Maine Climate Council Governor's Office of Policy Innovation and the Future 181 State House Station Augusta, Maine 04333

Dear Members of the Maine Climate Council:

Thank you for the time, attention, and energy you have devoted to the Maine Climate Council. Like you, we listened to the Working Groups' presentations of their recommendations with great interest, attention, and pride. Clearly, Maine's commitment to climate action is strong.

As environmental, social justice, public health, and community organizations that regularly research, analyze, and advocate for addressing the impacts of climate change, reducing carbon pollution, and equitably transitioning our economy to clean, renewable energy, we recognize the challenge you face in reviewing and evaluating the large volume of information, data, recommendations, and big ideas that have been presented to you.

Using our collective climate policy knowledge and shared commitment to making Maine a better place for all people, we have identified 13 strategy recommendations, pulled from across the Working Groups, which we believe:

- are essential to meeting Maine's greenhouse gas emission reduction requirements of at least 45% by 2030 and at least 80% by 2050;
- will create and retain high-quality jobs that provide a living wage and secure benefits for Maine families;
- provide public health and ecological benefits; and
- show the most promise for addressing existing structural inequities, including racial and ethnic disparities, and can be equitably accessed by all to maximize long-term economic growth and prosperity.

The Working Groups have provided the Council with more than 650 pages of materials, including 35 strategies and more than 300 strategy-related actions and sub-actions. Many of these proposals meet the criteria above, but upon initial review, we have assessed the 13 strategies identified in the following pages as being the best of the best. Overall, we are impressed by the vast majority of Working Group recommendations and see within this impressive body of work the many threads of action that must be taken to achieve our climate requirements. But there is still work to be done.

In general, we are concerned that the recommendations, as drafted by the Working Groups, are not actionable, measurable, and ambitious enough to move expeditiously and effectively to optimize Maine's clean energy and climate action opportunities while avoiding what scientists have determined are likely to be the worst impacts of climate change. As such, we propose modifications to some of the Working Group strategies to add metrics and mechanisms that begin to achieve the clarity and strength we would like to see the Climate Council include in Maine's updated Climate Action Plan. Regarding the Transportation Working Group, we have provided a revised recommendation that we believe holds strong potential to meet the requirement of reducing emissions from the transportation sector, the largest source of Maine's greenhouse gas emissions.

This document provides an initial assessment and we reserve final judgment on the strategies until the details of how they will be implemented are further fleshed out. Our organizations are

committed to achieving a just, clean energy and climate adaptation transition that leaves no Maine person behind and creates opportunity, resiliency, and security across all ages, races, incomes, and geographies as we collectively face the challenges and opportunities created by a changing climate.

Our organizations look forward to remaining engaged and helpful as the Climate Council continues its vital work to develop a plan to adequately address the causes and consequences of climate change in Maine.

Thank you for committing your time, expertise, and important perspectives to this critical effort.

# Signed,

350 Maine

A Climate to Thrive

Acadia Center

Appalachian Mountain Club

Atlantic Salmon Federation

Center for an Ecology-Based Economy

Community Action Works

Conservation Law Foundation

**Environment Maine** 

Environmental Health Strategy Center

Islesboro Islands Trust

Maine Association of Conservation Commissions

Maine Audubon

Maine Conservation Voters | Maine Conservation Alliance

Maine Council of Churches

Maine People's Alliance

Maine Unitarian Universalist State Advocacy Network

Natural Resources Council of Maine

Physicians for Social Responsibility Maine Chapter

**RESTORE: The North Woods** 

Sierra Club Maine

Southern Maine Conservation Collaborative

Trout Unlimited

Union of Concerned Scientists

# **Priority Climate Action Plan Strategy Recommendations**

The recommendations listed below are based on strategies submitted by the Working Groups, but in some cases have been revised to be more actionable, measurable, or ambitious. We encourage the Maine Climate Council to consider these versions of the recommendations as you develop a new Maine Climate Action Plan to meet the statutory requirements for reducing greenhouse gas emissions through 2050.

