

Maine Climate Council Meeting



Hannah Pingree
Council Co-chair

Melanie Loyzim
Council Co-chair



GOVERNOR'S OFFICE OF
**Policy Innovation
and the Future**



MAINE DEPARTMENT OF
Environmental Protection

June 18, 2024

Meeting Agenda

1. Welcome
2. Overview of Strategies and Introduction to Working Group Updates
3. Working Group and Task Force Presentations: Resilience, Coastal & Marine, Natural & Working Lands, Materials Management
- 4. Break**
5. Working Group and Task Force Presentations: Transportation, Buildings, Energy, Land Use
- 6. Lunch**
7. Small Group Discussions
8. Panel Discussion: Context for the Climate Action Plan Update
- 9. Break**
10. Maine Climate Council Discussion
11. Closing Remarks / Adjourn



2024 Plan Timeline



DEC 1, 2020

Maine Won't Wait Climate
Action Plan Delivered to
Legislature



MAY 2023

Governor Announces
New and Returning
Appointments to
Climate Council



SEPT 2023 - JUNE 2024

Working Groups &
Subcommittees Meet to Update
Mitigation and Adaptation
Strategies



SEPT 2024

Climate Council
Meets to Consider and
Adopt Strategies



DEC 1, 2024

Updated Climate
Action Plan Delivered
to Legislature

The Maine Climate Council has 8 Climate Strategies:

1 —

Embrace the future of transportation in Maine



2 —

Modernize Maine's buildings: energy-efficient, smart, and cost-effective homes and businesses



3 —

Reduce carbon emissions in Maine's energy and industrial sectors through clean energy innovation



4 —

Grow Maine's clean energy economy and protect our natural resource industries



5 —

Protect Maine's environment and working lands and waters



6 —

Build healthy and resilient communities



7 —

Invest in climate-ready infrastructure



8 —

Engage with Maine people and communities



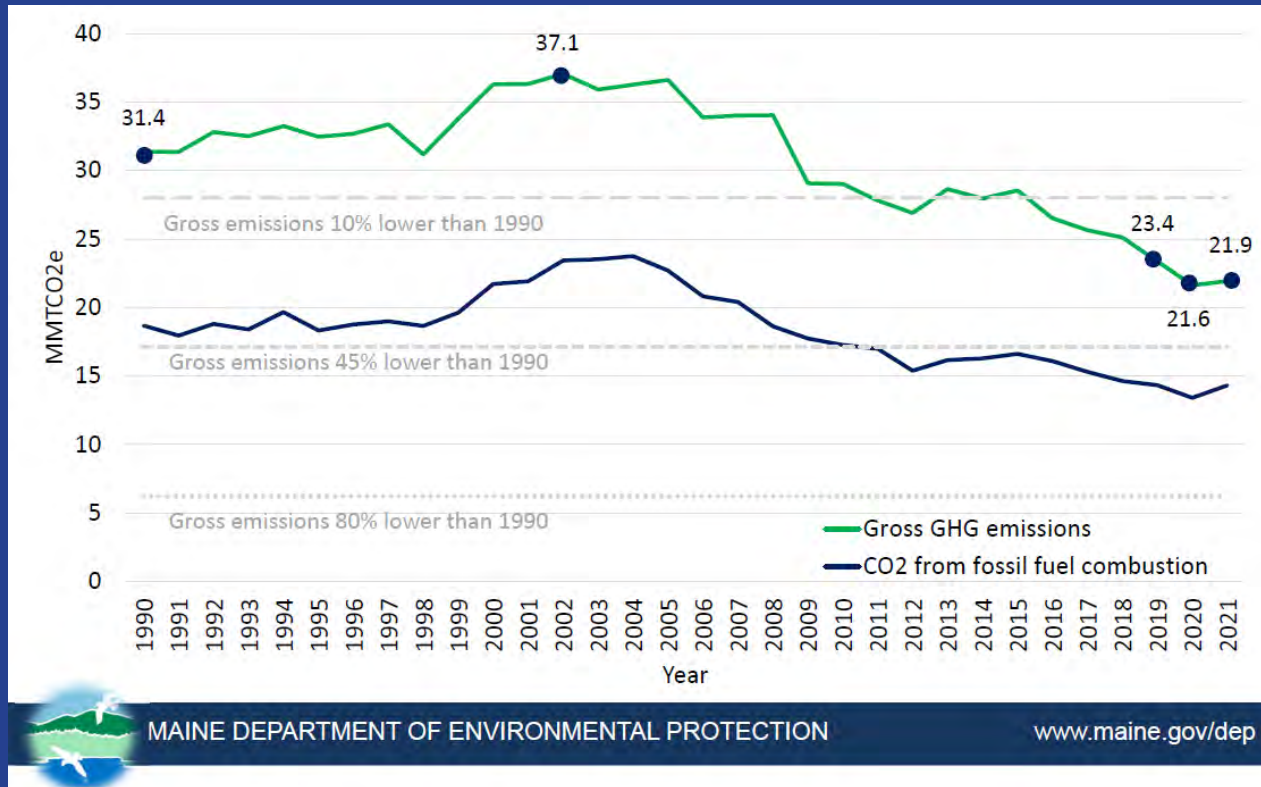
Maine's Climate Action Plan Goals:



1. Reduce Maine's **greenhouse gas emissions**
2. Make Maine more **resilient** to the impacts of climate change
3. Foster **economic opportunity** and **prosperity**
4. Advance **equity** through Maine's response

