MAINE WON'T WAIT

R TEAR PLAN FOR CLIMAN

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THE CLIMATE COUNCIL

MAINE CLIMATE COUNCIL -- LD 1679 Governor's Bill sponsored by Senator David Woodsome Overwhelming bipartisan support, signed June 2019



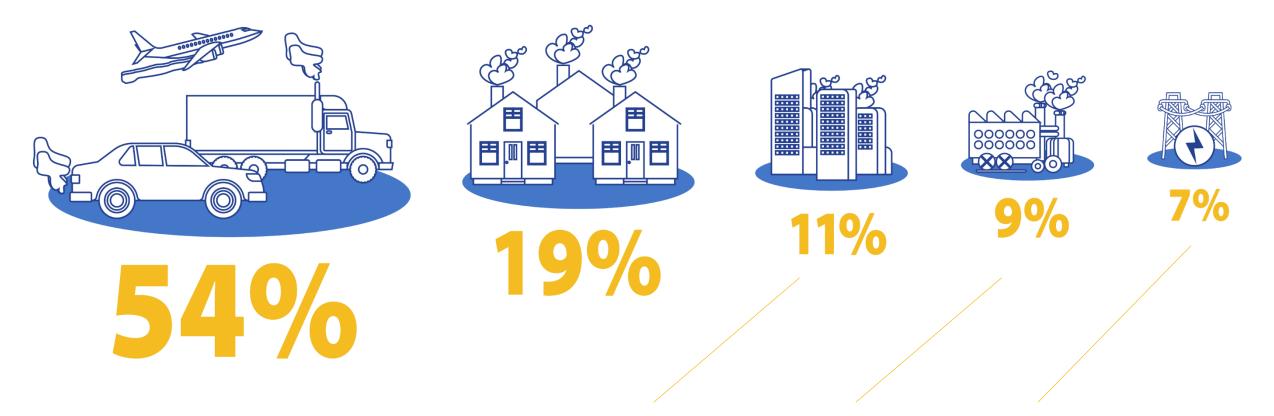


CLIMATE COUNCIL GOALS

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LARE RESILIENT TO THE IMPACTS OF CLIMATE CHANGE.



TRANSPORTATION • RESIDENTIAL • COMMERCIAL • INDUSTRIAL • ELECTRIC POWER

Data source: Maine Department of Environmental Protection 8th Biennial Greenhouse Gas Emissions Report

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

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 <u>recommend strategies</u> 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.

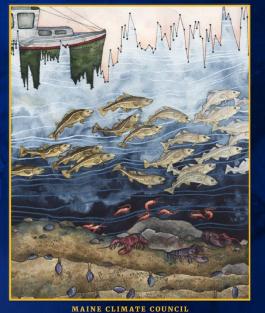
An **Equity Subcommittee** will support planning and implementation of climate strategies to ensure benefits across diverse populations of Maine people.



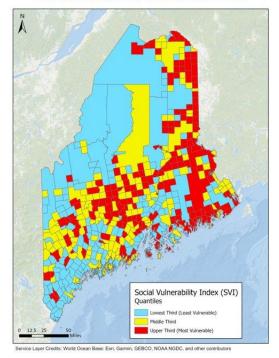
Maine Climate Council Reports

Download at climatecouncil.maine.gov

Scientific Assessment of Climate Change and Its Effects in Maine



Social Vulnerability Index (SVI) By County Subdivisions

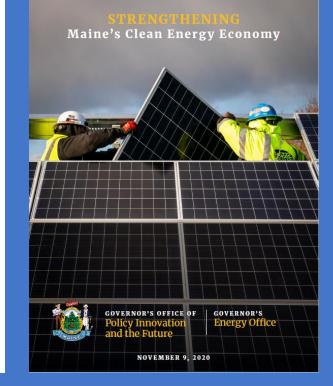




Assessing the Potential Equity Outcomes of Maine's Climate Action Plan: Framework, Analysis and Recommendations

September, 2020

Prepared for the Maine Climate Council by the University of Maine's Senator George J. Mitchell Center for Sustainability Solutions (Dr. Linda Silka, Sara Kelemen and Dr. David Hart). Information about the Mitchell Center is available at <u>umaine.ed/umitchellcenter</u>!. Additional staff auroport was provided by the Mitchell Center. We are grateful for the valuable guidance and feedback we received from our colleagues in the Governor's Office of Policy Innovation and the Future as well as the Climate and Equity Advisory Committee. The views expressed in this report are those of the authors and do not reorseent the University of Maine.



