stakeholder network | Stakeholders described methods for activating networks. These networks could use innovation funding to support those leading these efforts. They have an important role in combating climate misinformation and holding proponents of misinformation accountable. | | ● | | ● | | ● |

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Key Terms

Building Performance Standard (BPS): A policy that requires building owners to meet performance targets by actively improving their buildings over time.

Clean Heat Standard (CHS): A policy to reduce and regulate emissions from natural gas, fuel oil, and propane distributors by creating a cap-and-trade mechanism.

Climate Council: A body of qualified individuals appointed to achieve climate goals.

Community Choice Aggregation (CCA): Programs that allow local governments to procure power on behalf of their residents, businesses, and municipal accounts from an alternative supplier while still receiving transmission and distribution service from their existing utility provider.

Disinformation/misinformation: False information which is intended to mislead.

Distributed Generation (DG)/Distributed Energy Resources (DER): Small-scale energy resources usually situated near sites of electricity use, such as rooftop solar panels and battery storage.

Electrification: Substituting electricity consumption for consumption of other fuels in electric heating, water heating, cooling, cooking, drying, and other end-uses.

Electric Vehicles (EVs): Vehicles powered directly by electricity rather than other fuels such as gasoline and diesel fuels.

Environmental Justice (EJ): The fair treatment and meaningful involvement of all people when developing, implementing, and enforcing environmental laws, regulations, and policies.

Greenhouse gases (GHGs): Gases that trap heat in the atmosphere and warm the planet such as carbon dioxide, methane, nitrous oxide, and fluorinated gases.

Grid modernization: Investments in updating the grid to accommodate greater use, distributed energy resources, multi-way power flows, and active management of the distribution grid to achieve reliability and greater efficiency.

Heat Pumps: An efficient way to heat or cool a space using electricity.

Intervenors: Individuals approved to address the PUC in a case.

ISO New England: The independent, not-for-profit corporation responsible for keeping electricity flowing across the six New England states and ensuring that

the region has reliable, competitively priced wholesale electricity.

Lobbying: Influencing or attempting to influence legislative action or non-action through oral or written communication or an attempt to obtain the goodwill of a member or employee of the Legislature.

Municipalization: The transfer of private entities, assets, service providers, or corporations to public ownership by a municipality.

Net Metering: A tariff design that allows consumers to earn bill credit for excess energy injected into the grid for use by other customers.

Not-in-my-backyard (NIMBY): A person who objects to the siting of something perceived as unpleasant or hazardous in the area where they live, especially while raising no such objections to similar developments elsewhere.

Percentage of Income Payment Plan (PIPP): A monthly energy bill based on the income levels of households.

Public Utility Commission (PUC): Regulators of electric, gas, telecommunications, water and waste water utilities.

Regional Greenhouse Gas Initiative (RGGI): 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.

Renewable Energy Credits (RECs): Issued when one megawatt-hour of electricity is generated and delivered to the electricity grid from a renewable energy resource.

Renewable Portfolio Standards (RPS)/Renewable Energy Standards (RES): State level mandates that require utilities to source a certain percentage of their electric energy from renewable sources like wind or solar.

Third-Party Residential Retail Energy Suppliers: Another type of energy provider licensed to supply retail electricity and/or natural gas contracts to buildings in deregulated markets.

Transportation Climate Initiative (TCI): Regional collaboration of Northeast and Mid-Atlantic states to improve transportation, develop the clean energy economy, and reduce carbon emissions from the transportation sector.

Introduction and Purpose

Progress towards reducing greenhouse gas emissions has always been slow, even after the 1980s, when leading climate scientists began to publicly advocate for sharp greenhouse gas emission reductions to combat climate change. The pace has picked up in recent years as legislatures in most New England states have passed ambitious targets for reducing their greenhouse gas emissions. In many cases, these legislatures have also enacted a series of supportive policies such as renewable energy targets, energy efficiency savings goals, and energy storage requirements. In addition, some states are codifying equity and environmental justice as the responsibility of regulatory bodies and defining these terms. And, several states have established Climate Councils composed of many government agency directors, to begin to coordinate on achieving climate targets.

Despite good progress on legislation, no state appears to be on track to achieve its 2030 greenhouse gas emission reduction goals.

With goals in most New England states largely set and updated, states are now turning their attention to implementation. Despite good progress on legislation, no state appears to be on track to achieve its 2030 greenhouse gas emission reduction goals.¹ The primary focus for every state's carbon reduction efforts is the energy sector. Given the electric and gas investor-owned utilities' major role in the production of greenhouse gas emissions and the need to switch to renewable, zero carbon energy, these utilities and the state public utility commissions (PUCs) that regulate them are central players. The role of electric utilities is slated to expand rapidly as electrification of the heating and transportation sectors increases the electricity use of all existing customers and absorbs uses that were once served by oil, gas, gasoline, and diesel fuels.

Multiple states have enacted legislation establishing PUC authority to achieve greenhouse gas emission reduction goals. Some PUCs have reflected this authority in their mission and vision statements. But PUCs often consider their responsibility to address climate change, and to do so equitably, as secondary to

goals of safety, reliability, and cost. Public understanding and appreciation of PUC roles and responsibilities with regards to climate action is low; the ability of the public to access and influence PUCs remains limited. All of these factors are significant barriers to climate action.

The Brown University Climate and Development Lab teamed up with Synapse Energy Economics and Climable for a collaborative, public effort to help identify roadblocks to climate action in New England and brainstorm ways to overcome them. While the effort included actions by all types of regulatory agencies, decision-making bodies, and stakeholders, the effort placed particular attention on the actions of PUCs. An initial report with background research provided context for workshop participants on areas of progress and barriers to date.² In-person and virtual workshops held in all six New England states from March 2022 through November 2022 included a wide variety of stakeholders, including Public Utility Commission (PUC) staffers, legislators, utilities, renewable energy companies, environmental advocates, environmental justice organizations, and Tribal Nations. These workshops generated the actions and examples summarized in this final report. We group the actions by the type of actor (legislators, governors, PUCs, and all of us). This list of actions was provided by stakeholders who attended the workshops and refined using the authors' decades of experience working with communities on these issues. A brief description of each action appears in *italics*. This description is followed by more detail about the action from stakeholders or from research conducted by the report authors. Interesting state examples contextualize a variety of ways the actions are or could be implemented. Some actions are in the process of being implemented in one or more states and some actions are ideas for the future. Though this list of actions is comprehensive, it is not exhaustive.

Each action identified represents a significant step forward from current practice. Taken together, the actions are transformative and can help New England states to achieve climate goals. We invite readers to be inspired to implement the actions in this report, and to propose and act on additional ideas.

Actions for Legislators

1. Create authority and accountability

Stakeholders voiced the need for state legislatures to codify who has the authority to take action on climate issues. They further encouraged new legislation pertaining to regulation of the heating and transportation sectors, strengthening of interagency and cross-disciplinary climate councils, and funding for all initiatives related to climate action.

Sector-Specific Standards

Stakeholders in all states generally agreed that legislation that sets greenhouse gas reduction goals was not specific enough to drive implementation. States need additional legislation to provide clear direction on roles and responsibilities, establish more detailed goals, and enact penalties for not meeting the goals.

Renewable Portfolio Standards (RPS) for the electric sector (also referred to as Renewable Energy Standards or RES) and Clean Heat Standards (CHS) for the heating sector set required reductions for the sector, create a system of tradable credits earned from the delivery of measures relevant to that sector to enable compliance with the required reductions, and establish penalties for non-compliance with the requirements. There are no current examples of legislation setting greenhouse gas emission reduction targets, compliance options, and penalties for the transportation sector, but stakeholders supported legislation specific to this sector nonetheless. With the adoption of electric vehicles set to rise quickly, this will become increasingly important.

Most New England states have RPS policies. Stakeholders in many states noted that electric utilities are achieving greenhouse emission reductions required in RPS legislation. Conversely, Clean Heat Standards policies are relatively new. In 2022, Vermont's CHS legislation was proposed, passed the House and Senate, but then was vetoed by Vermont's Governor.