Focus on emissions and resilience

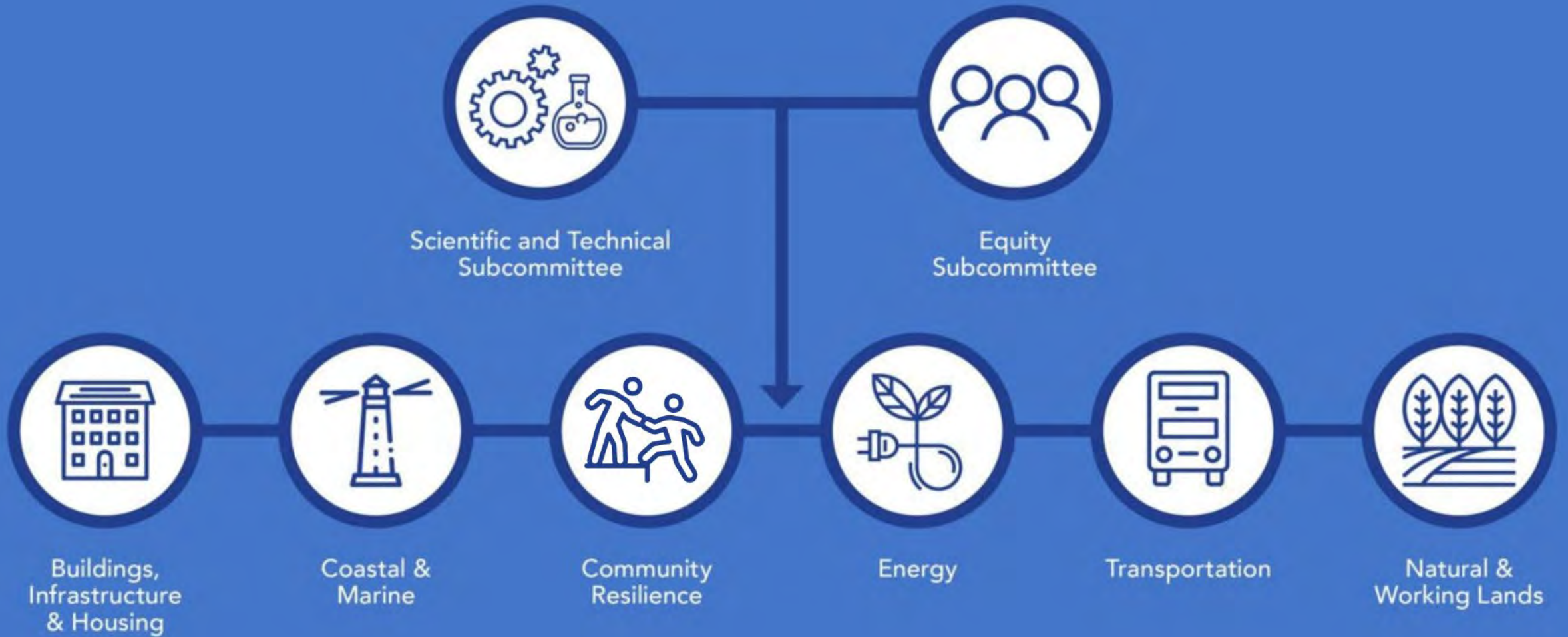
Gross greenhouse gas emissions in 2021: 30% lower than 1990



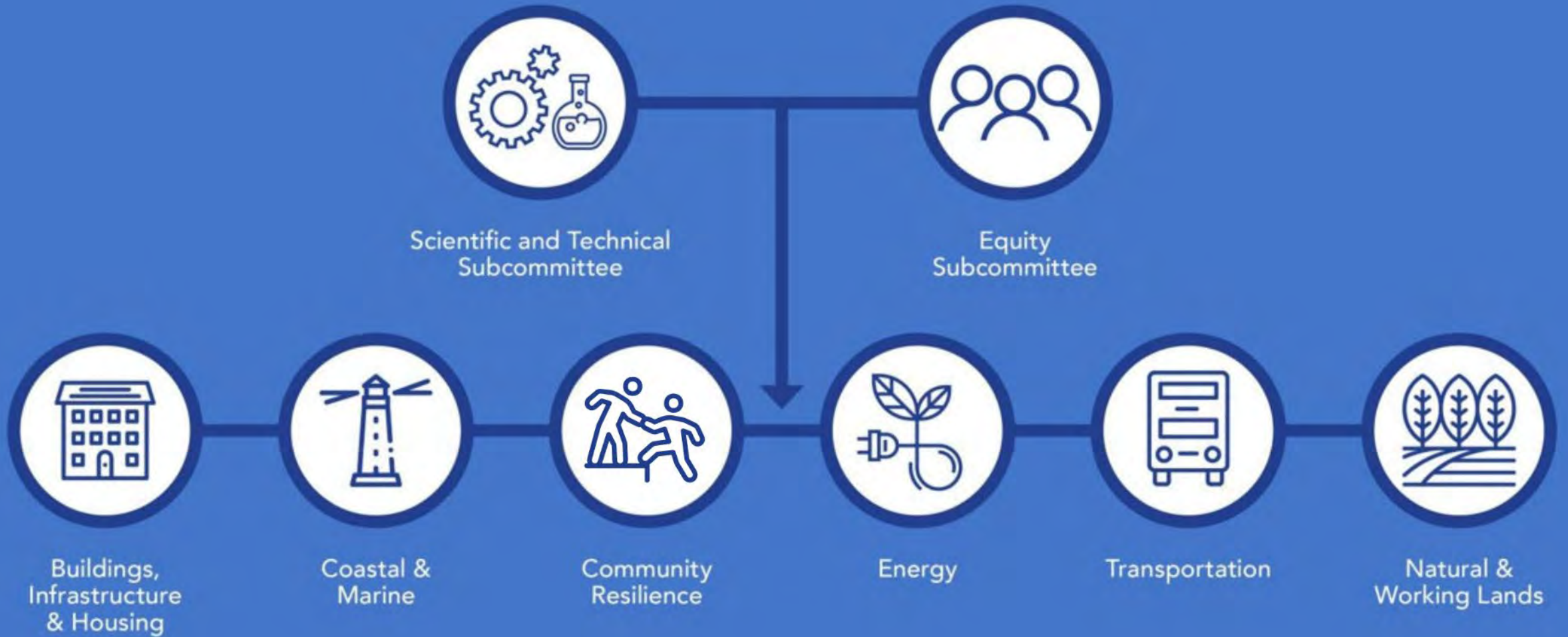
Newry, Maine, December 2023



Maine Climate Council



Maine Climate Council



Maine Climate Council by the Numbers

100

Maine Climate Council & Working Group meetings between September 2023 and June 2024



222

Working Group members



7,300+

Working Group participant hours



Up to

450

members of the public attended MCC meetings

Maine Climate Council **SURVEY**



<https://www.maine.gov/future/climate/council/workinggroups/2024strategies>



Community Resilience Working Group



Anne Fuchs
MEMA
Co-chair



Rebecca Boulos
Maine Public Health Assn.
Co-chair



Judy East
MDACF
Co-chair



Photo credit: Island Institute



Community Resilience Working Group Members



- Rebecca Boulos | Maine Public Health Association
- Judy East | Bureau of Resource Information and Land Use Planning, MDACF
- Anne Fuchs | Maine Emergency Management Agency
- Senator Craig Hickman | Maine State Legislature
- Senator Marianne Moore | Maine State Legislature
- Representative Amanda Collamore | Maine State Legislature
- Representative Margaret Craven | Maine State Legislature
- Andrew Barton | University of Maine at Farmington
- Jeremy Bell | The Nature Conservancy
- Noël Bonam | AARP Maine
- Lance Boucher | American Lung Association
- Alsina Brenenstuhl | Piscataquis County Emergency Management Agency
- Kirsten Brewer | Volunteer Maine Climate Corps
- Jessica Brunacini | Maine Sea Grant / Casco Bay Estuary Partnership
- Howard Carter | City of Saco
- Tim Doak | Northern Light Health
- Andy Dorr | Town of Damariscotta
- Heather Dumais | Maine Emergency Management Agency
- Michael Durkin | Cumberland County Emergency Management Agency
- Parker Gassett | University of Maine
- Samantha Grela | City of Portland (Cities Readiness Initiative)