#### **Energy Working Group Strategies**

- 1. Develop and implement new financing options by 2023 necessary to meet Maine's clean energy and emission reduction targets and requirements<sup>1</sup>.
  - a. Create the mechanisms or entities necessary to finance Maine's energy system effectively, through and including energy end-uses, and authorize their initial capitalization.
    - Maine Green Bank: Create a Maine Green Bank, based on the successful experience in other states and building on existing clean energy financing programs in Maine. A green bank would leverage significant, low cost private sector capital to finance clean energy projects and infrastructure.
    - Increased Revenue Bonding: Enable and encourage state and local revenue bonding to compete for any and all energy infrastructure investments that have a material impact on reducing carbon dioxide emissions. Remove legal impediments to the use of this low-cost, tax-exempt capital, enabling existing state and local entities to accelerate the pace and reduce the cost of new clean energy investments.
  - b. Pursue further investigation of structural approaches to reducing clean energy infrastructure costs in Maine, including but not limited to:
    - Consumer ownership and control of all, or the greater portion of, Maine's power delivery systems (e.g., as explored in 2019 via LD 1646) to enable less-costly financing of related infrastructure, as well as to refocus planning and investment priorities; and
    - Establishment of a "Maine Power Authority "as a quasi-independent governmental entity to serve as the primary energy planning and financing authority in the state.
  - c. Investigate the potential of multistate or national carbon pricing beyond the electric power sector. Economists generally believe that carbon pricing will be needed to address climate change; many also suggest that carbon prices need to increase over time and be accompanied by other complementary policies and measures.
- 2. Ensure adequate affordable clean energy supply to meet Maine's 100% RPS requirement and any increased load through the development of centralized generating resources, distributed energy resources, and other measures<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> See Energy Working Group Strategy #1

<sup>&</sup>lt;sup>2</sup> See Energy Working Group Strategy #5

Virtually all foreseeable new large-scale renewable generation development will require **power purchase agreements**. The energy storage, ocean energy, distributed generation resources, and infrastructure improvements and actions also delineated in this strategy are likely to be necessary to fulfill Maine's RPS requirements.

## **Transportation Working Group Strategies**

1. Expand electrification of light-duty vehicles to 70% of sales by 2030, with interim milestones and a dedicated investment in associated infrastructure<sup>3</sup>.

The Climate Action Plan should require a significant investment in electrification infrastructure and set clear, science- and modelling-based targets for the state in order to: ensure that policies developed and implemented to advance electrification are striving toward the same objective; enable clear metrics and evaluation of progress; send strong market signals and establish certainty in the marketplace.

2. Continue to participate in the TCI design and development conversations, including aspects of just revenue sharing, oversight, and actual emissions reductions<sup>4</sup>.

Maine's TCI representatives should push for the TCI framework to ensure significant emission reductions and require equitable and targeted distribution of revenue. If the final model rule meets those thresholds, then Maine should join the other TCI states by signing the final MOU and implementing the program in 2022, allocating revenue to strategies that expand and enhance access to clean transportation options particularly in Maine's rural, underserved, and low-income communities while investing in the state's economy and creating and retaining high-quality jobs.

TCI proposes an overarching framework to reduce emissions from transportation fuels, and create a revenue stream that can be invested in the emission reduction strategies recommended by the Transportation Working Group, which are otherwise currently unfunded. Importantly, states will have discretion to expend the funds on transportation solutions targeted to help specific communities invest in their transportation-related priorities and reduce transportation-related pollution, including Maine's rural and low-income communities. A minimum percentage of TCI proceeds should be dedicated for investment to benefit rural and low-income communities, with input from those communities.

3. Expand public transportation options and access, particularly for rural and low and moderate-income communities, and increase public transportation funding to average at least \$5 per capita by 2025 to assist in supporting this expansion<sup>5</sup>.

Public transportation is essential for work and other activities for persons who cannot afford or do not have access to an automobile. Public transportation also helps to reduce road congestion and travel times, air pollution, and energy and oil consumption, all of

<sup>&</sup>lt;sup>3</sup> See Transportation Working Group Strategy #1

<sup>&</sup>lt;sup>4</sup> See Transportation Working Group Strategy #3

<sup>&</sup>lt;sup>5</sup> See Transportation Working Group Strategy #5

which benefit both riders and non-riders alike. Maine's public transportation system is woefully underfunded and inadequate. Maine currently invests only 86 cents per person on public transportation, while our neighbors invest considerably more. Vermont, for instance, invests 12 dollars per resident.

