

# Maine Climate Council

## Energy Working Group Meeting

Co-Chairs:

Dan Burgess, Governor's Energy Office  
Ken Colburn, Symbiotic Strategies, LLC



GOVERNOR'S OFFICE OF  
Policy Innovation  
and the Future



MAINE DEPARTMENT OF  
Environmental Protection



November 8, 2023

# Meeting Agenda

1. Welcome, Meeting Objectives
2. Setting the Scene - Maine Climate Council (MCC) Update Process
3. EWG Recommendations and Progress
4. Enhancing Energy Equity
5. Moving Forward - Initial Ideas

# Meeting Goals

Build a shared understanding on:

- The Working Group's directive and focus;
- The energy strategies in *Maine Won't Wait* and progress toward achieving them; and
- The recommendations of the Equity Subcommittee.

Start a discussion about prioritizing our time and effort

# Introductions

*(The 30-60 second version...)*

- Name and affiliation(s)
- What expertise or lived experience are you bringing to our work together?
- Did you participate in the climate council process last time?

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# Maine Climate Council Context

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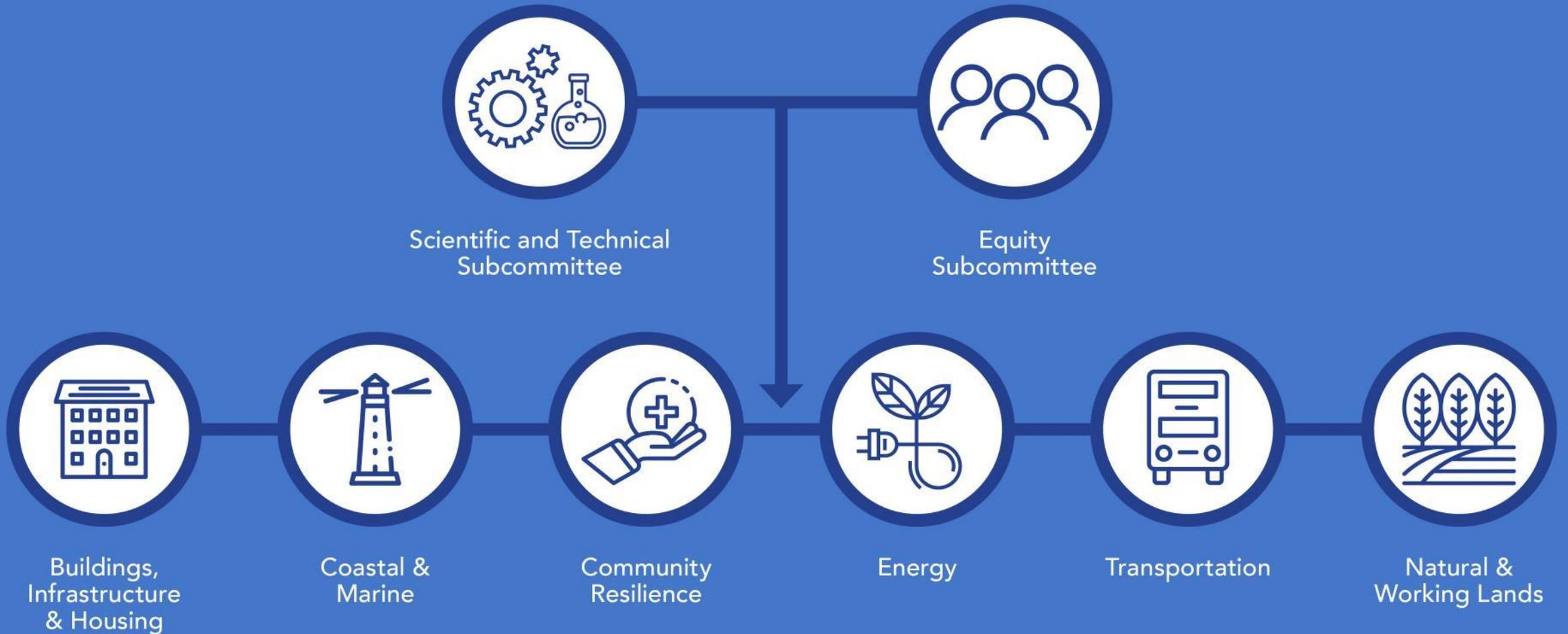


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# Maine Climate Council



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# CLIMATE COUNCIL GOALS



**12.01.24**

Updated Climate  
Action Plan Due



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.