Scientific Assessment of Climate Change

SCIENTIFIC AND TECHNICAL SUBCOMMITTE

Cost-Benefit Analysis & Greenhouse Gas Modeling Equity Assessment of Draft Strategies Strengthening Maine's Clean Energy Economy Plan

Maine's Climate Action Strategies



A. Embrace the Future of Transportation in Maine



D. Grow Maine's Clean Energy Economy and Good Jobs



G. Invest in Climate-Ready Infrastructure

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B. Modernize Maine's Buildings



E. Protect Maine's Environment and Working Lands and Waters, Increase Carbon Sequestration



H. Engage People and Communities in Climate Impacts and Program Opportunities



C. Reduce Carbon Emissions the Energy and Industrial Sectors through Clean Energy Innovation



F. Build Healthy and Resilient Communities



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 (Public transportation options, broadband, land use policies)





Strategy B: Modernize Maine's Buildings

- 1. Transition to Cleaner Heating and Cooling Systems, Efficient Appliances
- 2. Accelerate Efficiency Improvements to Existing Buildings (including weatherization).
- 3. Advance the Design and Construction of New Buildings
- 4. Innovate and Promote Climate-Friendly Building Products.
- 5. "Lead by Example" in Public Buildings



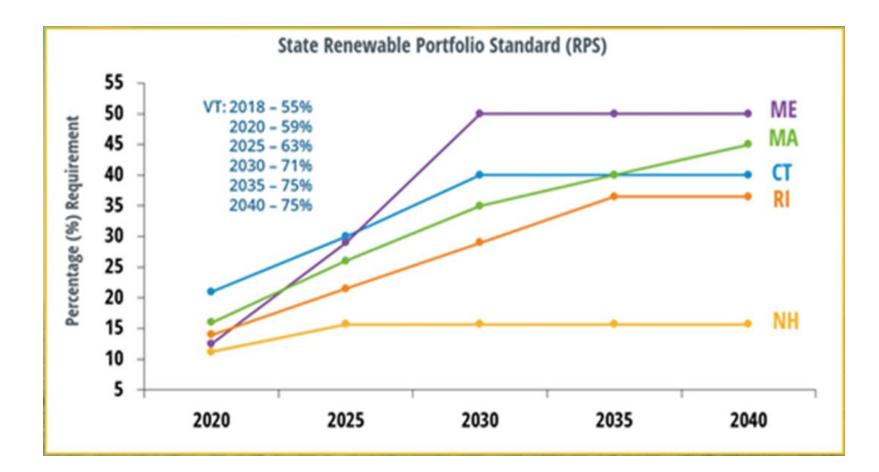


Strategy C: Reduce Carbon Emissions in Maine's Energy and Industrial Sectors through Clean-Energy Innovation





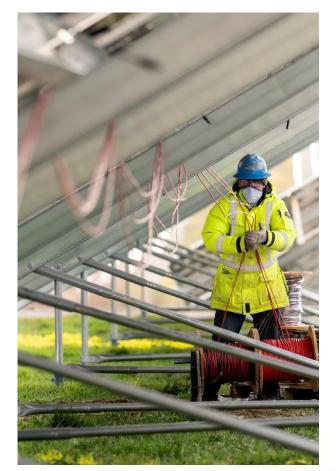
In 2019 Maine increased its renewable portfolio standard for electricity to 80% by 2030 with a goal of 100% by 2050





Strategy D:

Grow Maine's Clean Energy Economy and Protect Our Natural-Resource Industries





<u>Goal:</u> Double clean energy jobs in Maine by 2030 (30,000 jobs)

What is the clean energy economy?

"Economic development, operations and supply chains in renewable energy and energy efficiency, that generate economic benefits, create high-quality jobs, and fight climate change."





Strategy E:

Protect Maine's Environment and Working Lands and Waters, Promote Natural Climate Solutions and Increase Carbon Sequestration





Maine is nearly 90% forested, among the most forested states in the country.