Vermont's Clean Heat Standard legislation proposed a 26 percent reduction in greenhouse gasses from heating as compared to 2005 levels by 2025, 40 percent as compared to 1990 levels by 2030, and 80 percent as compared to 1990 levels by 2050. The scope was comprehensive and included all thermal fuels. The eligible measures were broad as well, including biofuels, wood, and renewable natural gas, energy efficiency, green hydrogen, heat pumps and efficient electric heaters, and renewable district heating. This policy would have required every business selling heating fuel to register with the PUC, since the PUC does not currently regulate these entities.³³

Discussions in the Vermont stakeholder workshops centered around the need to update the existing RPS to be more consistent with other New England states and best practices for the region.³⁴ Stakeholders noted that the State's approach to counting emissions for its RPS is inconsistent with the rest of the region: Vermont appears to be 15 times cleaner than any other state in New England due to the fact that the state is not capturing carbon impacts of energy produced out of state, which represents much of Vermont's energy use.³⁵ The Vermont Climate Action Plan recommends moving to a 100 percent renewable electric portfolio by no later than 2030. Vermont stakeholders also supported removing biomass as an eligible resource and setting a higher in-state renewable requirement than the current level of 10 percent. Renewable Energy Vermont's 2023 RES Reform Bill proposes changes to address the issues with the existing RPS.³⁶

Climate Councils

Legislators have the authority to create Climate Councils; Rhode Island, Connecticut, Maine, and Vermont all now have them. Climate Councils typically conduct research and analysis and lack the authority, staffing, and funding to implement and enforce climate regulations. Stakeholders were generally supportive of legislation to provide Climate Councils with the authority and resources to implement concrete plans to achieve state climate and equity goals. Stakeholders also supported reforming these bodies to ensure they have a distinct purpose and the appropriate membership to achieve that purpose. Their advisory boards need empowerment and resources to serve their oversight and outreach functions.

Stakeholders supported a diverse and representative cross-section of people in Climate Councils. Where Climate Councils or their advisory boards have vacancies, stakeholders wanted Climate Councils to widely publicize their vacancies so more diverse and knowledgeable individuals can apply to these positions and be considered. Environmental groups, community-based organizations, tribes, citizens groups, regional and local planning boards, and energy committees have good candidates for these roles and should be alerted of any openings. Stakeholders noted that PUCs are not represented on some Climate Councils and that Climate Councils should have a PUC representative to ensure good planning and coordination.

Climate Councils typically consist of agency heads and stakeholders representing agriculture, forestry, finance, labor, economic development, fisheries and wildlife, health, energy, transportation, defense, education, housing, local governments, and environmental justice and under-served communities. Many Councils are supported by various working groups and subcommittees, including equity subcommittees. Maine has an Equity Subcommittee, Vermont has a Just Transitions Subcommittee, and Connecticut has an Equity and Environmental Justice Working Group supporting the Council. PUC staff are involved in the Rhode Island, Maine, and Connecticut Councils and participate in several subcommittees (Maine's Energy

Working Group and Rhode Island's Mobility Innovation Working Group, for example).

Stakeholders want Climate Councils to focus on implementation of concrete plans to achieve state climate and equity goals. Climate Councils can (1) propose and support the adoption of RPS and CHS policies and other key legislation, (2) address barriers to building modernization and energy efficiency, such as asbestos, mold, unsafe ventilation and wiring, interconnection costs, metering, siting, permitting/zoning, and electrical panel upgrades, (3) assist with accelerating codes and standards that facilitate deployment of new technologies, and (4) address and facilitate energy infrastructure siting, permitting, and zoning updates, where appropriate.

Stakeholders in several states identified Maine as having an exemplary Climate Council.³⁷ Maine's Climate Council has robust participation from 39 members including members of the House and Senate and the Governor's office. There are five standing working groups, including: (1) transportation; (2) coastal and marine; (3) buildings, infrastructure, and housing; (4) working lands; and (5) energy. The Council can request funding to support its efforts.

Rhode Island's Executive Climate Change Coordinating Council, called the EC4 for short, was created in 2014 with the passage of the state's first major climate bill, the *Resilient Rhode Island Act*. The Council seats eight state agency heads or their designees. The legislation also created two advisory boards.

EC4 meetings for many years consisted of reports from agencies about their efforts. The Council reached no decisions except the approval of minutes and reports produced by staff and consultants. None of the panels received any funding or dedicated staff to support their work. The two advisory boards often struggled to meet, as the Governor and the Legislature were slow to make and approve appointments. The *2021 Act on Climate* made the EC4's task more urgent and clarified the Council's authority, but the boards still have no funding to create adequate capacity for planning state action.³⁸ These and other issues prevent these boards from serving their intended roles.

Funding

Stakeholders across states expressed a desire to accelerate change by funding more incentives for action, as well as new positions to inform and support people in applying for these additional incentives. Stakeholders reiterated that people in local leadership have limited capacity, particularly those who are volunteers in committees and energy groups. Some of these groups and committees need compensation and funding to enable a more diverse group of people to spend time on this important work, provide access to more technical assistance, and ultimately bolster what has mainly been volunteer time. Stakeholders reported extremely limited capacity at the local level with volunteers governing town energy committees and most towns not having any planning staff. Providing funding for these efforts would allow people to be fairly compensated for their time and dedicate more attention to enacting change more quickly.

The need to move quickly, aggressively, and equitably on climate change requires an enormous amount of effort, which in turn requires commensurate funding. The legislature holds the keys to this funding and will need to make it available in order to pursue the actions within this report. Legislatures, which control state budgets, could move to more actively fund programs and departments that support climate action at all levels. If educating various government agencies on the urgency of climate issues is a priority, then states need to allocate funding to these efforts. Similarly, on the topic of equity, if the PUC is meant to create a more equitable stakeholder experience, then it needs additional funding to support initiatives such as language translation of materials, plain-languaging of processes and dockets, live interpretation at events, and additional intervenor funding. PUCs would also need funding to support much more robust outreach to stakeholders and payments for their time, as well as additional staff to perform the engagement, outreach, and creation of materials. Further, participant attendance at some meetings may require childcare support. In addition, some stakeholders suggested that Climate Councils and their advisory boards should have reliable and adequate funding sources (such as the state operating budget) to support their initiatives.

The Massachusetts Metropolitan Area Planning Council (MAPC) established a technical assistance support program to guide climate action in the state's cities and towns. MAPC provides a list of its 10 programs and associated technical resources on its website.³⁹ The programs include: data development and management, bulk purchasing, grant writing, local energy campaigns, and shared energy staffing services. Many cities and towns make use of this technical support to augment often-limited in-community technical resources.

The need to move quickly, aggressively, and equitably on climate change requires an enormous amount of effort, which in turn requires commensurate funding.

2. Amp up equity

A common theme throughout the stakeholder workshops was not only the pressing need to act quickly, but also the need to create change that works to address environmental injustices and provide the resources for all residents to participate in a just transition off of fossil fuels. Ideas included enacting equity-focused climate legislation and enabling Climate Councils to reflect equity in everything they do.

Integration and Consistency

Stakeholders generally agreed that climate action must consistently and seamlessly identify and address inequities. However, the two priorities of climate and equity are not often explicitly interconnected in policy and practice. In addition to overarching legislation that provides clear and consistent equity definitions, goals, and metrics, many stakeholders identified a need for legislation that integrates equity outcomes into existing policies and practices.

Before the federal government established the Justice 40 initiative, some states had established definitions for terms such as environmental justice, were evaluating equity within current practices and processes, and were identifying areas of improvement. Many states are now working on resolving inconsistencies between state and federal definitions of equity and aligning with federal funding opportunities. States are also working on integrating equity into all climate-related policies and practices. The push to electrify heating and transportation use has piqued stakeholder interest in legislation that limits electricity costs as a protection for low-income customers seeking to engage in this transition.