# 2024 Plan Timeline

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**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**

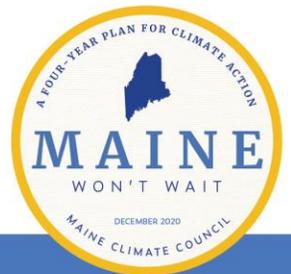
Updated Climate  
Action Plan Delivered  
to Legislature

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# 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



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



**G.** Invest in Climate-Ready Infrastructure



**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 in the Energy and Industrial Sectors through Clean Energy Innovation



**F.** Build Healthy and Resilient Communities



# The charges of the working groups:

By early June 2024, recommend updates to existing strategies or new strategies to address gap areas

# Stages in the working group process:

1. **Taking Stock** of progress to date, existing *Maine Won't Wait* strategies, and equity recommendations
2. **Prioritizing** Working Group (WG) effort—where will the WG spend its time?
3. **Updating Strategies** using guided templates for discussion
4. **Reporting** back to the Climate Council a list of new and updated strategies to *Maine Won't Wait*

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# Energy Strategies in *Maine Won't Wait*

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# 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



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# Progress

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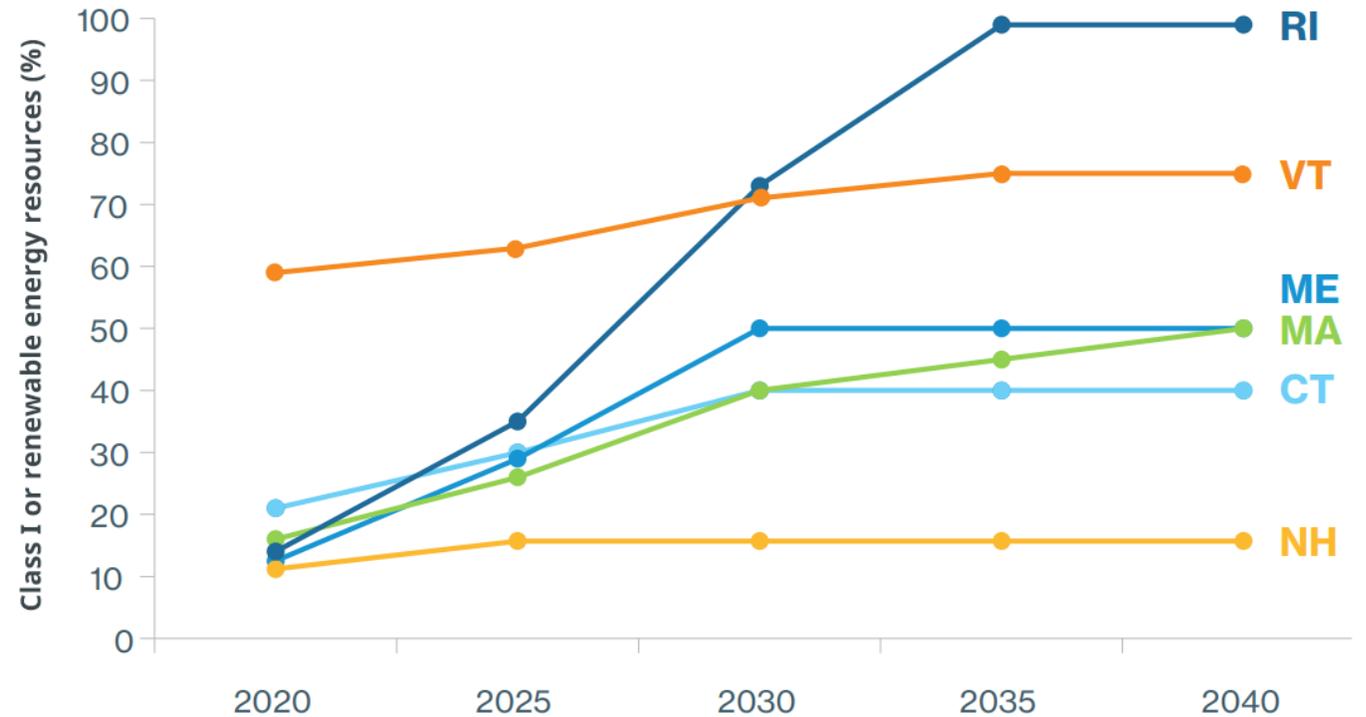
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# 1

## Ensure Adequate Affordable Clean-Energy Supply

- Achieve by 2030 an electricity grid where 80% of Maine's usage comes from renewable generation.
- Set achievable targets for cost-effective deployment of technologies such as offshore wind, distributed generation, and energy storage, and outline the policies, including opportunities for pilot initiatives, necessary to achieve these results.



