Hannah Pingree
Director, Governor’s Office of Policy Innovation and the Future
Co-Chair, Maine Climate Council
Mills Administration—SIGNIFICANT CLIMATE + CLEAN ENERGY ACTIONS

ESTABLISHED the Maine Climate Council and greenhouse gas reduction targets in law

SIGNED state renewable portfolio standard law requiring 80% renewable energy by 2030 + goal of 100% by 2050

PASSED law to implement 100,000 new heat pumps - including support for low + moderate income Mainer

ESTABLISHED new electric vehicle programs, supported by VW settlements: rebates, charging infrastructure, + public transportation

25

22ND STATE TO JOIN the U.S. Climate Alliance—a bi-partisan coalition of 25 U.S. States committed to meeting Paris Climate Goals

ENDED the state’s wind energy moratorium, left an offshore drilling coalition, + actively engaged in regional efforts around carbon reductions, transportation, + offshore wind

PASSED legislation to help launch the first floating offshore wind turbines in the U.S.

INTRODUCED legislation to limit the use of hydrofluorocarbons (“climate super-pollutants”) to fight climate change
WHAT IS THE MAINE CLIMATE COUNCIL?
MAINE CLIMATE COUNCIL (LD 1679)

Governor's Bill, sponsored by Senator David Woodsome (R), passed with overwhelming bi-partisan support, signed June 2019

- Set reductions in law: 45% reduction in greenhouse gas emissions by 2030, 80% by 2050
- Created Maine Climate Council to advise the Governor and Legislature on ways to mitigate the causes of, prepare for and adapt to climate change
- State Climate Action Plan update due by December 1, 2020 and every four years
CLIMATE COUNCIL GOALS

12.01.20
Climate Action Plan Delivered

ACHIEVE STATE CARBON NEUTRALITY BY 2045

REDUCE MAINE’S GREENHOUSE GAS EMISSIONS BY TARGETS OUTLINED IN STATE LAW

45% BELOW 1990 LEVELS BY 2030

80% BELOW 1990 LEVELS BY 2050

ENSURE MAINE PEOPLE, INDUSTRIES, AND COMMUNITIES ARE RESILIENT TO THE IMPACTS OF CLIMATE CHANGE.
In Maine, most greenhouse emissions come from transportation, followed by residential, commercial and industrial sources. Finding ways to reduce them is a key goal of the Climate Council.

climatecouncil.maine.gov
Maine Greenhouse Gas (GHG) Emissions + Reduction Goals

Below 1990

1990 BASELINE EMISSIONS LEVELS

10%

45%

80%

Source: Maine DEP, 2020

Data source: Maine Department of Environmental Protection
Maine Climate Council

PROCESS TIMELINE

June 2019 Governor signs LD 1679, establishing Maine Climate Council

Sept 2019 Governor appoints Maine Climate Council members; MCC launches


June 2020 - Dec 2020 Maine Climate Council Considers & Selects Final Strategies for State Climate Action Plan

Dec 1, 2020 State Climate Action Plan Delivered to Legislature

climatecouncil.maine.gov
The **39-member Maine Climate Council**, an assembly of scientists, industry leaders, bipartisan local and state officials, is responsible for developing a Climate Action Plan for Maine.

**Six working groups** comprised of 230+ volunteer members recommend strategies to the Council for achieving Maine's climate goals.

An expert **Scientific and Technical Subcommittee** is responsible for identifying the impacts of climate change in Maine.

An **Equity Subcommittee** will support planning and implementation of climate strategies to ensure benefits across diverse populations of Maine people.
Maine Climate Council Reports
Download at climatecouncil.maine.gov

Scientific Assessment of Climate Change
Cost-Benefit Analysis & Greenhouse Gas Modeling
Equity Assessment of Draft Strategies
Strengthening Maine’s Clean Energy Economy

September, 2020
Maine Climate Action Plan Goals

• Reduce Maine’s Greenhouse Gas Emissions

• Make Maine more resilient to the impacts of climate

• Foster Economic Opportunity and Prosperity

• Advance Equity through Maine’s Climate Response
Maine’s 8 Climate Action Strategies

A. Embrace the Future of Transportation in Maine
B. Modernize Maine’s Buildings
C. Reduce Carbon Emissions the Energy and Industrial Sectors through Clean Energy Innovation
D. Grow Maine’s Clean Energy Economy and Good Jobs
E. Protect Maine’s Environment and Working Lands and Waters, Increase Carbon Sequestration
F. Build Healthy and Resilient Communities
G. Invest in Climate-Ready Infrastructure
H. Engage People and Communities in Climate Impacts and Program Opportunities
Strategy A: Embrace the Future of Transportation in Maine