Climate Councils

Stakeholders generally strongly agreed that equity and climate action are interconnected, and that these two goals should be well coordinated. Some states have separate bodies addressing climate action and equity. Stakeholders supported integrating equity directly and explicitly into the group in charge of climate action by including members of Equity Councils in Climate Councils.

Equity experts' specific charge is ensuring that environmental justice communities have access to and

representation on Climate Council meetings and that they are included in processes and decision-making. Stakeholders supported communication plans that proactively identify where equity experts are missing from processes and develop engagement methods tailored to those stakeholders' needs and backgrounds. Stakeholders also supported adding equity expert positions to Climate Councils, where missing, to provide ongoing direct representation of EJ community needs and priorities.

Vermont's proposed Clean Heat Standard had extensive language around equity and included the creation of an Equity Advisory Group to oversee the implementation of the standard. The purpose of this group was to ensure that low- and moderate-income Vermonters received an equitable share of the clean heat measures and that those who did not receive clean heat measures did not experience adverse economic consequences when buying fossil fuels for heat. In addition to language requiring the Equity Advisory Group, there was language requiring at least 16 percent of the investment in clean heat fuel measures go to low-income customers, and at least another 16 percent go to moderate-income customers (the definitions of low- and moderate-income were to be set by the PUC). Most of the language around equity was focused on economic status, although there was mention of wanting "socioeconomically, racially, and geographically diverse backgrounds" on the Equity Advisory Board.

In Rhode Island, the drive for electrification is coinciding with a movement to pass the Percentage of Income Home Energy Affordability Act (PIPP) which would help low-income households pay lower electricity bills through a tiered subsidy program based on income. Under PIPP, ratepayers would pay a fixed amount of their income for electricity: 3 percent for households that do not use electric heat and 6 percent for households that do use electric heat.⁴⁰ The bill was introduced last session in the Rhode Island House and Senate and referred to the House Corporations Committee and the Senate Finance Committee.

Funding

Before states can set funding levels, states must identify how much funding is needed. States need to recognize the cumulative effects of underfunding for low-income customers and their historically low participation. Programs that support climate action are bound to be more expensive moving forward as greater resources will be needed to reach and engage the remaining population. Stakeholders agree that climate programs should be designed to prioritize serving people who have not been served to date.

Recent Rhode Island and Massachusetts studies have revealed barriers to low-income participation in electric vehicle³ and energy efficiency incentive programs to date.⁴ Also, these programs have mostly only been administered in English. Using the information from these studies, some stakeholders suggested that utilities should reset program incentives and incentive allocations to reach those who have not yet had the opportunity to participate. Furthermore, the outreach plan to engage these residents should include materials and program administrators that communicate in languages besides English. In its 2023 Energy Efficiency Plan, Rhode Island Energy identified communities with lower historical participation rates and committed to deploying community-specific efforts in languages most familiar to residents in those communities to increase participation in those areas.⁵ More customer segmentation can enable greater precision in identifying and responding to low-income customer needs.

The complexity of the combinations of funding sources and program administration for low-income customers can hamper implementation. For instance, some agencies responsible for administering programs do not have the capacity to serve the need, which has resulted in backlogs and waitlists for service. Increasing staffing for these organizations is essential to serving interested low-income residents who are already in the pipeline and awaiting service. In recent years, some utilities have launched customized incentive offerings for a new tier of customers: moderate-income customers. Multiple tiers of service may help utilities secure program participation at a more reasonable cost by better targeting and addressing needs.

The Sustainability Office of the City of Portland in Maine is providing supplemental City-funded incentives to low-income residents and leading public outreach to hard-to-reach segments of the population to ensure they are not being left behind. Their Electrify Everything 2.0 Program augments Efficiency Maine Trust's energy efficiency efforts by providing incentives for no-cost equipment installations for households earning 80 percent or less of median income.⁴² Program materials are translated into six primary languages and apartment dwellers are a key focus of outreach efforts. The office just launched its Sustainable Neighborhood program, which partners with neighborhood organizations to reach all residents with solar and efficiency measures.⁴³

In order to keep costs down for lower- and middle-income residents, stakeholders stated that the wealthy should be paying for climate change solutions on an ongoing basis through taxes. Stakeholders felt that Vermont's progressive taxes were a good start, but that given its affordable housing crisis the state should do more to tax those with additional homes in the state or who only live in Vermont part-time. Vermont stakeholders also recommended instituting a Green Savings Smart energy-cost savings coaching program specifically for low-income customers.⁴¹

Workforce Development

Workforce development barriers affect the pace of growth of the clean energy economy in many job types. These include equipment installers, lawyers, engineers, and legislators. This workforce is not only inadequately sized, it is also not diverse. Stakeholders recommended both growing and diversifying the workforce. Climate action requires training and employment of people of all ages, genders, races, ethnicities, and socio-economic conditions in order to reach and engage all people. A workforce that looks and speaks more like the individuals in the community they are approaching will also be particularly important for addressing barriers to trust.

Dependence on volunteers and/or part-time compensation to develop expertise in these professions is not a commitment to developing the workforce. Many stakeholders felt that a commitment to supporting permanent, appropriately paid positions must be a part of every law, practice, and process as it is developed. Legislation can require industries to generate employment for residents of the areas in which they are developing. Workforce development initiatives can also prioritize frontline and other underserved communities. More people can be engaged in the clean energy industry through initiatives such as paid, language-accessible job training and career buyouts to transition the mid-to-late career workforce to other industries. Prevailing wage requirements can be applied to solar and other clean energy industries to ensure these are well paying jobs. Interpretation and translation is needed and can more easily be provided by intentionally including provisions for these elements in policy and law, as well as other explicit provisions that will drive a more diverse workforce.

In Connecticut, stakeholders identified the importance of the Connecticut Green Bank as a source of state-level funding for workforce development. The Green Bank is working in conjunction with the Office of Workforce Strategy to advance the state's workforce development goals; representatives from both agencies sit on the Connecticut Clean Economic Council that was established in 2021. There is opportunity for further cooperation between the two entities since the passage of the IJA and the IRA: a task force published a report in January of 2023 identifying how Connecticut could capitalize on federal funding for clean hydrogen as a result of this legislation. Many of the federal funds available require matching at the state level, which could include existing Green Bank programs. The report highlighted workforce development as a key part of this effort and recommended that the Office of Workforce Strategy partner with schools and industry to work to develop a robust clean hydrogen workforce.^{44,45,46}

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Recent clean energy legislation has begun to address the problem of workforce development. For instance, the *Inflation Reduction Act (IRA)* allocates funding for workforce development, with \$200 million given to states to establish training for installation of home efficiency and electrification improvements, and a portion of the Clean Heavy Duty Vehicle Program provides the U.S. Environmental Protection Agency (EPA) with funding to train and develop workers for that industry.⁶ Additionally, many of the tax credits in the bill are dependent on companies meeting apprenticeship requirements.⁷ Separately, federal funding from the *2021 Infrastructure Investment in Jobs Act (IIJA)*⁸ increased the money given out through the EPA's Environmental Workforce Development and Job Training grants from \$200,000 to \$500,000. These grants for workforce development and job training support low-income and minority people in particular. Stakeholders also noted the need for emphasis on youth workforce development and education to grow the future pipeline of potential employees. Pathways for this goal could include incorporating new technologies into education, funding green trade schools and apprenticeships, and partnering with community groups. Stakeholders also felt that people working in the fossil fuel industry should not be left behind during the transition.