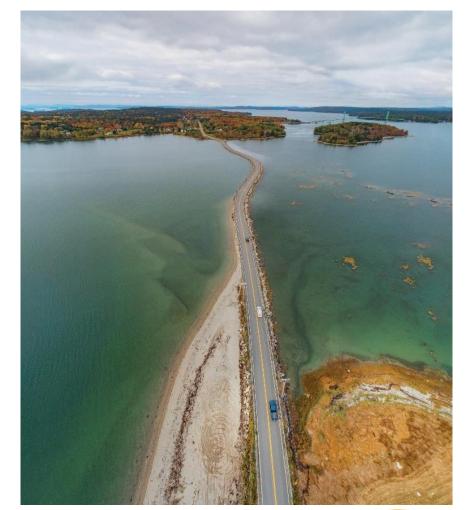
There are huge opportunity for ongoing and increased carbon sequestration - including ocean opportunities (called blue carbon).





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
- 4. Strengthen Public-Health Monitoring, Education, and Prevention



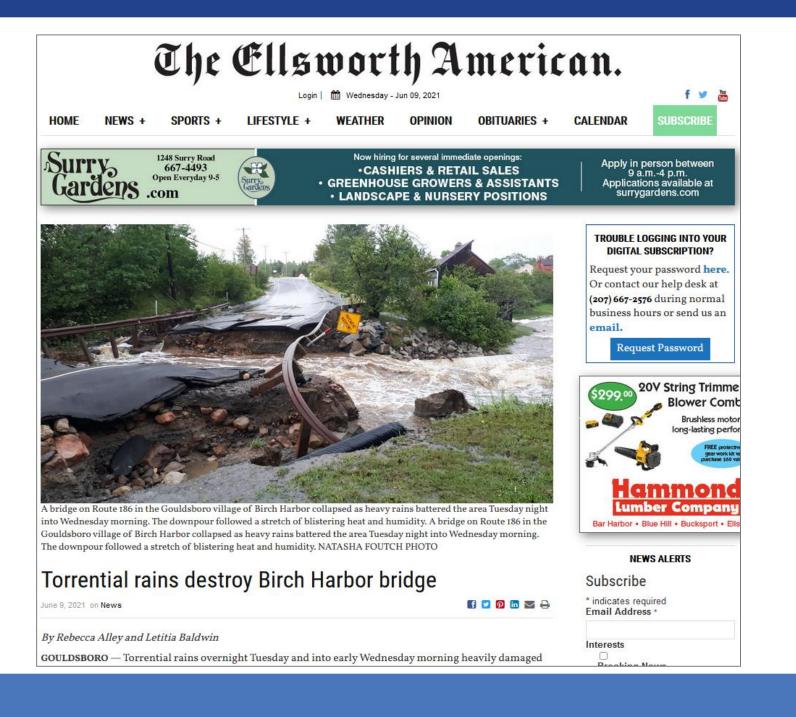




Strategy G:

Invest in Climate-Ready Infrastructure







Strategy H:

Engage with Maine People and Communities about Climate Impacts and Program Opportunities

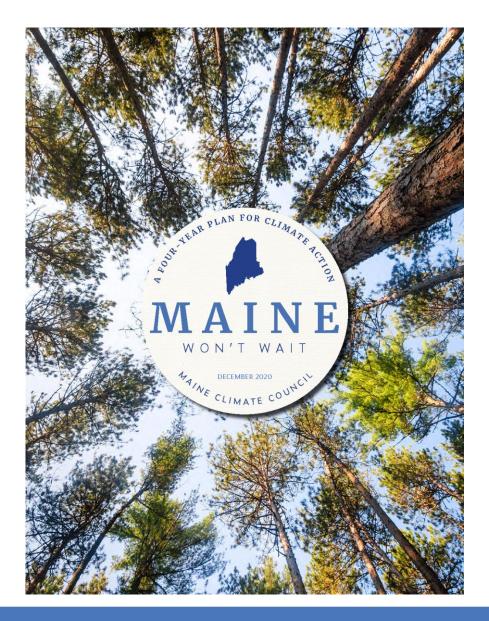




Inspiring Climate Action for Maine

#MaineWontWait







MAINE WON'T WAIT ONE-YEAR PROGRESS REPORT DECEMBER 1, 2021



MAINE WON'T WAIT TRACKING DASHBOARD

Tracking numerical progress toward *Maine Won't Wait* goals is critical for informing the public about whether our climate policies are having the intended effects, and for evaluating whether evidence-based adjustments, enhancements or replacements to policies are needed in pursuit of near-term and long- term climate objectives.