1. Accelerate Maine’s Transition to Electric Vehicles
2. Increase Fuel Efficiency and Alternative Fuels
3. Reduce Vehicle Miles Traveled
Strategy B: Modernize Maine’s Buildings

1. Transition to Cleaner Heating and Cooling Systems, Efficient Appliances
2. Accelerate Efficiency Improvements to Existing Buildings
3. Advance the Design and Construction of New Buildings
4. Advance the Design and Promote Climate-Friendly Building Products
5. “Lead by Example” in Publicly Funded Buildings
6. Investigate a Renewable Fuel Standard
7. Replace Hydrofluorocarbons with climate-friendly alternatives
Strategy C: Reduce Carbon Emissions in Maine’s Energy and Industrial Sectors through Clean-Energy Innovation

1. Ensure Adequate Affordable Clean-Energy Supply
2. Initiate a Stakeholder Process to Transform Maine’s Electric Power Sector
3. Accelerate Emissions Reductions of Industrial Uses and Processes
4. Encourage Highly Efficient Combined Heat and Power Facilities
Emissions Modeling

Potential Pathway

• By 2030, total emissions are equal to the target of 45% 1990 levels
• Total emissions in 2050 are 82% below 1990 levels

Data source: Synapse Energy Economics
# Reducing Carbon Emissions - Key Actions

<table>
<thead>
<tr>
<th>Sector</th>
<th>Metric</th>
<th>2025</th>
<th>2030</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transportation</strong></td>
<td>Number of Light-duty EVs on the Road</td>
<td>41,000</td>
<td>219,000</td>
<td>904,000</td>
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<tr>
<td></td>
<td>EV Share of New Light-duty Vehicle Sales</td>
<td>28%</td>
<td>85%</td>
<td>100%</td>
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<tr>
<td></td>
<td>Reduction in Light-duty VMT per Vehicle</td>
<td>10%</td>
<td>20%</td>
<td>20%</td>
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<tr>
<td></td>
<td>ZEV Share of New Heavy-duty Vehicle Sales</td>
<td>12%</td>
<td>55%</td>
<td>100%</td>
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<tr>
<td></td>
<td>Reduction in Heavy-duty VMT per Vehicle</td>
<td>2%</td>
<td>4%</td>
<td>4%</td>
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<tr>
<td><strong>Buildings</strong></td>
<td>Number of Households with Retrofit Heat Pumps (installed after 2018) and Legacy Fossil Systems</td>
<td>80,000</td>
<td>130,000</td>
<td>26,000</td>
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<tr>
<td></td>
<td>Number of Households with Whole-Home Heat-Pump Systems</td>
<td>35,000</td>
<td>116,000</td>
<td>487,000</td>
</tr>
<tr>
<td></td>
<td>Newly Weatherized Households (after 2019)</td>
<td>17,000</td>
<td>35,000</td>
<td>105,000</td>
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<tr>
<td><strong>All</strong></td>
<td>GHG Emissions (MMT)</td>
<td>14.50</td>
<td>11.67</td>
<td>3.72</td>
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<tr>
<td></td>
<td>Emissions Reduction from 1990 Levels</td>
<td>32%</td>
<td>45%</td>
<td>82%</td>
</tr>
</tbody>
</table>

Data source: Maine Department of Environmental Protection 8th Report on Progress toward GHG Reduction Goals
Strategy D: Grow Maine’s Clean Energy Economy: Protect Our Natural-Resource Industries

1. Take Advantage of New Market Opportunities
2. Grow Clean-Energy Jobs and Businesses in Maine
Strategy E: Protect Maine’s Environment and Working Lands and Waters: Promote Natural Climate Solutions and Increase Carbon Sequestration

1. Protect Natural and Working Lands and Waters
2. Develop New Incentives to Increase Carbon Storage
3. Expand Outreach to Offer Information and Technical Assistance
4. Enhance Monitoring and Data Collection to Guide Decisions
Strategy F: Build Healthy and Resilient Communities

1. Empower Local and Regional Community Resilience Efforts
2. Adopt Official Sea-Level Rise Projections
3. Emphasize Resilience Through Land-Use Planning Tools
Strategy G: Invest in Climate-Ready Infrastructure

1. Assess Climate Vulnerability and Provide Climate-Ready Design Guidance
2. Establish a State Infrastructure Adaptation Fund to support municipal and regional projects
Strategy H:
Engage with Maine People and Communities about Climate Impacts and Program Opportunities

1. Raise Awareness about Climate-Change Impacts and Opportunities
2. Support Public Education Offerings
3. Start the “Maine Climate Corps” for Climate-Related Workforce Development
4. Recognize Climate Leadership by Maine Businesses and Organizations
Next steps - Maine Climate Council

• Implementation
• Monitoring & Metrics
• Workgroups, communications
• New plan every 4 years
Learn More & Read the Full Plan

@ climatecouncil.maine.gov