New England states' renewable portfolio standard (RPS) requirements for Class I (new) renewable energy resources.

Source: ISO New England

# Maine Energy Policy Requirements

## • Renewable Portfolio Standard



- 80% of electricity delivered in Maine to be renewable by 2030
- Supports hydroelectric, biomass, tidal, waste-to-energy, wind, and solar
- Targeted support for new and existing resources including solar, wind, biomass, hydro, and wood-fired CHP

## • Offshore Wind



- Goal of 3,000 megawatts from the Gulf of Maine by 2040
- GEO to establish procurement schedule and process with stakeholder input

## • Energy Storage



- Goal of 400 megawatts by 2030
- GEO to develop procurement program for up to 200 megawatts

## • Solar



- Goal of 750 megawatts of distributed generation
- GEO to implement distributed solar and storage program
- Targeted procurement for solar on contaminated lands

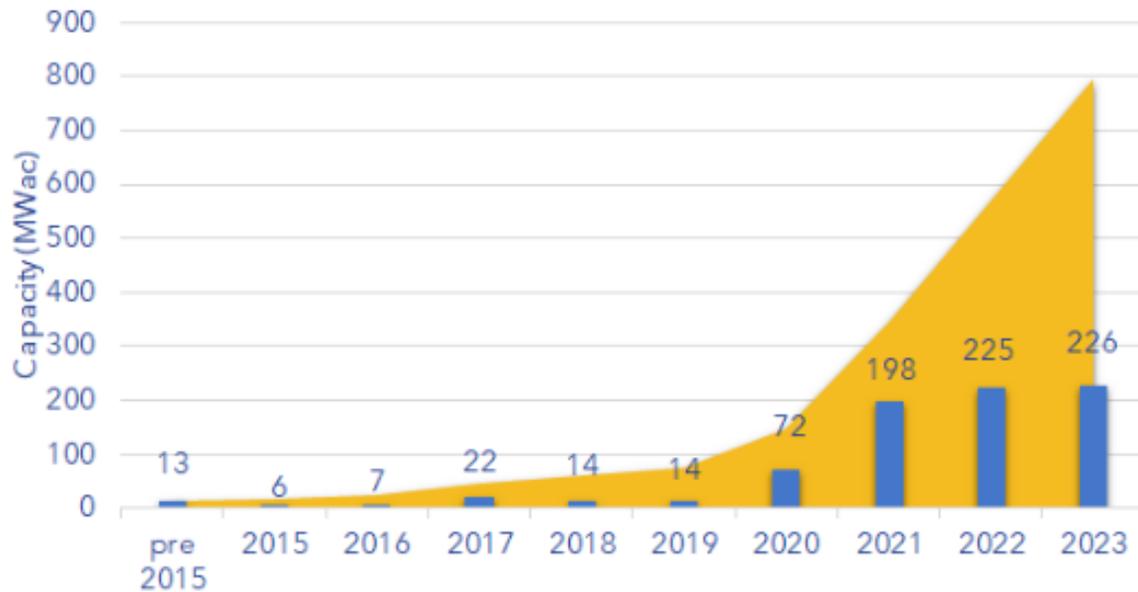
## • Electrification



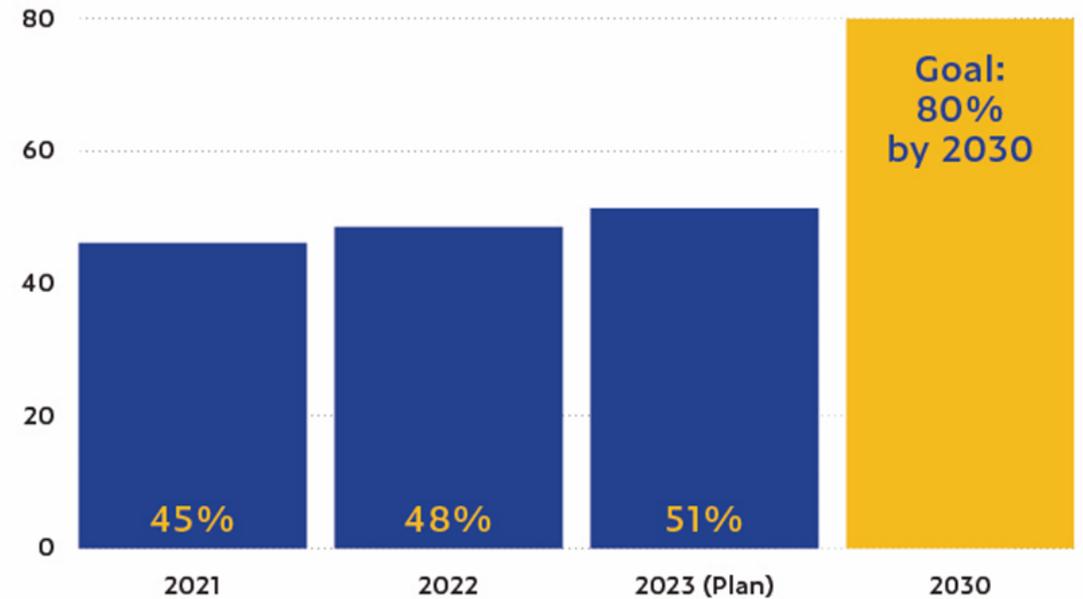
- Oil dependence reduction
- Electrification of heating and transportation to achieve emissions reduction requirements

# Accelerating Pace of Clean Energy Deployment

796 megawatts of solar is currently installed in Maine



## Maine Renewable Electricity (Percent of Load)



Source: Governor's Energy Office



## 2

### **Initiate a Stakeholder Process to Transform Maine's Electric Power Sector**

- **Establish a comprehensive stakeholder process in 2021 to examine the transformation of Maine's electric sector and facilitate other recommendations of the Maine Climate Council.**

## **Integrated Grid Planning Process**

The Maine Legislature enacted legislation (P.L. 2021, ch. 702) that directs utilities to undergo a new process for grid planning that begins with robust stakeholder engagement to identify priorities that utilities must address.

In 2022, the PUC issued Docket No. 2022-0322, "Proceeding to Identify Priorities for Grid Plan Filings." This proceeding will identify the priorities to be addressed by Maine's investor-owned transmission and distribution utilities regarding a grid plan that will assist in the cost-effective transition to a clean, affordable and reliable electric grid.