In Massachusetts, state administration and the Clean Energy Center gave out Minority- and Women-Owned Business Enterprises Support Implementation and Planning Grants as well as Equity Workforce Training Grants. These grants are distributed to organizations and community colleges to help them grow the clean energy workforce, specifically focusing on environmental justice communities and retraining former fossil fuel workers. Recipients include programs partnering with local technical high schools and manufacturing companies and training local community members on jobs related to the growing offshore wind industry.⁴⁷ These programs recruit members of frontline communities and supporting community organizations and make the training more accessible by providing childcare, training during hours when trainees are available to participate, and interpretation services. However, stakeholders in Massachusetts highlighted the fact that 67 percent of energy efficiency companies in New England conduct background checks during the hiring process, which can be a barrier to equitable workplace development initiatives if not applied equitably.⁴⁸

3. Create community agency

As the heating and transportation sectors electrify to enable achievement of climate goals, PUCs and electric utilities will come to have oversight and control over an increasing proportion of energy consumption. Without changes in power and control, decisions about how many clean energy resources to develop, the types of clean energy resources used to meet the requirements/goals, where the resources are sited, the costs to develop these resources, and the distribution of the costs and benefits of these resources will largely fall to PUCs and utilities to make. Stakeholders expressed concern with the current balance of power and supported a shift in power from utilities to communities. There are several ways in which this is already occurring: community choice aggregation (CCA), building performance standards, fossil fuel infrastructure bans, municipalization, and statewide energy data repositories.

A variety of stakeholders expressed distrust in their PUCs and utilities due to issues with transparency, communication, and power/control. One way to address this is to provide communities and individuals with more and ongoing decision-making authority. Existing regulations preclude some communities from pursuing CCAs, fossil fuel infrastructure bans, existing building performance standards, and municipalization; or they cap the number of communities that may pursue them. Legislation may be needed to enable statewide energy data-sharing and address data security and privacy concerns. Many stakeholders supported legislative updates or new legislation to allow more communities access to these opportunities.

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Community Choice Aggregation

Three New England states – Massachusetts, New Hampshire, and Rhode Island – have enacted Community Choice Aggregation (CCA) legislation that empowers local governments to procure electrical generation resources to meet the aggregated electricity loads of residents, businesses, and/or municipal facilities. Connecticut lawmakers are actively exploring CCAs.⁹ CCAs are often used to increase deployment of renewable energy at scale, thereby resulting in a more reasonable cost. These states adopted an opt-out format, which automatically enrolls all residents and allows them to opt out if they prefer. In contrast, opt-in plans require residents to sign up for the program and end up with significantly lower enrollment rates. States without CCA legislation can pass legislation to allow CCAs. Community-led efforts in states with CCA legislation can focus on expanding the number of communities offering CCAs.

Massachusetts authorized CCAs in 1997 and at the same time authorized the country's first municipal energy aggregator, the Cape Light Compact. The state has approved CCAs for more than half of its municipalities.⁴⁹ A 2019 law made CCAs possible in New Hampshire, and a number of localized government entities throughout the state created the Community Power Coalition New Hampshire shortly after the law passed. In February 2021, Hanover and Lebanon became the first two municipalities in New Hampshire to offer CCA for their consumer electricity needs.⁵⁰ Since then, eight additional towns have shown an interest in CCAs.⁵¹ Rhode Island's first CCA program includes six communities and is set to launch mid-2023. In 2020, the Connecticut PUC opened Docket 20-05-13 for "PURA Study of Community Choice Aggregation," after clean energy groups petitioned for a study to be conducted by the end of the year to determine the potential opportunities and challenges for the state.⁵² The study informed development of Connecticut's House Bill 5260 (*An Act Concerning Community Choice Aggregation*) which was proposed during the 2021 General Assembly and did not pass.⁵³

Existing Building Performance Standards

Existing buildings are responsible for a substantial portion of greenhouse gas emissions. Building Performance Standards (BPS) are policies that incorporate a range of innovative and flexible strategies to help mid-to large-sized building owners drive down emissions, create benefits for occupants, and ensure oversight through standardized and transparent data and reporting. Several large cities have adopted BPS, but states can adopt them too. Massachusetts and Rhode Island have legislation requiring building energy use tracking for large buildings but no New England states have not adopted legislation requiring large buildings to reduce their emissions.¹⁰

Fossil Fuel Infrastructure Bans

Every stakeholder workshop discussed the need for communities to have the authority to prohibit new fossil-fuel-reliant infrastructure as a key catalyst to begin the shift to renewable energy sources. Each of the six New England states is at a different stage in preventing additional fossil fuel use.

Boston addressed the need to electrify existing buildings by setting a goal for 80 percent of retrofits in the city to be electrified rather than connected to gas systems. To help meet this goal, Boston passed an ordinance requiring any building over 20,000 square feet to reach net zero carbon emissions by 2050. This will affect roughly 4 percent of the city's buildings for both commercial and residential uses. Although this applies to a small percentage of buildings, these structures account for 60 percent of the city's total building emissions. Boston's policy requires periodic reporting on environmental justice and equity metrics and establishes an equitable investment fund.

Massachusetts was one of the earliest states to allow gas infrastructure bans at the municipal level. Beyond California, the Massachusetts town, Brookline, was the first local government to adopt a fossil fuel ban for all new buildings in 2019. As a result of a 2022 climate law, more than 20 cities and towns in Massachusetts have restricted new fossil-fuel-dependent buildings.

New Hampshire diverges from other New England states regarding banning gas infrastructure. The state is one of 20 nationwide that passed a "preemption law" in response to California's influx of municipal legislatures banning gas. New Hampshire is addressing the renewable energy transition and gas sector by proposing renewable natural gas as a solution. Renewable natural gas comes from methane released from food waste in landfills, agricultural waste, and wastewater treatment plants. Governor Chris Sununu passed Senate Bill 424 which calls on utilities to invest in renewable natural gas infrastructure. The PUC supports this law that allows utility customers to pay for renewable natural gas energy and infrastructure. The Conservation Law Foundation is among the stakeholders expressing concern that this legislation will lessen focus on renewable energy development and instead continue investment in fossil fuels.

Municipalization

Sometimes the trust between utilities and the public is broken and communities seek to abandon their relationship with existing utilities by setting up completely separate, locally focused utilities in their place. Municipalization campaigns are underway in several New England states, including in Maine, as described above.

Statewide Energy Data Repositories

The act of aggregating and publicizing energy data can drive community and third-party provider leadership. Legislators can direct utilities to develop a centralized energy reporting platform for use by all stakeholders.

4. Fight fake news

Stakeholders highlighted misinformation as a key barrier in mobilizing the public to act. Misinformation has largely shifted from denial of the reality of human-caused climate change to negative portrayals of the need and capability for a rapid and near-complete transition to renewable energy. Efforts to limit misinformation in the United States are largely focused on recent efforts by foreign governments and bad actors to spread falsehoods through social media outlets. Legislation to address climate misinformation has not yet been passed. In the meantime, a host of lobbying groups, political action committees, and organizations with conflicting interests are attacking renewables and intentionally manipulating public perception of what is “clean”, “green”, and “smart.” Many stakeholders agreed that legislation is needed to hold bad actors accountable on climate misinformation. Stakeholders also agreed that utilities should be prohibited from using ratepayer money for legislative lobbying and that utilities should report lobbying activities.

The European Union (EU) has addressed misinformation in sweeping legislation over the past year.¹¹ Formalized in the Digital Services Act, the EU Commission explicitly states seven initiatives that are part of a coordinated effort across EU countries,

Maine’s municipalization bill (providing communities with the ability to municipalize) passed the legislature in 2022 but was vetoed by Governor Mills.⁵⁴ Proponents of the bill stated they plan to file it again in 2023. Maine’s municipalization initiative, referred to as Our Power, is led by a group of Maine ratepayers, business leaders, energy experts, conservationists, and other stakeholders. Our Power states that the two foreign investor-owned utilities running Maine’s grid today, Central Maine Power and Versant, pursue profit without considering Maine’s best interests. Our Power is advocating to shift the authority to the Pine Tree Power (PTP) Company, which is a local consumer-owned utility that delivers economical, cleaner, more reliable power to multiple Maine communities. PTP would be governed by an autonomous Board of Directors consisting of Mainers elected by the people of Maine. It is expected that the process of shifting the power to PTP would be complete in 3 to 4 years. Recently the Our Power coalition celebrated the end of its signature campaign with 80,000 signatures from residents.