This dashboard tracks 9 initial numerical targets, based on an outline included in *Maine Won't Wait*. It will expand to include other key *Maine Won't Wait* metrics as updated data becomes available, new programs are established, and state and federal climate investments are realized. The dashboard will be updated regularly, with an online version coming in 2022.



5,577 Electric & Hybrid Vehicles

+47% since 2019 Goal: 219,000 by 2030



265 Public EV Charging Stations

+46% since 2019



\$11.55 Per Capita

on Public Transit

Updated Figure for 2021



40,000 New Heat Pumps since 2019

Goal: 100,000 new by 2025



2,043 Homes Weatherized in 2021

> Goal: 17,500 by 2025



NEW Community Climate Resilience Plans

Goal: 100 Communities by 2023



Path to **80%** Clean Energy by 2030

Maine will Reach 45% in 2021



30,000 Clean Energy Jobs by 2030

Maine had 14,000 in 2019



30% Land Conservation by 2030

State at 20.1% in 2021

Greenhouse Gas Emissions

The Maine Department of Environmental Protection is preparing the next biennial greenhouse gas emissions inventory update for release in early 2022. This inventory will include gross and net emissions estimates for the first time. Emissions data will be added to this dashboard in the future to track Maine's goal of achieving carbon neutrality by 2045 and progress toward statutory targets of reducing emissions by 45% by 2030 and 80% by 2050.

Maine Won't Wait - Funding for Action Clean Transportation Funding

From the Federal Infrastructure Investment & Jobs Act (over five years):

- \$234 million improve public transportation options across the state
- \$19 million to expand public EV charging.
- \$100 million from the Infrastructure Investment and Jobs Act to help provide broadband coverage across the state
- Additional competitive funds for EV school buses, ferry conversions, charging and fueling infrastructure, innovation and more.

From the Maine Jobs & Recovery Plan (Federal American Rescue Plan):

- \$8 million to expand municipal and public EV charging
- \$150 million to fund the Maine Connectivity Authority to expand broadband
- \$5 million for workforce transportation pilot projects



Buildings & Efficiency Funding

From the Maine Jobs & Recovery Plan (Federal American Rescue Plan):

- \$50 million for energy efficiency programs, such as residential weatherization and efficiency upgrades, and industry and business efficiency incentives
- \$50 million for efficient affordable housing, including housing units close to employment centers
- \$20 million for forest product innovation, including climate-friendly building materials

From the Federal Infrastructure Investment & Jobs Act (over five years):

- \$36.9 million for the Weatherization Assistance Program, low-income energy efficiency
- \$1.9 million for the Energy Efficiency and Conservation Block Grant Program, which provides grants to communities, cities, and tribal governments for energy efficiency programs
- \$884,000 for the Energy Efficiency Revolving Loan Fund Capitalization Grant Program
- Additional competitive funds for energy auditor training, building energy codes technical assistance and training, and more.



Clean Energy Jobs Funding

From the Federal Infrastructure Investment & Jobs Act (over five years):

- Est. \$4.4 million for the Governor's Energy Office to provide grants to develop and implement clean energy programs and projects that will create jobs
- Additional competitive funds for clean energy deployment, projects at schools, electric transmission, grid resilience and reliability and several other areas.

From the Maine Jobs & Recovery Plan (Federal American Rescue Plan):

 \$8 million for advancing clean energy partnerships and initiatives to grow workforce and innovation in Maine's clean energy sector, in support of Governor Mills' goal of 30,000 clean energy jobs in Maine by 2030.



Climate Resilience

From the Federal Infrastructure Investment & Jobs Act (over five years):

- \$1.3 billion for federal-aid highway apportioned programs and \$225 million for bridge replacement and repairs which can include climate resilience projects \$390 million to improve water infrastructure across the state
- Additional competitive funds for cybersecurity, energy and climate resilience programs

From the Maine Jobs & Recovery Plan (federal American Rescue Plan Act):

\$20 million to support adaptation and resilience of infrastructure vulnerable to climate

Maine State Budget:

- \$40 million in the biennial budget for land conservation (LMF Program)
- \$4.75 million for local and regional planning grants to prepare for climate change effects, reduce carbon emissions, and transition to renewable energy.
- \$3 million to upgrade municipal culverts at stream crossings
- \$300k for eelgrass mapping; \$200k for DEP rulemaking support; and \$400k for forest carbon mapping.