# The GEO is leading a “Pathway to 2040” Study

“The time has come to be bolder: I am announcing tonight that I am directing my Energy Office to draft legislation requiring that **100 percent of our electricity come from clean energy by 2040**. By accelerating our pace toward 100 percent clean energy, we will reduce costs for Maine people, create new jobs and career opportunities that strengthen our economy, and protect us from the ravages of climate change.”

**Governor Mills, State of the Budget Address, February 2023**

## Plan objectives

- Developing a new, comprehensive, integrated energy plan consistent with Maine law to meet the Governor’s 100% clean electricity by 2040 directive and identify economy-wide decarbonization options looking beyond 2040.
- Informing planning for future investment opportunities, including pursuit and deployment of federal and other funds, by entities within the state, in order to continue to ensure Maine is able to capitalize on such opportunities.
- Ensuring sufficient planning and policies are in place to ensure Maine households and businesses have access to clean, affordable, and reliable energy over the coming decades.
- Creating a plan that meets the needs of Maine people and businesses including reducing reliance on fossil fuels and decreasing energy volatility and cost burdens. This includes supporting historically disadvantaged and low-income communities across Maine.
- Building upon recent energy studies and analysis, including the statutorily directed GEO energy plan, the energy and demand analysis from the Maine Climate Council, and in-depth analyses GEO has conducted

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### Accelerate Emissions Reductions of Industrial Uses and Processes

- **Launch an Industrial Task Force to collaboratively partner with industry and stakeholders to consider innovations and incentives to manage industrial emissions through 2030 and reduce total emissions by 2050.**

4

### Encourage Highly Efficient Combined Heat and Power Facilities

- **Analyze policies, including the potential for long-term contracts, needed to advance new highly efficient combined heat and power production facilities that achieve significant net greenhouse gas reductions.**