While a top-down approach to climate action is working well for many New England states, stakeholders pointed out that it has failed in the past and is not an effective approach in New Hampshire moving forward. However, an effort to design a centralized energy data repository reveals that some legislative efforts have garnered attention and support. Enacted in 2019, Senate Bill 284 requires the PUC to establish a statewide online energy data platform with access for utilities, customers, and third parties to share data regarding customer energy usage.⁵⁵ The platform will permit voluntary participation of municipal utilities and deregulated rural electric cooperatives, address privacy and security issues, be certified by the Green Button Alliance.⁵⁶ It will support both the North American Energy Standards Board’s Energy Service Provider Interface⁵⁷ and the Green Button Alliance’s Green Button “Connect My Data” initiative.⁵⁸

institutions, online platforms, and media outlets to address the threats of disinformation and misinformation. The EU states that both dis- and misinformation are harmful, regardless of intent. These initiatives include the European Democracy Action Plan, which establishes accountability measures for online platforms, and the 2018 Code of Practice, an international agreement that develops “self-regulatory standards to fight disinformation... on a voluntary basis.”¹² This is the first international legislation of its kind, and it offers a preliminary model for government action to combat information. While this scale of legislation has yet to occur in the United States, there are a few state-level examples of initiatives to address misinformation.

In the United States, several members of Congress are currently addressing climate misinformation through the lens of digital services and media. Representative Lori Trahan (D-MA-3) introduced the federal Digital Services and Oversight Act of 2022 which explicitly demands better transparency and oversight over the dissemination of information on social media.¹³ Several environmental organizations have advocated for this legislation, including Friends of the Earth and the Union for Concerned Scientists. While the bill has garnered support from these organizations, it has yet to move forward in Congress.

Two recent studies discuss how New England utilities spread climate misinformation, spend large amounts

of ratepayer funds lobbying against climate legislation, and are particularly effective at hindering climate action.^{14 15} Many stakeholders agreed that ratepayers, many of whom support climate action, deserve transparency on utility lobbying and political activities, and that ratepayers should not be funding utility lobbying activities that oppose climate action. Laws around lobbying disclosures are generally weak. Massachusetts and Rhode Island require lobbyists to report the bills they lobbied for and against, however many lobbyists report their activity as neutral. Maine requires lobbyists to report specific bills they lobbied for and against, but not whether they supported or opposed them.¹⁶ New England needs legislation to strengthen lobbying requirements, especially for utilities.

Massachusetts and Rhode Island Attorneys General used legal means as a way to prevent the spread of and minimize the impact of climate disinformation. In 2019, both states sued major oil companies for their history of climate disinformation as well as their continued greenwashing and endangering the states. Given the companies’ early knowledge of climate change, the AGs argued that these firms failed to act to minimize harm and instead produced false research and false advertising that obfuscated the negative impacts of fossil fuels.⁵⁹

No one is officially in charge of communication on state climate action, and many actors are taking on some portion of the role.

Actions for Governors

5. Coordinate communications

Decentralized leadership, a lack of interagency coordination, and lack of shared understanding is stalling progress on climate action. While stakeholders supported decentralization of PUC and utility power, they supported a centralization of climate action information and communications at the state level.

State Governors have the power to centralize and synthesize messaging and communications on state climate action. Stakeholders discussed how current communications from state governments are scattered and unwieldy and it is hard to keep track of developments. No one is officially in charge of communication on state climate action, and many actors are taking on some portion of the role.¹⁷ There is no one source for complete information and there are gaps. One important gap is the absence of updates on PUC and utility action. Many stakeholders thought that any statewide effort to improve climate communications should address this gap. In addition to concerns about the source and completeness of updates, there are also concerns about the comprehensibility of the updates. Some stakeholders did not feel confident that PUCs and utilities were capable of crafting less-technical explanations of their efforts for a more general audience. Translation into primary languages spoken across the state is also important for accessibility. Stakeholders felt that a third party with expertise in technical translation and sensitivity to language equity

might be better suited to provide needed context—for example, why a decision is important and what the impact of that decision will be. Many stakeholders also supported media engagement by third-party outreach teams to help circulate information on important dockets and other efforts in ways that are more accessible.

Stakeholders also felt it was imperative for each state to engage directly with communities to provide updates on climate action. It is costly for each state agency to provide this type of direct outreach. Stakeholders generally agreed that this outreach should be streamlined and a single entity should provide a variety of updates. In addition to face-to-face outreach, stakeholders noted that electronic forms of communication (including email and social media) can be better leveraged to get the word out in each state by using existing listservs. A centralized and coordinated system for updates to communities also provides the opportunity to conduct periodic surveys to inform decisions more broadly and in advance of the formation of any plans.

In Rhode Island, stakeholders recommended leveraging the Coastal Resources Management Council (CRMC), Department of Environmental Management (DEM), and other listservs to inform people about PUC hearings. Current notification of PUC hearings is limited to print listings in the Providence Journal and online listings on the Secretary of State's website. Adding these listservs would allow information about hearings to reach a wider audience.

6. Cooperate regionally

Throughout the workshops, stakeholders expressed interest in what other states were doing and how they were doing it. Stakeholders also inquired about the degree to which experiences and challenges are shared across states. States share many of the same experiences and challenges, and encouraging dialogue among states will enable states to move forward faster and smarter. Regional coordination also enhances participation in regional activities and initiatives, such as ISO New England, the Regional Greenhouse Gas Initiative (RGGI), and The Transportation Climate Initiative (TCI).

The six New England states and the five Eastern Canadian provinces have worked together to address their shared border interests. The New England Governors and Eastern Canadian Premiers (NEG/ECP) encourages cooperation by developing networks and relationships, taking collective action, engaging in regional projects, undertaking research, and increasing public awareness of shared interests.¹⁸ The existing NEG/ECP joint committees include: the Committee on the Environment and its Climate Change Steering Committee, the Northeast International Committee on Energy, and the Transportation and Air Quality Committee. The NEG/ECP last met virtually in May 2021 to discuss COVID-19 and economic recovery, climate change, and U.S.-Canada relations. The future meeting schedule and level of activity of this group is uncertain from its website, but clearly this is a coalition that could be re-energized.¹⁹

State-level conversations raised the importance of regional forums but did not identify many ideas about how to improve engagement. Stakeholders in Rhode Island and Vermont supported expanding the Regional Greenhouse Gas Initiative (RGGI) to include thermal and transportation emissions in addition to emissions from the electricity sector.⁶² Stakeholders in Connecticut wanted to resume regional discussions on the Transportation and Climate Initiative, which fell through last year.⁶³

Actions for Public Utility Commissions

7. Improve stakeholders' experience

Stakeholders noted that it is much more difficult to participate in a PUC meeting or energy facilities siting board meeting than a hearing on legislation at the statehouse. Stakeholders need easier and more meaningful ways to weigh in on PUC priorities and decisions and supported overhauling PUC processes, policies, and practices to improve equitable communication and participation. Stakeholders also wanted PUCs to dedicate time and training towards eliminating bias and preference, sharing knowledge, and building trust.

Notably, many stakeholders who participated in the workshops did not know what the PUC was or how to participate in a PUC proceeding. Stakeholders wanted to find ways for communities and individuals to have more awareness and say about decision-making and be able to provide input upfront, before plans were formed and directions established. Stakeholders who had participated in PUC proceedings identified concerns with not feeling welcome or feeling intimidated. They even noted that at times the physical arrangement of the room where proceedings are held can exacerbate power dynamics, thereby creating discomfort for some attendees. Some stakeholders also did not feel their views were heard and did not see their views expressed in decisions. Stakeholders discussed how PUC proceedings can be more accessible and how they could get more involved in PUC proceedings. But, stakeholders also recognized they would find it costly and difficult to monitor PUC activities and decisions on a regular basis. For stakeholders in environmental justice communities, the time and cost hurdles are greater because their availability and resources are more limited; and the demands on their time and interest in their input only increases as the additional focus on equity grows.

Communication

Stakeholders need plain language summaries of the types of decisions being made in PUC dockets, why the decisions are important, and how stakeholders can

provide input. Stakeholders also need plain-language summaries to be translated into the primary languages spoken in each state and shared across a variety of platforms to ensure people can access them. Those platforms could range from websites to social media, to the more traditional sources like newspapers and mailers. Stakeholders should also be able to view simple summaries of feedback provided by other stakeholders.