- Nancy Hasenfus | Retired Physician
- Charlie Hebson | Maine DOT
- Corrie Hunkler | Healthy Acadia
- Eileen Johnson | Bowdoin College
- Nan Johnson | Federal Emergency Management Agency
- Tora Johnson | University of Maine / Sunrise County Economic Council
- Kohl Kanwit | Department of Marine Resources
- Dennis Kiley | EcoPsychology Initiative
- Taylor LaBrecque | Maine DOT
- Kathleen Leyden | Maine Coastal Program / Maine DMR
- Ainsley Morrison | Bowdoin College
- Jim Nadeau | Nadeau Land Surveys
- Keyana Pardiya | Wabanaki Public Health and Wellness
- Jessie Perkins | Bethel Area Chamber of Commerce
- Emily Rabbe | Lincoln County Regional Planning Commission
- Abbie Sherwin | Southern Maine Planning and Development Commission
- Chloe Shields | New England Environmental Finance Center
- Pete Slovinsky | Maine Geological Survey
- Charlie Soltan | Soltan Bass, LLC
- Marla Stelk | National Association of Wetland Managers
- Puthiery Va | Maine CDC
- Leticia VanVuuren | Knox County Emergency Management Agency
- Kate Warner | Maine Rural Water Association
- Stephanie Welch | Island Institute



Community Resilience Recommendations



1 Empower Local and Regional Community Resilience Efforts.

Enhance state and local abilities to assess climate risks, prepare for and recover from natural disasters, and adapt infrastructure and communities.



3 Establish a framework for measuring the effectiveness of adaptation and resilience actions.

4 Improve information and education about climate and health.

5 Expand access to funding and financing for climate adaptation and emissions reduction.



Increase awareness and action on the mental health impacts of climate change.

6





1

Empower Local and Regional Community Resilience Efforts.



Invest in the **full spectrum** of **resilience** strategies

Provide natural hazard and climate **data** for planning

Advance **nature-based solutions** and **coastal bluff** management

Increase capacity for **disaster management**

Avoid development in **high-risk** locations

Consider **climate risks** in **infrastructure** decisions



2

Enhance state and local abilities to assess climate risks, prepare for and recover from natural disasters, and adapt infrastructure and communities.



Assess
climate
vulnerability

Prioritize improvements where infrastructure poses **threats to public health**

Enhance hazard mitigation, planning, response, and recovery

Support difficult conversations about **Getting Out of Harm's Way**

Explore a **voluntary buyout program** for flood-prone properties



3

Establish a framework for measuring the effectiveness of adaptation and resilience actions.

Set resilience **goals** and **metrics**

Learn from other **state** and **national** **examples**

Adjust metrics over time



4

Improve information and education about climate and health.



Address air quality concerns from wildfire smoke and mold

Help communities address extreme heat

Connect with communities on climate-related health priorities

Include indoor air quality in heating assistance

Monitor water quality for public health

Community **warming and cooling centers**



5

Expand access to funding and financing for climate adaptation and emissions reduction.



Design a **resilience bank**

Maximize **federal funds** for resilience projects

Simplify grant application processes

Engage **communities** that **have not** sought **funding**

Develop a comprehensive **climate funding strategy**

Adopt **performance metrics**



6

Increase awareness and action on the mental health impacts of climate change.

Provide mental health **resources** and **training**

Support **community assessments**

Support **frontline workers' mental health** resilience

Incorporate mental health services into **emergency response planning**

Expand **investment** in **mental healthcare**

Support **resilience, agency, and hope**



Input From Priority Populations



When asked open ended questions about their most pressing needs, [survey respondents] do not cite climate change, but nearly always point to challenges that are related to climate (e.g., high fuel costs) or competing challenges (e.g., lack of childcare).

- Sunrise County Economic Council engagement report





Input From Priority Populations

When asked **“What are the biggest needs for your community?”**

- Cost of living
- Economic development & job opportunities
- Public transportation
- Different types of people engaged in decision making processes

Barriers identified:

- Lack of funds
- Feeling disillusioned
- Recruiting small/socially vulnerable communities to the Community Resilience Partnership

Coastal & Marine Working Group



Curt Brown
Ready Seafood
Co-chair



Carl Wilson
Dept. of Marine
Resources
Co-chair



Coastal & Marine Working Group Members



- Carl Wilson | Department of marine Resources
- Curt Brown | Ready Seafood
- Senator Marianne Moore | Maine State Legislature
- Senator Cameron Reny | Maine State Legislature
- Representative Tiffany Strout | Maine State Legislature
- Representative Lydia Crafts | Maine State Legislature
- Nick Battista | Island Institute
- Jocelyn Runnebaum | The Nature Conservancy
- Curtis Bohlen | Casco Bay Estuary Partnership
- Ben Gutzler | Wells National Estuarine Research Reserve
- Ivy Frignoca | Friends of Casco Bay
- Jeremy Gabrielson | Maine Coast Heritage Trust
- Beverly Johnson | Bates College
- Kathy Mills | Gulf of Maine Research Institute
- Bill Needelman | City of Portland
- Gayle Zydlewski | Maine Sea Grant at the University of Maine
- Susie Arnold | Island Institute
- Wendy Garland | Maine DEP
- Dawn Hallowell | Maine DEP
- Rebecca Peters | Maine DMR
- Amy deVries | Cape Elizabeth High School
- Thew Suskiewicz | Atlantic Sea Farms

- Jessica Waller | Maine DMR
- Meredith White | Maine DMR
- Lisa White | Maine DMR
- Carla Guenther | Maine Center for Coastal Fisheries
- Amy Winston | CEI
- Robert Holmberg | Roger Williams University
- Ben Martens | Maine Coast Fishermen's Association
- Chuck Bennett | Independent Lobsterman
- Michelle Staudinger | University of Maine
- Heather Hamlin | University of Maine
- Josh Stroll | University of Maine
- Damian Brady | University of Maine
- Christine Beitzl | University of Maine
- Natalie Johnson | Maine Maritime Academy
- Edge Venuti | Maine Youth for Climate Justice
- Bob Baines | Maine Lobstermen's Association
- Anne Langston Noll | Maine Aquaculture Innovation Center
- Kathleen Billings | Town of Stonington
- Gabe McPhail | Town of Stonington
- Jessica Joyce | Tidal Bay Consulting / DMR Shellfish Advisory Council
- Marissa McMahan | Manomet
- Facilitated by Laura Singer | CBI



Coastal & Marine Recommendations



1

Build healthy and resilient coastal communities and protect critical place-based infrastructure.



2

Support climate adaptation of Maine's fisheries, aquaculture and seafood industries.

3



Monitor, conserve and increase resilience of coastal and marine ecosystems.



1

Build healthy and resilient coastal communities and protect critical place-based Infrastructure.