## **Buildings, Infrastructure and Housing Working Group Strategies**

1. Implement actions by 2022 that begin to markedly reduce energy burdens and create jobs through energy-efficient affordable homes<sup>6</sup>.

Maine can make its housing more affordable, safe, and healthy for all people—especially low- and moderate-income households—through a comprehensive approach to new and existing homes. This approach would help the State address its affordable housing shortage, reduce the energy burden on vulnerable households, and put Mainers back to work in construction and forest products/manufacturing, and should include:

- ramping up construction of ultra-efficient and highly cost-effective new affordable housing, through multifamily housing financed through MaineHousing;
- a new initiative to build zero-energy manufactured homes right here in Maine to replace aging, inefficient mobile homes;
- dramatically accelerating the successful low-income weatherization programs to tighten up leaky homes—which are also often unsafe and unhealthy; and
- increasing access to financing for home improvements.

These efforts can be paid for by fixing the loophole by which Maine uses an energy efficiency surcharge for electricity and natural gas but not heating oil. To advance sufficiently, this loophole should be fixed by 2022.

2. Significantly accelerate by 2022 Maine's transition to heating and cooling with clean, cost-effective, Maine-made energy<sup>7</sup>.

Maine can reduce its energy burden by transitioning to clean, cost-effective heating and cooling systems that rely on Maine-made renewable electricity. **Beneficial electrification** will accelerate the use of both new and market-ready technologies to replace high-carbon fossil fuels with cleaner electricity while lowering home and business owners' heating and cooling bills. This transition is already underway: Maine leads the region in adoption of high-efficiency electric heat pumps, and our Renewable Portfolio Standard requires the state's relatively clean electricity supply to become more renewable over time. To accelerate this transition, Maine should:

- ramp up support for heat pump adoption;
- require progressively tighter standards for space- and water-heating systems in residential and commercial buildings, and
- develop standards to ensure that those systems are installed and serviced with consistent quality control and safety.

In other words, we must change our way of producing and using electricity in a manner that embraces renewable, clean energy. This strategy is highly scalable, technically and

<sup>&</sup>lt;sup>6</sup> See Buildings, Infrastructure and Housing Working Group Strategies #1 and #3

<sup>&</sup>lt;sup>7</sup> See Buildings, Infrastructure and Housing Working Group Strategy #2

economically feasible, and has the potential to achieve very significant greenhouse gas emission reductions.

## **Natural and Working Lands Working Group Strategies**

1. Create a dedicated, sustained public funding source by 2022 that generates at least \$15 million annually to conserve working forest, agricultural, and ecologically significant lands and results in increased carbon storage, avoided greenhouse gas emissions, enhanced climate adaptation resilience, and a more robust natural resource economy<sup>8</sup>.

Farms, forests, wetlands, and other natural areas store vast amounts of carbon, have the capacity to sequester even more, and provide essential community resources like clean drinking water, as well as support a substantial portion of Maine's workforce, primarily in rural areas of the state. Dedicated funding will bring additional stability to Maine's forestry, agricultural, and outdoor recreation and tourism sectors, which are the economic backbone of many rural communities. Increased investment in conservation activities will also make working lands more affordable for agricultural producers, especially for younger, beginning, and New Mainers, and expand access to recreation opportunities for all Maine people, resulting in positive public health outcomes. This effort may also be coupled with less-traditional partners, like low-income housing and public health, in recognition of their collective contribution to the vitality of Maine people.

2. Vigorously support climate-friendly land management practices and infrastructure development on public and private lands to increase carbon storage, build resilience, reduce emissions, and keep farms as farms and forests as forests<sup>9</sup>.

Maine's forests and working lands currently capture approximately 75% of the state's greenhouse gas emissions. Financial incentives can help landowners and managers offset the start-up costs associated with adopting practices that could increase that percentage while ensuring the resilience of these important rural economic sectors and realizing a host of other co-benefits:

- Incentivizing sustainable forest management by creating a Maine forest carbon program, for example, will send more wood to market, while keeping ecologically significant lands intact, particularly in southern and western Maine where development pressure is high.
- Expanding the state's **Ecological Reserve System** will improve resiliency for species and habitats that are vulnerable to climate change.