The Connecticut PUC set up a YouTube channel in June 2020. Since then, the Commission has uploaded over 120 videos covering live major decisions of regular meetings, virtual conversations with important stakeholders, webinars, and explanatory and educational videos.⁶⁵ The PUC also launched a series of quarterly PUC newsletters in 2022 which provide more information on upcoming dockets and ways stakeholders can get more involved. The first newsletter in October linked readers to educational materials including video tutorials for ratepayers with an overview of a rate case, elements of a rate case, why rate cases matter, how electric bills are affected by rate cases, parties in a rate case, and how to get involved in rate cases. The newsletter also described key procedural meetings, opportunities for public comment, and planned final decisions scheduled in the fourth quarter, among other information. The last section of the newsletter was dedicated to press releases and prompted users to sign up to receive the newsletter regularly. Features such as a subscription button and quick links to the participation process, elements of rate case, calendar, and electronic filing make information more accessible for readers.⁶⁶

The Vermont PUC has a page dedicated to public participation on its website, with downloadable resources that can assist people in participating in its proceedings. For example, it has “A Citizen’s Guide to the Public Utility Commission,” “Public Participation and Intervention in Proceedings Before the Public Utility Commission,” and “A Guide to Evidentiary Hearings.” The page links to information about the Commission and types of cases handled by the Commission, participating in the Commission’s regulatory process, and procedures for different types of cases. Readers can learn about contested and uncontested case proceedings, submitting public comments, and being a formal party to a case. At the bottom of the page, there are quick links to FAQs, an ePUC guidance memo, and contact information for the Clerk of the Commission.⁶⁴

Participation

Stakeholders indicated that they need to be able to provide general input, in advance of and during a specific proceeding or decision. Distribution lists are generally organized by docket, but stakeholders suggested a general docket and associated service list so the public can learn about new dockets and provide input. Also, the PUC can issue questions specifically for community stakeholders under this docket to better gauge topics of concern and priorities.

Stakeholders need to be proactively invited to participate, welcomed into conversations when they show up, and presented with clear evidence that their input is treated with equal consideration to that of utilities. Many stakeholders thought that PUCs should develop lists of affected stakeholders, including those that are often underrepresented, and reach out to them at the outset of dockets. Stakeholders also supported PUC engagement with a neutral third party or designated staff member to ensure responsibility for this outreach and incorporation of feedback into decision-making. Stakeholders want their input to be given the same consideration as utility input. Stakeholders want PUCs to require utilities to incorporate this input and provide evidence that they have incorporated it.

At proceedings, affected stakeholders can represent themselves, be represented by a public advocate such as a consumer advocate or attorney general, or be represented by an ombudsperson of their choosing. Stakeholders in several states questioned whether generic public advocates are aware of their views and priorities and are accurately representing their interests and priorities. Some stakeholders expressed concerns about the independence of public advocates that exist as departments within the PUC and recommended identifying new representatives who would truly be independent of their PUC.

Stakeholders expressed the need for limited stakeholder resources and time to be reflected in the design of all stakeholder processes. Some PUCs restrict participation to formal intervenors for certain types of proceedings.²⁰ And many stakeholders want PUCs to reexamine formal intervenor requirements and eliminate as many barriers to and costs for participation as possible. Some states offer intervenor funding or compensation for certain intervenors in

There are two existing programs for funding “intervenor” (groups approved to address the PUC in a case) in New England, one in Maine and one in New Hampshire.⁶⁷ Neither of these programs are particularly well designed, which may explain why they are not actively in use. Stakeholders specifically cited Michigan’s intervenor compensation program as one that is more robust and a helpful model for New England states. Michigan’s program is funded by the state’s investor-owned utilities based on the number of customers they serve. The program is unique because it is separated from the broader utilities commission, and it funds intervenors prior to proceedings, so they can prepare adequately depending on how much funding they are allotted. The program allocates \$1 million dollars to the attorney general’s office, of which \$750,000 goes directly to the Utility Consumer Participation Board to distribute to specific interest groups. The money is allocated through grants which are only given to organizations, not to individual applicants.

In Maine, the comprehensive grid planning effort features a required stakeholder process that takes place before grid planning starts. Stakeholders are asked to submit priorities and the PUC is required to work with the utilities to incorporate the input into their grid planning process. The existing statute does not provide specific guidance about how the PUC should conduct the stakeholder engagement process and who should be included as participants. The PUC’s budget proposal includes adding a position to the PUC that is focused on outreach; this individual is tasked with identifying and notifying affected groups. The PUC is finding that building public engagement is a challenge and trust is needed to build that engagement over the longer term. The PUC is requesting stakeholder input on how to improve the process. The PUC has a place on its website to collect this type of general feedback, and it provides contact information for those who want to reach out to the PUC by phone.⁶⁸ It is the PUC’s intention to keep the rules as broad and flexible as possible and the PUC is willing to work with interested stakeholders individually to enable participation.

regulatory proceedings, such as representatives of environmental justice communities. Stakeholders across New England felt that regulators can encourage a diverse array of stakeholders to participate in utility regulatory proceedings by offering intervenor funding.

Stakeholders also identified opportunities to actively engage certain underrepresented groups in energy facility siting. Large energy facilities are usually approved by specialized state agencies that operate similarly to PUCs. For example, Connecticut,²¹ Massachusetts, New Hampshire, and Rhode Island have some version of an energy facility siting board that approves larger projects, while local governments have jurisdiction over smaller projects. The decisions energy facility siting boards make can have a long-lasting and large impact on communities. Stakeholders from Tribal nations expressed the need for greater consideration of Mother Earth. Stakeholders representing Environmental Justice communities expressed the need for greater consideration of health impacts, safety impacts, and existing burdens on communities that already shoulder the brunt of environmental injustices. Siting boards can consult with communities earlier in the facility planning process, make their hearings easier to attend and more accessible, remove barriers to participation in hearings, and include equity experts on their staff.

Stakeholders felt that opportunities for feedback should not be limited to attending meetings and hearings and that they should have the option to participate in all meetings virtually post-COVID. Some stakeholders also indicated that they should have the opportunity to provide input using commercially available technology such as voice recordings, videos, online forms, and social media. Technology is advancing to where automated translations might be offered simultaneously online.

Several stakeholders also recommended improving the dynamics of hearing rooms at the PUC or use other types of meeting spaces to allow for more conversational and collaborative interaction. Aspects of spaces, such as layout, impart certain power dynamics which affect the level and quality of participation by stakeholders. Often, Commissioners sit behind a wide desk on an elevated platform, with the public in a viewing area behind a gate. While the elevated platform may help those in the back to see the

Commissioners, it is intimidating and the degree of separation inhibits two-way communication between Commissioners and members of the public. Also, members of the public who wish to speak during comment periods must stand and provide remarks at a podium with a microphone. Members of the public must approach the podium one at a time, inhibiting two-way communication between members of the public as well.

Stakeholders commented that the Rhode Island PUC employed a facilitator to ensure stakeholder input was captured in its Value of Distributed Energy Resources proceeding. Stakeholders also noted that the PUC is also considering hiring an outreach specialist who can focus on diverse participation and representation.

One potential opportunity for stakeholders in New Hampshire to influence the PUC is a net metering proceeding. Net metering program design is important—lower rates of compensation, monthly fees, program caps, and limiting participation in community net metering (e.g., for renters) can limit these benefits. Program design is also important to allow and encourage disadvantaged customers to participate in net metering programs and to reduce the potential for shifting costs to those that do not or cannot participate. Stakeholders noted that increased participation of local planning boards and local utility boards could sway the PUC to improve its net metering policies and regulations. Stakeholders suggested that a coordinator be identified to represent local energy committees, similar to the role the New Hampshire Association of Conservation Commissions (NHACC) is playing for conservation commissions. The coordinator can intervene in the proceeding and represent the communities involved in the Community Power Coalition of New Hampshire (CPCNH) and any other communities or groups with similar positions.