Empower **local** and **regional** adaptation

Equitable access to Maine lands and waters

Increase **resilience** of **working waterfronts**

Build **workforce** for resilience projects

Preserve **waterfront** and **intertidal access**

Technical **assistance, funding, governmental leadership**





2

Support climate adaptation of Maine's fisheries, aquaculture and seafood industries.



Stewardship of resilient ecosystems

Take advantage of diverse markets

Expand equitable access

Support cultural, traditional, emerging and heritage industries

Marine bioproduct innovation

Workforce training





3

Monitor, conserve and increase resilience of coastal and marine ecosystems.



Enhance **data collection** to fill gaps

Expand outreach, **participatory science**

Document impacts of extreme events

Protect, restore **ecosystem resiliency**

Engage **multiple perspectives**, including indigenous knowledge

Technical **assistance**

Input From Priority Populations



We've always had storms, but storms are more out of the south & southeast now, and out of that direction, a lot of our harbor is unprotected.

- Commercial fisherman in Spruce Head, ME





Input From Priority Populations

When asked **“What are the biggest needs for you/your community?”**

10% wrote in a related issue including:

- Healthy/Local Food
- Clean Water
- Preservation and/or conservation of natural spaces
- Sustainability

Top areas for **improvement** include:

- More education
- Support for municipal staff
- Removing language barriers
- Lowering access costs



Natural & Working Lands Working Group



Amanda Beal
Maine DACF
Co-chair

Tom Abello
Governor's Office
Co-chair



Natural & Working Lands Working Group

Members



- Commissioner Amanda Beal | Maine DACF
- Tom Abello | Governor's Office
- Senator Rick Bennett | Maine State Legislature
- Senator Henry Ingwersen | Maine State Legislature
- Representative Dean Cray | Maine State Legislature
- Representative Margaret O'Neil | Maine State Legislature
- Ivan Fernandez | University of Maine
- Patrick Strauch | Maine Forest Products Council
- Melissa Law | Bumbleroot Organic Farm
- Hannah Carter | University of Maine
- Molly Docherty | Maine DACF
- Phillip DeMaynadier | Maine DIFW
- Charles Penney | USDA Natural Resources Conservation Service
- Carol Weymouth | Maine Association Conservation Districts
- Ellen Griswold | Wolfe's Neck Center for Agriculture & the Environment
- Karin Tilberg | Forest Society of Maine

- Maureen Drouin | Maine Conservation Voters
- Francesca Gundrum | Maine Audubon
- Heather Spalding | Maine Organic Farmers and Gardeners Association
- Kaethe Rice | Maine Youth for Climate Justice
- Darren Ranco | University of Maine
- Norm Daigle | Hannaford Supermarkets
- John Naylor | Rosemont Market
- Jeff Romano | Maine Coast Heritage Trust
- David Trahan | Sportsman's Alliance of Maine
- Gary Lamb | City of Hallowell
- Silvan Shawe | Cultivating Community
- Dana Doran | Professional Logging Contractors of Maine
- Bethany Atkins | Maine DIFW
- Craig Lapine | Maine DACF
- Andy Cutko | Maine DACF
- Bethany Humphrey | The Climate Initiative
- Adam Bishop | Maine Farmland Trust
- Facilitated by Jo D. Saffeir | Maine DACF

Natural & Working Lands Recommendations



1

Increase by 2030 the total acreage of conserved Natural and Working Lands in the state to 30%.



2

Increase the amount of food consumed in Maine from state food producers to 30% by 2030.



3

Develop new incentives to increase carbon storage.





1

Increase by 2030 the total acreage of conserved Natural and Working Lands in the state to 30%.



Protect **high biodiversity** areas

Double **farmland protection** by 2030

Protect lands of **cultural** and **economic importance**

Expand public and private **capacity**

Improve **equitable public access**

Increase **funding** and funding eligibility



2

Increase the amount of food consumed in Maine from state food producers to 30% by 2030.



Create a **Maine food plan**

Funding for **equitable** local food **access**

Marketing for Maine **local food** markets

Expand access to farmland, working waterfront, food supply chain infrastructure

Permanent **funding** support across **food supply chain**

Support producers in **climate adaptation**



3

Develop new incentives to increase carbon storage.



Incentives for landowners, loggers, & foresters

Technical assistance and training; technical and **financial resources**

Diversify forest sector workforce

Climate-focused forest data to support policy

Improve **low-grade wood markets**

Multi-state **forest carbon** discussions





Input From Priority Populations

Barriers to natural and working lands access:

- Lack of information
- Cost of access
- Transportation to resources
- Processes to gain access

Barriers to natural resource industry careers:

- **Youth:** natural resources can feel isolated, lack of mentorship/guidance
- **New Mainers:** language barriers, lack of transportation, unfamiliarity with state resources

Challenges to accessing local food include:

- Price of local food
- Hard to find culturally preferred food
- “Food deserts” (convenience stores only)

Materials Management Task Force



Cindy Isenhour
UMaine Orono
Co-chair

Melanie Loyzim
Maine DEP Commissioner
Co-chair



Material Management Task Force Members

- Mark Draper, Aroostook Waste Solutions
- Hillary Lister, Athens Town Council & Don't Waste ME
- Abbie Webb, Casella Waste Systems
- Kate Tomkins, Chickadee Compost
- Sarah Nichols, CLYNK
- Kevin Roche, ecomaine
- Brett Rogers, Environmental Projects, Inc.
- Greg Williams, Exeter Agri-Cycle Energy
- Heather Steeves, Goodwill Northern New England
- George Parmenter, Hannaford Supermarkets
- Dan Wojciechowski, IDEXX Laboratories
- Alex Zipparo, Island Institute
- Lane Gould, Maine Bureau of General Services
- Carla Hopkins, Maine Department of Environmental Protection
- Josh Bossin, Maine GearShare
- Victor Horton, Maine Resource Recovery Association
- Maya Faulstich, Maine Youth for Climate Justice
- Mike Carroll, Municipal Review Committee
- Vanessa Berry, Natural Resources Council of Maine

- Scott Reed, Nine Dragons Paper Holdings Limited (ND Paper)
- Melissa Lavoie, Northeast Waste Management Officials' Association (NEWMOA)
- Juliana Beecher, Oak Ridge Institute for Science and Education (ORISE) Fellow
- Ben Chesler, Roux Institute
- Wes Ingwerson, U.S. EPA Office of Research and Development
- Susanne Lee, UMaine/Sen. George J. Mitchell Center for Sustainability Solutions
- Reed Miller, UMaine/Sen. George J. Mitchell Center for Sustainability Solutions
- Travis Blackmer, UMaine/Sen. George J. Mitchell Center for Sustainability Solutions
- Sydney Harris, Upstream
- Jeff McGown, Waste Management (WM)
- Alison McKellar, Town of Camden Selectboard
- Josh Paul, Penobscot Nation
- Travis Peaslee, Lewiston Auburn Water Pollution Control Authority
- Teddy Lyman, Maine Department of Education



Materials Management Task Force Recommendations



1 Measure and reduce consumption-based emissions.



2 Advance policies and deploy funding resources to grow Maine's circular economy.



3 Reduce food loss and waste 50% by 2030.

(base year 2016)



Regionalize and scale-up access to waste prevention and diversion services.