Investment is also needed for infrastructure development to reduce emissions and build climate resilience. Climate-friendly agricultural management practices increase the profitability of farms, enabling them to continue to be important contributors to both rural economies and to food security by providing access to healthy local food. Increasing support to improve aquatic connectivity will reduce flooding damage and support habitat functionality, leading to a more resilient relationship between infrastructure and ecosystem.

<sup>&</sup>lt;sup>8</sup> See Natural and Working Lands Working Group strategy #1

<sup>&</sup>lt;sup>9</sup> See Natural and Working Lands Working Group strategies #2 and #4

#### **Coastal and Marine Working Group Strategies**

1. Further enhance mitigation by 2022 by conserving and restoring coastal habitats that naturally store carbon (blue carbon optimization)<sup>10</sup>.

Healthy coastal and marine areas provide vital benefits to the community, ecosystem, and economy, while performing long-term carbon storage and sequestration of greenhouse gases (GHGs) and ameliorating coastal acidification. Essential strategy components include inventorying Maine's blue carbon resources to inform baseline estimates of current storage and sequestration, tracking changes in sequestration/emissions over time, and increasing conservation and restoration of coastal ecosystems to optimize carbon burial and obtain climate mitigation benefits.

2. More vigorously promote by 2022 climate-adaptive ecosystem planning and management using nature-based solutions<sup>11</sup>.

This ecosystem-based adaptation strategy identifies actions that leverage a range of tools (regulatory, voluntary, incentive-based, best management practice) that promote coastal community and ecosystem resiliency through adapting to changing environmental conditions, harnessing our natural resources, and protecting jobs, infrastructure, and biodiversity.

# Community Resilience Planning, Public Health, and Emergency Management Working Group Strategies

1. Markedly improve by 2022 the delivery (system) of technical assistance on resilience to municipalities<sup>12</sup>.

The magnitude of the impacts of climate change is significant, yet specific effects vary across the state. Some localities do not understand their current and future vulnerabilities, nor do they have the capacity to develop a resilience response. Others have a better understanding of their vulnerabilities but lack access to assistance. Indeed, about 75% of coastal communities have completed vulnerability assessments yet they often lack the capacity to secure funding or manage their response. This strategy establishes the institutional infrastructure at the state and regional levels to support resilience in all municipalities. It stresses the importance of using existing governance structures, providing access to the most recent data and tools, and tailoring assistance to municipal needs and capacity.

2. Establish by 2022 funding mechanisms to achieve resilience<sup>13</sup>.

<sup>&</sup>lt;sup>10</sup> See Coastal and Marine Working Group Strategy #3

<sup>&</sup>lt;sup>11</sup> See Coastal and Marine Working Group Strategy #4

<sup>&</sup>lt;sup>12</sup> See Community Resilience Planning, Public Health, and Emergency Management Working Group Strategy #2

<sup>&</sup>lt;sup>13</sup> See Community Resilience Planning, Public Health, and Emergency Management Working Group Strategy #3

Funding resilience to the impacts of climate change will be expensive. Such investments in resilience, however, will cost less than responding to repetitive and increasing climate impacts that compound virtually all contemporary social problems. The profound economic disruption posed by the COVID-19 pandemic will demand even greater efficiency than was already obvious at the launch of the Maine Climate Council's work. Thus, the actions recommended in this strategy call for investment of dollars but especially for coordination, efficiency, collaboration, and incentivizing behavior.

The strategy recommends Executive Orders to establish cabinet-level coordination across state agencies so that funding priorities are consistent and can reach communities and regional organizations that are ready to implement adaptation solutions. The strategy also recommends assembly and maintenance of a clearinghouse of funding options from public and private sources and the development of, and participation in, creative financing ideas within and beyond Maine's border. A possible key funding mechanism would be the establishment of a non-disaster related "State Infrastructure Climate Adaptation Fund" that would allow municipalities and state agencies to access the funds needed to supplement the often-excessive local cost shares associated with adaptation projects.

Creation of this fund emphasizes the "whole-community" approach by emphasizing financial support across the federal, state, and local levels. With both a backlog of \$325 million in mitigation projects (listed across the sixteen County Hazard Mitigation Plans) and major state infrastructure at risk of changing climate conditions, there is a desperate need to address the current "gap" that restricts a large majority of these projects from moving forward.