8. Phase out gas

Many stakeholders expressed disappointment at the lack of gas phase-out as a planning mechanism to mitigate climate change. They felt gas utilities are wasting valuable time and money investigating and investing in purported carbon-free sources of gas, pipeline upgrades, conversions to gas, and more efficient gas-fueled space and water heating systems. Stakeholders recommended PUCs open gas phase-out planning dockets with the goal of providing a roadmap for dramatic reducing gas use, along with timing and key milestones for limits on new investments and system phase-out. Since the phase-out of gas can increase the need for and reliance on electricity, alternatives to current gas utility business models also need addressing in these dockets, and efforts need to be well coordinated with electric grid planning.

Stakeholders supported more comprehensive planning initiatives that span electric and gas, since one of the key barriers to the phase-out of gas through electrification is a limitation in electric grid capacity. Various types of PUC proceedings with a focus on the electric grid are underway. These include grid modernization (New Hampshire),²² comprehensive grid planning (Maine),²³ equitable modern grid (Connecticut),²⁴ and power sector transformation (Rhode Island).²⁵ Massachusetts and Rhode Island have initiated “future of gas” dockets with procedures to allow for broader public engagement.^{26, 27} Connecticut,²⁸ Vermont,²⁹ Rhode Island,³⁰ Maine,³¹ and Massachusetts³² have statewide energy plans which span all fuels. However, some of these plans are dated and do not reflect a phase-out of gas in alignment with state climate goals.

Rhode Island’s PUC recently opened a “Future of Gas” docket, Docket 22-01-NG, which as a non-contested case allows much greater participation by the public and interested parties. The questions posed by the PUC will require consideration of a wide range of issues and options.⁶⁹ The effort also will include a Stakeholder Committee, to “participate in a series of meetings including technical workshops and roundtable discussions aimed at addressing the issues and questions raised in the docket Scope. [and] create an organized and manageable body of information that will support the initial development of work product within the proceeding.”

Stakeholders in Massachusetts suggested that decision-making for electricity and gas needs to be centralized and coordinated at the state level in an energy planning commission that is independent of the PUC. They suggested this commission have longer terms of service and representation from labor, EJ communities, renewable energy companies, planning experts, geology experts, electric and gas utilities, state agencies such as the energy office, and technology companies. The commission’s mandate would be to develop the most efficient, affordable, safe, and zero emission energy system over a longer (e.g., 20-year) planning period. The commission should have the authority to hold the PUC and other regulatory agencies responsible or enact sanctions. Another advantage of a statewide energy planning commission is that it could more effectively integrate environment, health, and jobs into decision-making and evaluate the geographical distribution of benefits and harms of investments.

Stakeholders supported more comprehensive planning initiatives that span electric and gas, since one of the key barriers to the phase-out of gas through electrification is a limitation in electric grid capacity.

9. Realign utility goals

Utility goals are not currently well aligned with state climate and equity goals. Stakeholders noted that utility interconnection processes and fees need to be overhauled to allow for more renewables on the grid. Background research for this project revealed that utility interconnection requirements often do not incorporate battery or other grid storage. Many stakeholders commented that PUCs do not give environment, safety/health, and jobs equal consideration as rates and reliability. And, equity is not defined consistently by states and PUCs.

Stakeholders recommended that PUCs (1) develop metrics to measure the impacts of utility decision-making on environment, health, jobs, affordability, and resilience, (2) enact performance incentive mechanisms (including both rewards and penalties) to push utilities to achieve the goals set forth by the legislature and/or climate council and (3) require utilities to identify and incorporate future projected extreme weather risks in planning to account for continued climate change and the need to further adapt.

One challenge identified in several states is that utilities generally provide similar treatment of all customers in the Residential rate class, even though the annual household income of Residential customers varies greatly. To counter this, utilities in some states provide discounted rates and incentives that cover 100 percent of energy efficiency measure costs for low-income customers. Some PUCs also mandate minimum budget allocations for programs that are specifically designed to meet the needs of low-income customers.

In Maine, the Governor's Office of Policy Innovation and the Future (GOPIF) used a series of workshops with environmental justice communities to define ways that the Maine PUC could better incorporate equity. The Commission proposed to address intervenor and low-income assistance program funding as two immediate actions. Regarding intervenor funding, the Commission is proposing legislation to change this section of law such that funding is more readily available for groups to participate in Commission proceedings. Regarding low-income funding, the Commission initiated a rulemaking that proposes to increase the funding for the low-income program from \$7.8 million to \$11.8 million. Other areas of action may include: (1) statutory changes to enable consideration of environmental impacts of electric transmission infrastructure on low-income/disadvantaged populations or geographic areas as well as environmental justice communities, (2) statutory changes to enable consideration of equity and environmental justice considerations in utility rate cases, (3) maintenance of adequate water utility infrastructure to ensure access to affordable drinking water, and (4) inclusion of equity and environmental justice metrics in evaluation of renewable energy solicitations.⁷⁰

Actions for All of Us

10. Organize around appointments

Stakeholders noted many drawbacks of the appointment processes for important positions such as on PUCs, Climate Councils, boards, and committees. First, stakeholders noted many vacancies are not filled in a timely manner and that these seats should be filled with experts in climate and equity. Second, some stakeholders were concerned that the most qualified individuals were not selected for positions and that there are issues with fairness and conflicts of interest. Third, stakeholders were concerned about the diversity of the individuals selected for positions.

Strategic appointments are an often overlooked opportunity to effect significant change. While stakeholders expressed that there is no shortage of qualified candidates for key positions, ensuring that qualified candidates are interested in and selected for key positions remains a challenge. Stakeholders need to be continually working on developing the pipeline of individuals interested in taking on climate action responsibilities and moving qualified individuals up in that pipeline as their knowledge and capabilities increase. Community groups and representatives can maintain a master list of qualified candidates for key positions to ensure that no position is left unfilled or is filled by a candidate of lesser capabilities or commitment. This list can then be reviewed with leaders responsible for making key appointments periodically and leaders can be more aware of who they can reach out to for suggestions when seats on key boards and committees become available.

While stakeholders expressed that there is no shortage of qualified candidates for key positions, ensuring that qualified candidates are interested in and selected for key positions remains a challenge.

Stakeholders in the Rhode Island workshop discussed an approach used to train and compensate community members interested in climate action. As part of its 2019 Climate Justice Plan, Providence relied on community leaders to help produce and advance its environmental and climate justice goals using the Energy Democracy Community Leader Program run by the city's Office of Sustainability and the Racial and Environmental Justice Committee.⁷¹ Community leaders worked to engage members of the community to serve as liaisons and advisers when forming the Climate Justice Plan. As part of the 8-month program, the City paid 10 frontline community members \$1,000 each to help gather data and information from community members about energy, pollution, and related climate issues.

The program required participation of representatives from certain impacted neighborhoods in particular, and the climate leaders each developed a base of 10 additional community members for sharing ideas and providing feedback. Through weekly meetings, these leaders received training from city officials, advocates, and consultants around energy democracy, environmental justice, and community leadership. They brought this information back to their base networks, conducted interviews with community leaders regarding heating and cooling needs, transportation, and community health. The leaders then conveyed responses which influenced the climate justice plan and resulting policies. Next, the leaders presented the plan and policies to the community, along with stories from community members that helped individuals visualize how the plan and policies could improve their lives.

The recent election of a new Governor in Massachusetts presented an opportunity to develop a list of qualified candidates for leadership positions. Community representatives stated that they had many great individuals on regional and local planning boards and energy committees to contribute to the list.

11. Expand the stakeholder network

Stakeholders in several states discussed how community networks play a critical role in climate action and should expand to engage more supporters. Stakeholders in these states defined critical stakeholders such as regional and local planning boards, local energy committees, municipal sustainability managers, and educational institutions and schools. Stakeholders also identified citizen organizations including those related to wildlife, farming, agriculture, hunting, fishing, forests, fitness, health, and outdoor adventure.