5 Foster resilience in the built environment through materials collection and reuse.



6 Reduce and capture methane emissions from Maine's waste sector.



1

Measure and reduce consumption-based emissions.



Add **consumption-based emissions** to greenhouse gas inventory

Identify opportunities to **reduce consumption-based emissions**



2

Advance policies and deploy funding resources to grow Maine's circular economy.

Support **reuse and repair**

Lead by Example at state facilities

Statewide **waste reduction incentives**

Educate Mainers about the **circular workforce**

Study **impact of circular policies**

Promote **Save Money and Reduce Trash** program

Expand jobs in **materials management**



3

Reduce food loss and waste 50% by 2030.

(base year 2016)



Large generator food waste reporting

Maximize food rescue and donation

Launch statewide food waste education campaign



4

Regionalize and scale up access to waste prevention and diversion services.



Invest in waste prevention programs

Equitable access to waste prevention and diversion

Coordinate between regional and local entities





5

Foster resilience in the built environment through materials collection and reuse.



Design buildings for **deconstruction**

Salvage building materials for **reuse**

Manage **storm debris**

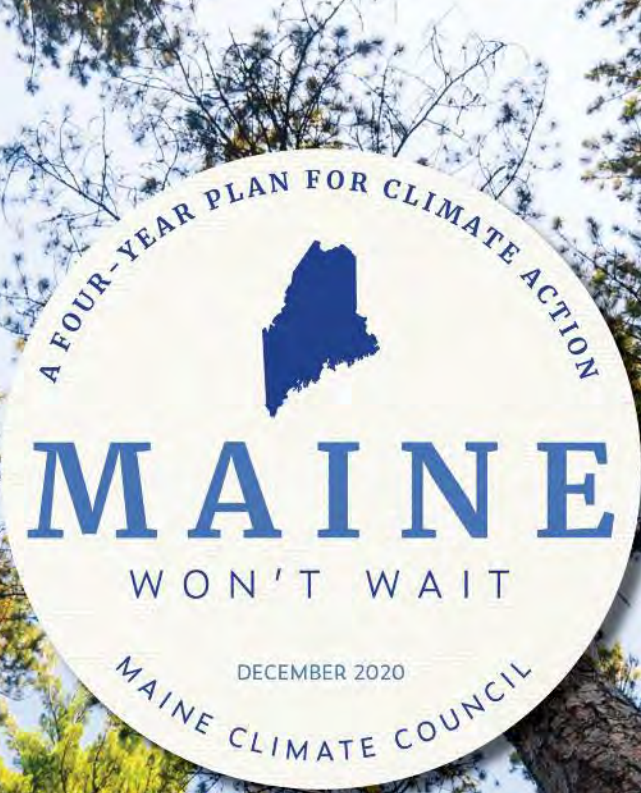


6

Reduce and capture methane emissions from Maine's waste sector.

Reevaluate **Class 1 Renewable Energy Credits** for landfills

Plan to reduce and capture methane



A FOUR-YEAR PLAN FOR CLIMATE ACTION



MAINE

WON'T WAIT

DECEMBER 2020

MAINE CLIMATE COUNCIL

Break until 10:45



Transportation Working Group



Joyce Taylor
Department of
Transportation
Co-chair

Jeff Crawford
Dept. of Environmental
Protection
Co-chair



Transportation Working Group Members



- Joyce Taylor | MaineDOT
- Jeff Crawford | Maine DEP
- Senator Ben Chipman | Maine State Legislature
- Senator Bradlee Farrin | Maine State Legislature
- Representative Wayne Parry | Maine State Legislature
- Representative Daniel Ankeles | Maine State Legislature
- Kendra Amaral | Town of Kittery
- Dan Burgess | Governor's Energy Office
- David Morris | Maine DAFS
- Karina Graeter | Southern Maine Planning & Development Commission
- Michael Stoddard | Efficiency Maine Trust
- Dana Doran | Professional Logging Contractors of Maine
- Eric Feigenbaum | Versant Power
- Elizabeth Frazier | Pierce Atwood / Alliance for Automotive Innovation
- Katherine Freund | ITNAmerica
- Ben Lake | VEIC
- Maria Fuentes | Maine Better Transportation Association
- Judy Gates | HNTB
- Emily Green | Conservation Law Foundation
- Chad Heid | BSOOB Transit
- Jay Kamm | Northern Maine Development Commission
- Bill Kitchen | Town of Machias
- Matt Marks | Cornerstone Government Affairs
- Jess Maurer | Maine Council of Aging
- Peter Merfeld | Maine Turnpike Authority
- Sara Mills-Knapp | Greater Portland Council of Governments
- Brian Parke | Maine Motor Transport Association
- Patricia Quinn | Northern New England Passenger Rail Authority
- Aaron Smith | Avangrid
- Jonathan Rubin | University of Maine
- Tim Seymour | Darling's Auto Group
- Tom Brown | Maine Automobile Dealers Association
- Jean Sideris | Bicycle Coalition of Maine
- Josh Caldwell | Natural Resources Council of Maine
- Kaitlyn Nuzzo | The Nature Conservancy
- Barry Woods | ReVision Energy
- Sandy Buchanan | Western Maine Transportation Services
- Marcel Ntagora | Greater Portland Council of Governments
- Patrick Strauch | Maine Forest Products Council
- Francis Eanes | Maine Labor Climate Council, AFL
- Taylor Colbeth | University of Southern Maine



Transportation Recommendations



1

Accelerate Maine's transition to light-duty electric vehicles, including plug-in hybrid vehicles.



2

Reduce vehicle miles traveled.

The diagram shows a road with a dashed center line. To the left of the center line is a bicycle lane with a bicycle icon. To the right of the center line is a pedestrian path with a person walking icon. The entire diagram is enclosed in a blue circle with the number 2.

3

Accelerate Maine's adoption of zero-emission medium-and heavy-duty vehicles.





1

**Accelerate
Maine's
transition to
light-duty
electric vehicles,
including plug-in
hybrid vehicles.**



**Expand EV
charging stations
statewide**

EV education for
drivers, dealers,
and employers

Targets for EVs,
including **low** and
moderate income
drivers

**Support EV
adoption** through
policy

Increase EV rebates for all drivers,
particularly for **low** and **moderate
income**



2

Reduce vehicle miles traveled.