Sea Level Rise Planning

LD 1572, Resolve, To Analyze the Impact of Sea Level Rise

January 2022 Multi-agency Report to ENR Committee <u>https://www.maine.gov/dep/publications/reports/index.html</u>

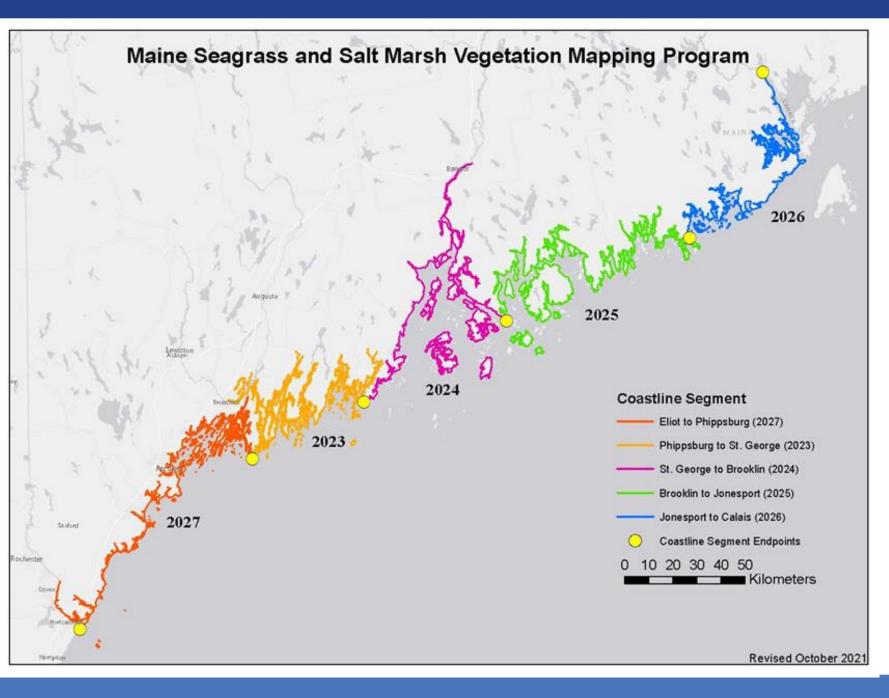
Recommend statutory revisions for:

- Permitting under Site Location of Development Act (Title 38)
- Municipal planning (Title 30-A)

Department of Environmental Protection rulemaking planned for stormwater management, sand dunes, beach nourishment permit-by-rule, and more...

Department of Agriculture, Conservation and Forestry coordinating with Maine Coastal Program and GOPIF Community Resilience Partnership





- Funded by 2021 P.L., ch.
 424 (LD 593)
- Entire coast surveyed every 5 years
- Data and imagery publicly available



Complimentary DEP Projects

- Marine Environmental Monitoring Program
 - 2022: release of 2021 low tide imagery and seagrass GIS layer (Eliot to Cape Elizabeth)
 - 2022: seagrass mapping (Cape Elizabeth to Phippsburg)



- 2023 ongoing: estuary water quality and biological community characterizations (coincident with coast-wide mapping segments)
- o Team Zostera

2022 (pilot) - ongoing: volunteer-based seagrass monitoring in Portland area



Photo credits: Alexander Lewis & Kaitlyn Schwalje



Coastal Carbon Working Groups

o Maine

- Steering Committee: ME Coastal Program, Bates College, ME Coast Heritage Trust, ME Natural Areas Program, DEP, Island Institute, Bigelow Lab, Wells Reserve
- Goals: "blue carbon" inventory (seagrass, salt marsh, seaweed), info. exchange, motivating research
- New England (EPA lead)
 - Goal: inventory regional seagrass & salt marsh carbon stocks
 - Seagrass, salt marsh distribution: <u>https://www.northeastoceandata.org/data-</u> <u>explorer/</u>
 - Report forthcoming in 2022

Greenhouse Gas (GHG) Inventory

Biennial report on progress toward state emission goals due December 1, 2022

- Covers 6 greenhouse gases, including CO2
- Previous reports on DEP website

https://www.maine.gov/dep/publications/reports/index.html

DEP plans to release Interim report Spring 2022, including:

- Actual emissions reported by licensed facilities
- Estimated emissions from all other emitting activities within Maine
- Emissions from biomass combustion
- Carbon sequestration by Inland and Coastal vegetation



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