Stakeholders identified significant support for climate action among organizations and groups that are focused on related topics. Stakeholders supported expansion of climate action networks through outreach to and engagement with these new networks. Uncommon allies, or groups that would be supportive of climate-related practices for reasons not connected directly to a concern about climate change, were also discussed. Outreach to these groups would require careful thinking about engagement strategies and messaging with uncommon allies.

Stakeholders in Massachusetts suggested that communities lacking the bandwidth to expand networks on their own can reach out to funders like the Barr Foundation, to support an effort to map out key collaborators and build coalitions across cities and towns. The University of Massachusetts Boston Sustainable Solutions Lab recently completed an effort to map stakeholders working in the climate adaptation space in the Boston area.⁷³

Stakeholders in New Hampshire agreed that new alliances, perhaps even uncommon alliances, need to be forged with organizations that have not previously been involved with the clean energy transition such as small businesses and nonprofit organizations. The organizations identified include: the New Hampshire Wildlife Federation, the League of Conservation Voters, Clean Energy New Hampshire, the New Hampshire Audubon Policy Committee, the Builders Association, the New Hampshire Farm Bureau, and Vital Communities. The upcoming net metering proceeding at the PUC provides a near-term opportunity to initiate communication with new allies. Stakeholders noted that they will need to work together to find a message that everyone can support and leverage their collective voice to ensure that message is heard by the PUC

Stakeholders in Vermont talked about engaging research institutions in the energy transformation. In 2022, The University of Vermont created the Vermont Clean and Resilient Energy Consortium (VCREC) which seeks funding for research and development for collaboration on projects of mutual interest. A potential project includes research on “energysheds” which are similar to a watershed or a food shed, and can be used to develop and test new approaches to managing a power grid with large amounts of highly distributed renewable energy sources.⁷²

Instead of a top-down approach to climate action, stakeholders in New Hampshire suggested a bottom-up approach potentially led by regional planning commissions and supported by community organizations. Messaging containing the words climate change, equity, and subsidy are not well received in New Hampshire. Stakeholders recommended that organizations and individuals re-frame climate action messaging to better appeal to the needs and interests of New Hampshire residents. Examples of more appealing and less polarizing terms included decentralization, independence, small government, economic benefit, workforce benefit, resilience, self-sufficiency, and housing affordability. Stakeholders also noted that market-based solutions are more attractive than governmental subsidies. Individual or third-party ownership is preferable to utility ownership, given the high value placed on individualism and lack of trust in governmental institutions. Along the same lines, stakeholders noted that incentives should be directed to residents and businesses rather than to utilities and their shareholders.

Stakeholders in New Hampshire also identified the need for resources to be redirected to offset the onslaught of misinformation in the state about climate change and climate action. Stakeholders identified several priorities, including: (1) leveraging strong local investigative reporting outlets to expose untruths from outside actors and dispel myths and fears, (2) launching school curriculum on climate science to be taught alongside natural and earth sciences, and (3) developing and circulating plain language materials on key topics such as the impact of high electric rates on the economics of solar. A 2022 video by 350.org on the impact of dark money on climate action in the state provides an example of how to hold dishonest actors accountable for their actions.⁷⁴ Stakeholders also discussed exposing Governor Sununu's brother's involvement in thwarting renewable energy development in the state through the use of misinformation provided by the New England Ratepayers' Association.⁷⁵

12. Activate the stakeholder network

Stakeholders described methods for activating their network such as communicating directly with local residents about transformative technologies, advancing zoning and permitting requirements and building codes/performance standards, and addressing not-in-my-backyard mentalities (referred to as NIMBY-ism). Innovation funding can be used to provide financial support for those who are interested in leading these efforts. Climate misinformation is present throughout all levels of learning about energy sources and usage, from elementary school lesson plans to ads targeted toward adult bill payers. There is an important role for communities to play in combating these messages with factual information and holding proponents of misinformation accountable.

Community and grassroots organizing drives climate action. Stakeholders identified the need to continue this practice, and for it to complement state and federal government forms of leadership as they are taking shape. Neighborhood initiatives, word of mouth among friends and family, and some social media networks continue to be trusted sources of news and information for residents.

In Vermont, The Climate Catalyst Innovation Fund⁸¹ provides small grants to support smaller communities and organizations developing innovative solutions to climate action. The recipients of this funding can be municipalities, nonprofits, businesses, or schools and it is a way to support people with climate and energy ideas who may not have the funding to start implementation. The funding for these grants is provided by the Vermont Low Income Trust for Electricity (a 501(c)4), the Green New Fund of Vermont Community Foundation, and the Vermont State Employees Credit Union (a “values-based financial cooperative”). The funding was administered by the Vermont Council on Rural Development, a nonprofit organization. Recipients of the funding are varied and have included weatherization plans as well as education campaigns. Other states also have innovation funds, for example the ClimateTech Fund in Connecticut,⁸² the Climate Resilience Fund in Rhode Island,⁸³ and grants through the Community Resilience Partnership in Maine.⁸⁴

Stakeholders in Vermont suggested using community forums such as Front Porch Forum⁸⁵ or Nextdoor⁸⁶ as a way to convey information from community member to community member. Another idea was to start a Vermont Chapter of the Citizens Climate Lobby⁸⁷ to facilitate community-specific communication.

Stakeholders in Massachusetts suggested coordinating and building upon existing efforts to transition away from gas. Groups like Gas Leaks Allies⁷⁶ and MAPC’s multi-town gas leaks initiative⁷⁷ can work with Mothers Out Front⁷⁸ and other climate action groups to oppose new gas infrastructure and support electrification. A dozen towns and cities across Massachusetts have partnered with the Rocky Mountain Institute to advocate for local governments to be able to require all-electric construction in their own communities.⁷⁹ A stakeholder at the workshop discussed Acton, Massachusetts’ collective block-scale electrification effort, which will use Abode Energy Management’s Services to go door to door to speak to residents about the benefits of heat pumps. The program seeks to aggregate purchasing for 40 households in a neighborhood to achieve economies of scale and to make projects more attainable for those of lesser means. Efforts to combat gas use and educate homeowners on electrification could leverage leaders to get the word out (for instance, John Farrell of the Institute for Local Self-Reliance (ILSR) who hosts the Local Energy Rules Podcast).⁸⁰

Next Steps

New England states have a lot of good planning and ideas, but less in the way of tangible results. There is still significant progress to make to meet climate goals. Each of the actions identified in this report represent a significant step forward from current practice. Taken together, the actions are transformative and can help New England states achieve their climate goals.

- ▶ Regarding the **Actions for Legislators**, the 2023 legislative session is underway and provides an opportunity to move forward with these actions. Please contact your legislators with these ideas and examples.
- ▶ Regarding the **Actions for Governors**, please reach out to your state leaders with ideas for appointments for key leadership positions on climate action. Also, please vote in all state elections as significant changes in leadership can present opportunities for more significant change.
- ▶ Regarding **Actions for PUCs**, PUCs have many responsibilities and many opportunities to act. Many New England PUCs are interested in receiving more stakeholder input and looking for suggestions for how they can reach and work with a diverse group of stakeholders. Please learn about the ways to submit input and get involved.
- ▶ Regarding **Actions for All of Us**, we all have a role in implementing these ideas. Please expand and activate your networks, with a focus on electrification and phasing out gas. And, continue to build pipelines of experts and promote existing experts to higher level roles.

We invite readers to enjoy, circulate, and implement the actions summarized in this report as well as the shorter and plain-language version called the *Power Play Playbook*, available at www.climable.org/brown. We also encourage readers to propose and act on additional ideas.

We are promoting the reports on LinkedIn, Facebook, and Twitter from our handles of @ClimateDevLab, @Climable, @TimmonsRoberts, and @SynapseEnergy, using the hashtag #PowerPlayNE. When you pursue any of these actions, please be sure to keep us and others in the loop by using #PowerPlayNE on social media to tag your progress.

Lastly, if you know of a conference or meeting where we should present these findings, please get in touch. We look forward to working with all of you on implementation.

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