Improve **bus service** to be **easy, affordable,** and **fast**

Education and awareness

Goals for more **buses, bikes,** and **carpooling**

Invest in **low carbon transportation** when expanding roads

Help people try and buy **e-bikes**

Study the **emissions impacts** of buses and bikes

Expand the **GO Maine** carpool program

Make roads **safer** for **biking** and **walking**

Intercity and rural **van** and **bus** pilots





**Accelerate
Maine's
adoption of zero-
emission medium-
and heavy-duty
vehicles.**

Expand **electric**
and **hybrid**
buses and
ferries

Pilot electric
trucks and
buses to show
how they work

Develop **fleet**
electrification
advisory
services

Incentives for **electric**
vans, trucks, and
buses

Implement the **Clean**
Transportation Roadmap
for MHDVs (2024)

Input From Priority Populations



Housing itself is the hardest part. Will the state work to make housing more affordable? The question about EV charging stations doesn't seem appropriate when housing prices are such a more immediate concern.

- Working Group Participant

Input From Priority Populations



Some people in Norway don't have cars at all - [this] also leads to a food desert issue, shopping at gas stations etc. [We need] transportation for people's most immediate needs.

- Person from a rural, underserved community, participating in the Maine Sustainability & Water Conference



Input From Priority Populations



- Survey respondents in **Washington County** reported problems with **transportation security**
- **70%** of survey respondents **support expanded public transportation**
- Availability, schedule, location, and ease of use are difficulties to using existing public transportation
- No focus groups were aware of GOMaine, but were glad to receive info about it
- Younger and older respondents have concerns (mining, battery disposal, cost) about the **environmental attributes** of EVs

Top areas for improvement include:

- Improved infrastructure
 - More public transport
 - Expanded broadband
 - Public EV charging
 - Bike/care share programs
- EV costs + charging availability

Buildings, Infrastructure & Housing Working Group



Kathleen Meil
Maine Conservation Voters
Co-chair

Michael Stoddard
Efficiency Maine
Co-chair



Buildings, Infrastructure & Housing Working Group Members



- Michael Stoddard | Efficiency Maine Trust
- Kathleen Meil | Maine Conservation Voters
- Senator Matt Pouliot | Maine State Legislature
- Senator Mike Tipping | Maine State Legislature
- Representative Richard Bradstreet | Maine State Legislature
- Representative Grayson Lookner | Maine State Legislature
- Naomi Beal | passivhausMAINE
- Ellen Belknap | SMRT, Architects & Engineers
- Laney Brown | Avangrid
- Scott Brown | Maine Department of Education
- Dan Burgess | Governor's Energy Office
- Elaine Clark | Maine DAFS
- Tom Twist | Bates College
- Dan Dixon | University of Maine
- Steve Hudson | Preti Flaherty
- Daniel Kleban | Maine Beer Company
- Jeff Marks | ClimateWork Maine
- Don McGilvery | MaineHousing
- Rozanna Patane | Town of York
- Greg Payne | GOPIF

- Todd Rothstein | Avesta Housing
- Mathew Pitzer | MEREDA
- Jason Shedlock | Maine State Building Construction Trades Council
- Jesse Thompson | Kaplan Thompson Architects
- Pat Stanton | E4TheFuture
- Sharon Klein | University of Maine
- Dale Basher | Downeast Community Partners
- Andrew Barrowman | Bangor Natural Gas Company
- Deborah Paredes | Maine Environmental Education Association
- Patrick Strauch | Maine Forest Products Council
- Francis Eanes | Maine Labor Climate Council
- Ania Wright | Sierra Club Maine
- Gary Fearon | Penobscot Nation Housing Department
- Matt Marks | Cornerstone Government Affairs
- Representative Christopher Kessler | Maine State Legislature
- Safiya Khalid | Community Organizing Alliance
- Eben Perkins | Competitive Energy Solutions



Buildings, Infrastructure & Housing Recommendations



1

Continue the progress on making homes and businesses more energy efficient by investing in weatherization and heating systems.



2

Establish strong systems to support rapid adoption and compliance with climate-friendly building codes and standards.



3

Promote the manufacture and use of climate-friendly building products.

4



Support measures that both reduce carbon and improve resilience.

5

Accelerate decarbonization in industrial processes.



6

Continue to lead by example in publicly-funded buildings.



1

Continue the progress on making homes and businesses more energy efficient by investing in weatherization and heating systems.

Adequate **funding**

Explore **standards** for heating appliances

Education & outreach

Ambitious **targets** for heat pumps & weatherization

Access for **low-income, rural, and renters**

Fair sales taxes for **electric heat**



2

Establish strong systems to support rapid adoption and compliance with climate-friendly building codes and standards.



Improve building code **process**

Net-zero building codes by 2035

Training for contractors and code enforcement officers

Encourage efficient **manufactured homes**





3

Promote the manufacture and use of climate-friendly building products.



Cross-laminated timber
manufacturing
in Maine

Whole-life
carbon
accounting for
publicly-funded
buildings

Demonstration
projects with
sustainable forest
products

Education
about
embodied
carbon



4

Support measures that both reduce carbon and improve resilience.



Solar & storage for homes and businesses

Education & outreach

Manage building energy **demand** on the grid

Manage oil spill **risk**

Prepare homes and businesses for climate change





5

Accelerate decarbonization in industrial processes.



Promote **emerging low-carbon technologies**

Energy efficiency for **small** and **mid-sized** facilities

Leverage **federal funding**

Incentives for **demand management**





6

Continue to lead by example in publicly-funded buildings.

50% reduction in emissions from State buildings by 2034

Clean & energy efficient **affordable housing**

Green Schools Program



Input From Priority Populations



[There is] so much information out there, it was so confusing after reading everything to see what I could qualify for. After reviewing everything, I didn't even know what I was eligible for!

- Older adult, Maine Council on Aging Climate Action Forum





Input From Priority Populations

- Clean energy and climate action are not “**at the top of the list**” for many people because they are dealing with urgent issues, e.g., **health and safety issues** and **landlord neglect**.
- Most people identified **cost** as the greatest barrier to **energy efficiency** improvements.
- **Renters** feel that their landlords **don't have enough incentive** to make the changes, because the **tenants pay all the utilities**.
- People need help to understand what incentives they qualify for, **particularly older adults**.

Energy Working Group



Dan Burgess
Governor's Energy Office
Co-chair

Ken Colburn
Symbiotic Strategies
Co-chair



Energy Working Group Members



- Dan Burgess | Governor's Energy Office
- Ken Colburn | Symbiotic Strategies, LLC
- Senator Matt Harrington | Maine State Legislature
- Senator Mark Lawrence | Maine State Legislature
- Representative Reagan Paul | Maine State Legislature
- Representative Gerry Runte | Maine State Legislature
- Gina Mace | Summit Utilities
- Jack Shapiro | Natural Resources Council of Maine
- Scott Cuddy | Maine Labor Climate Council
- Tony Buxton | Preti Flaherty / Industrial Energy Consumer Group
- Steve Clemmer | Union of Concerned Scientists
- Greg Cunningham | Conservation Law Foundation
- Chad Allen | Longroad Energy
- Johannah Blackman | A Climate to Thrive
- Bill Harwood | Office of the Public Advocate
- Suzanne MacDonald | National Renewable Energy Laboratory
- Audrey Hufnagel | Maine Youth for Climate Justice

- Ashley Luszczki | Maine State Chamber of Commerce
- Eliza Donoghue | Maine Renewable Energy Association
- Aaron Smith | Avangrid
- Michael Burgess | Penobscot Indian Nation
- Ben Cracolici | Maine Public Utilities Commission
- Julie Rosenbach | City of South Portland
- Fortunat Mueller | Revision Energy
- Michael Stoddard | Efficiency Maine Trust
- Alison Bates | Colby College
- Sarah Tracy | Pierce Atwood
- Jake Ward | University of Maine
- Tom Welch | Consultant, retired MPUC chair
- Jason Parent | Aroostook County Action Program
- Patrick Strauch | Maine Forest Products Council
- Moise Mulamba | Ready Seafood
- Martin Carriere | Bates College
- Gary Lamb | City of Hallowell
- Guillaume Sebahutu | ReVision Energy



Energy Recommendations



1 Decrease energy burdens while transitioning to clean energy.



2

Plan and build the infrastructure needed to achieve 100% clean electricity by 2040.

3 Manage the impact of buildings, vehicles, and industry on the grid with load flexibility and innovation.



4 Grow Maine's clean energy economy with a goal to support 30,000 clean energy jobs by 2030.





1

Decrease energy burdens while transitioning to clean energy.



Understand and **reduce energy burden** among households

Energy **navigator** program

Reduce barriers for **efficiency** and **clean energy**

Adequate **funding** for **energy assistance**



2

Plan and build the infrastructure needed to achieve 100% clean electricity by 2040.

Regular **clean energy procurement**

Maximize **federal funds**

Help communities plan for clean energy

Improve **siting & permitting** processes

Plan for **future grid needs**

Improve & modernize **interconnection**

Invest in **offshore wind**





3

Manage the impact of buildings, vehicles, and industry on the grid with load flexibility and innovation.



Software and technology

Policies, programs, markets and regulations

Ensure equitable participation

Track low-income participation

Education and communication





4

Grow Maine's clean energy economy with a goal to support 30,000 clean energy jobs by 2030.



Support **state workforce initiatives**

Clean-tech **innovation partnerships**

Expand **apprenticeships**

Online clean energy **jobs database**

Support **disadvantaged students and job seekers**

Support those **most impacted** by climate



Input From Priority Populations



*I've investigated alternative energy but **can't afford the upfront costs**. I was told you get all kinds of money back but then find out it's in the form of a tax rebate and to get the maximum, you have to spend several thousand dollars.*

- Adult survey respondent with a disability



Input From Priority Populations



When asked **“What are the biggest needs for you/your community?”**

28% wrote in an energy related issue including:

- Affordable renewable energy options
- Solutions to frequent power outages
- Stop burning fossil fuels

An additional 12% noted '*Climate Change*' in their responses.

When asked **“What might make it difficult for your local government to support or adopt renewable energy options?”** respondents highlighted:

- Costs/funding (46%)
- Politics/public perception (39%)
- Lack of knowledge/understanding (10%)
- Other (6%) - lack of planning capacity in small towns mentioned frequently

Land Use Cross-Cutting Discussion Group

Co-Chairs:

Melanie Loyzim - Maine Climate Council

Hannah Pingree - Maine Climate Council

Amanda Beal - Natural & Working Lands

Tom Abello - Natural & Working Lands

Judy East - Community Resilience

Carl Wilson - Coastal & Marine

Curt Brown - Coastal & Marine

Dan Burgess - Energy

Ken Colburn - Energy

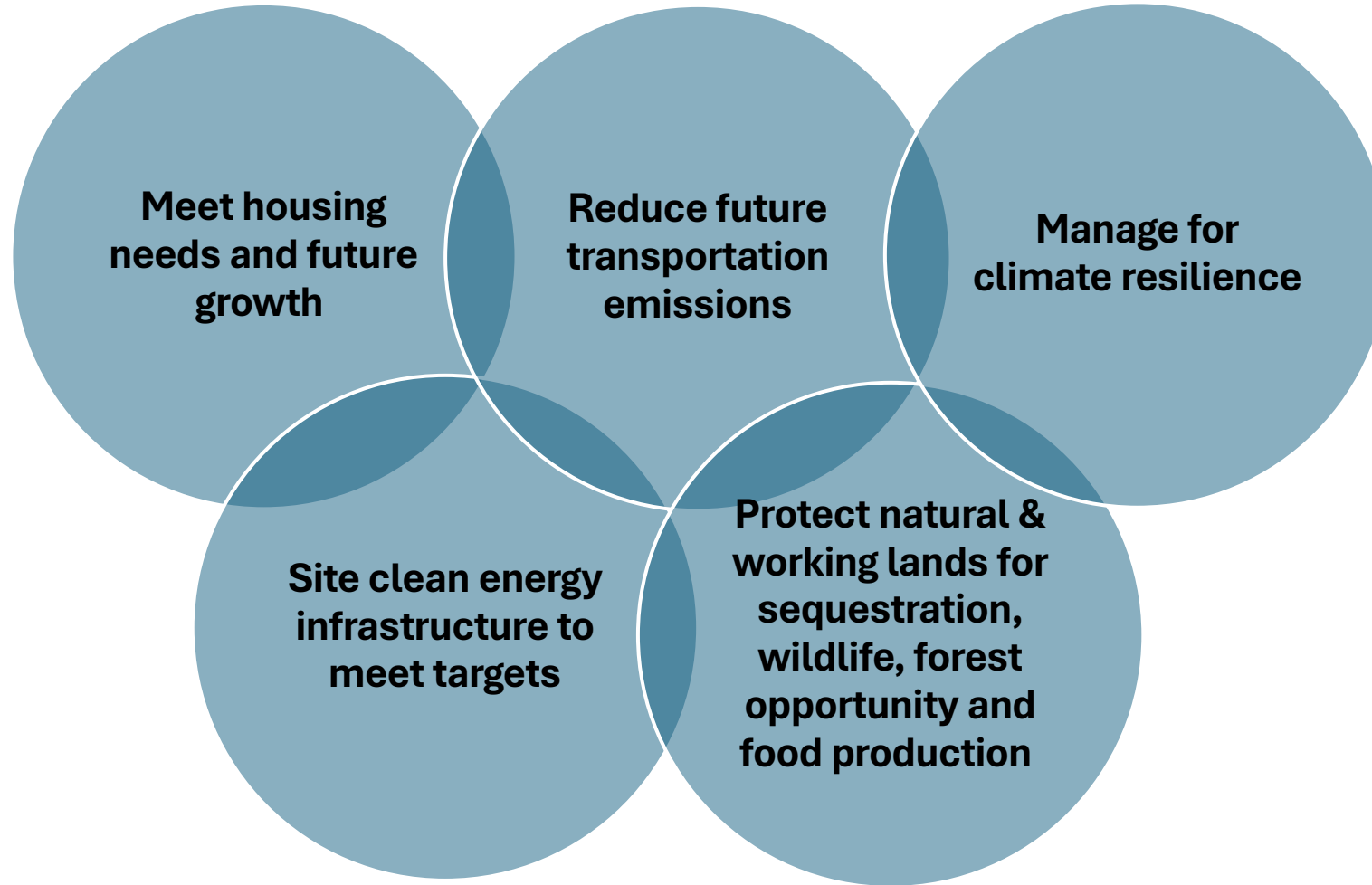
Kathleen Meil - Buildings

Joyce Taylor - Transportation

Jeff Crawford - Transportation



Land Use & Climate Goal Intersections





1

Promote smart growth to reduce emissions, prevent natural and working land conversion, and create affordable housing.



Promote compact development

Promote infill housing development

Expedite redevelopment through permitting

Integrate housing and climate goals

Promote clean energy investments that minimize land impacts

Avoid growth in vulnerable areas

Utilize zoning and land use policies





2

Provide technical assistance to communities and use proactive communication and engagement to support effective land use planning.



Inclusive land use policies

Technical assistance for implementation

Proactive messaging

Local engagement to build consensus





3

Use incentives and regulations for land use policies that reduce emissions, foster vibrant community centers, reduce sprawl, and provide measurable benefits.



Support **affordable housing** in locations **near services**

Use **high-resolution data** for land use planning

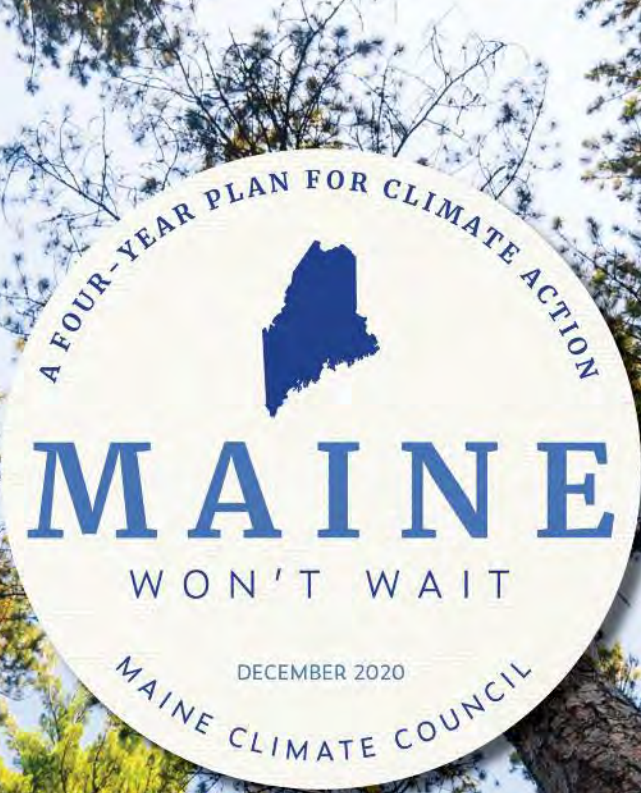
Protect **natural and working lands**

Prioritize projects that **mitigate environmental and community risk**

Support **adaptation and resilience** for **heritage industries**

Develop **financial solutions**





A FOUR-YEAR PLAN FOR CLIMATE ACTION



MAINE

WON'T WAIT

DECEMBER 2020

MAINE CLIMATE COUNCIL

Lunch until 12:50



Small Group Discussions: Turn to the nearest 2-3 other people at your table



Discussion Questions

- What recommendations are you most excited about?
- How can the Maine Climate Council ensure that these recommendations benefit priority populations?
- What overarching themes do you see emerging through these recommendations?



Panel Discussion

Linda Nelson, Economic and Community Development Director, Town of Stonington

Dr. Puthiery Va, Director for Maine Center for Disease Control and Prevention

Sam Dina, Associate Commissioner, Maine Department of Labor

Spencer Thibodeau, Deputy Assistant Secretary, Office of Congressional and Intergovernmental Affairs, U.S. Department of Energy



Break until 2:15



Next Steps

- Hear from a wide variety of Mainers through **survey** and **in-person events**
- Continue to hear from **priority populations** in partnership with the UMaine Mitchell Center
- Model **emissions** and **cost/benefits of** recommendations
- Integrate recommendations into the updated **climate action plan**



2024 Maine Climate Council Meetings

- **September 25, 2024** - Zoom
- **October 23, 2024** - Zoom
- **November 21, 2024** - In person, location TBD



Maine Climate Council **SURVEY**

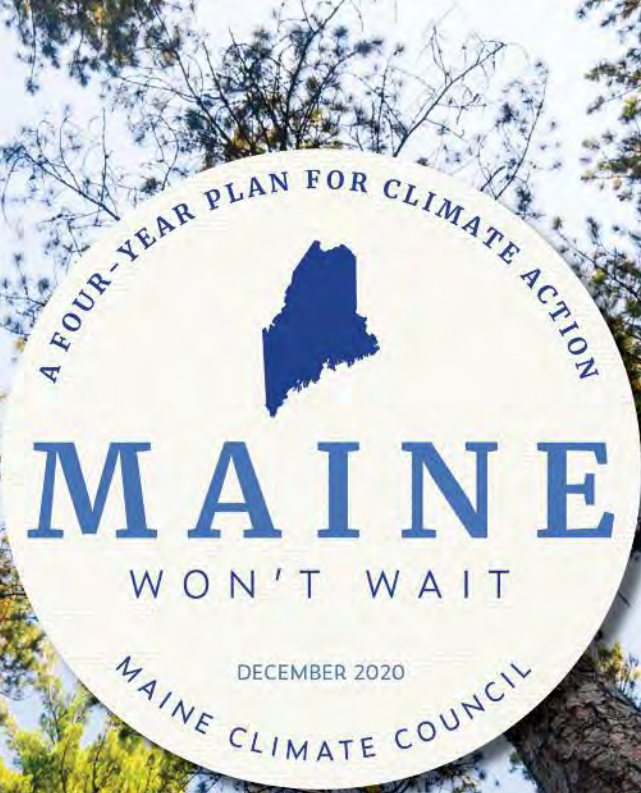


<https://www.maine.gov/future/climate/council/workinggroups/2024strategies>



Maine Climate Council Discussion





A FOUR-YEAR PLAN FOR CLIMATE ACTION



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DECEMBER 2020

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