## Industrial Efficiency

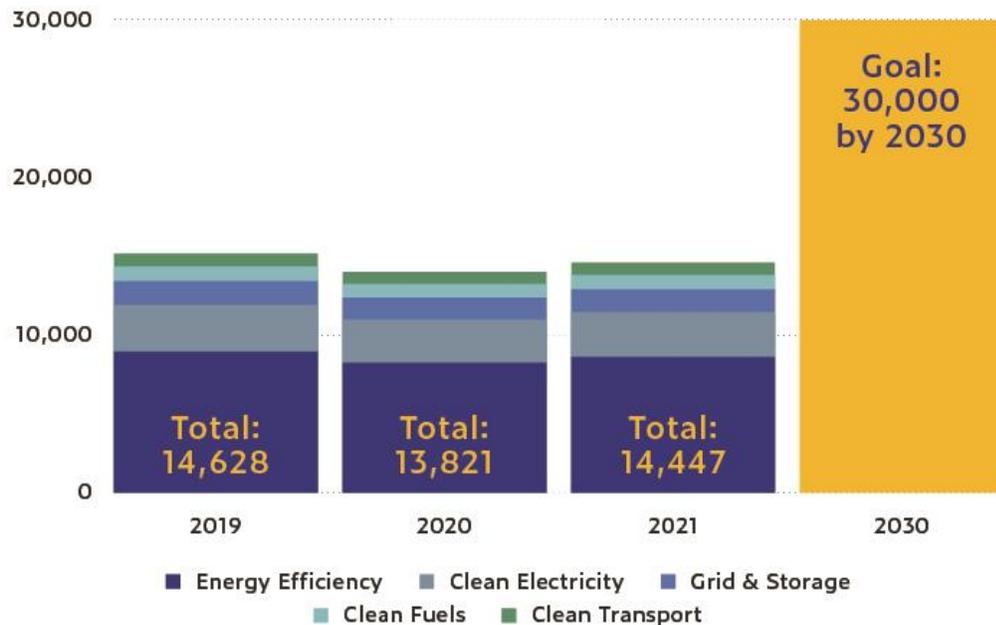
Per recommendations of *Maine Won't Wait*, an **Industrial Task Force** has been formed to provide a venue to further explore collaboration and innovation in this difficult to decarbonize sector.

The 130<sup>th</sup> Legislature established the **Wood-fired Combined Heat and Power Program** directing the Maine Public Utilities Commission to procure renewable energy from highly efficient combined heat and power (CHP) projects.

The 131<sup>st</sup> Legislature modified and expanded the size of the program to bolster Maine's forest products industry and support the heating and energy needs of the state's industrial facilities.

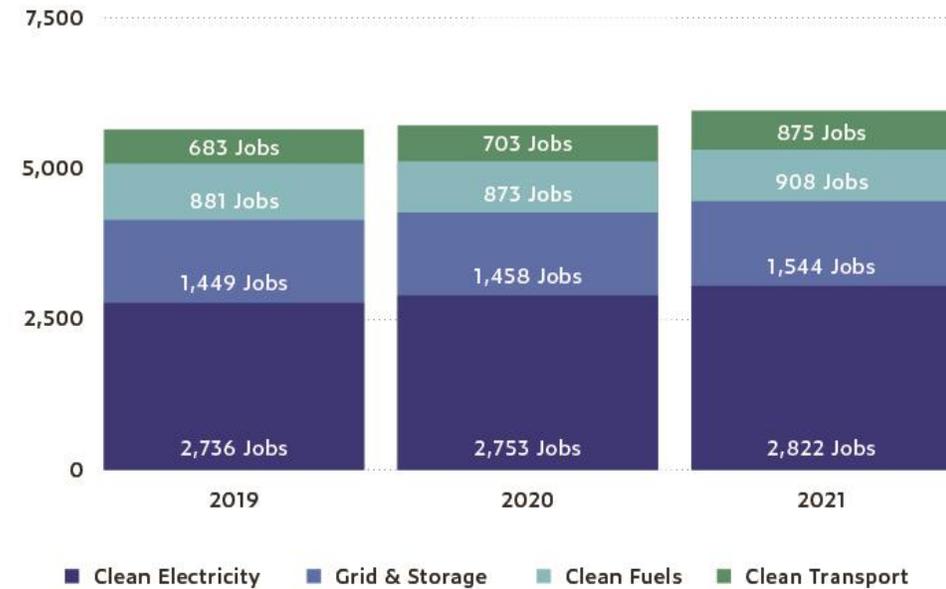
# Clean Energy Jobs (Total and By Sector)

## Maine Clean Energy Jobs



Source: Governor's Energy Office, 2021 Maine Clean Energy Industry Report

## Maine's Rising Clean Energy Job Sectors



Source: Governor's Energy Office, 2021 Maine Clean Energy Industry Report

Maine's Clean Energy Partnership has awarded \$2.5 million in grants to nine entities to advance clean energy workforce development.

# What progress have you seen in recent years?



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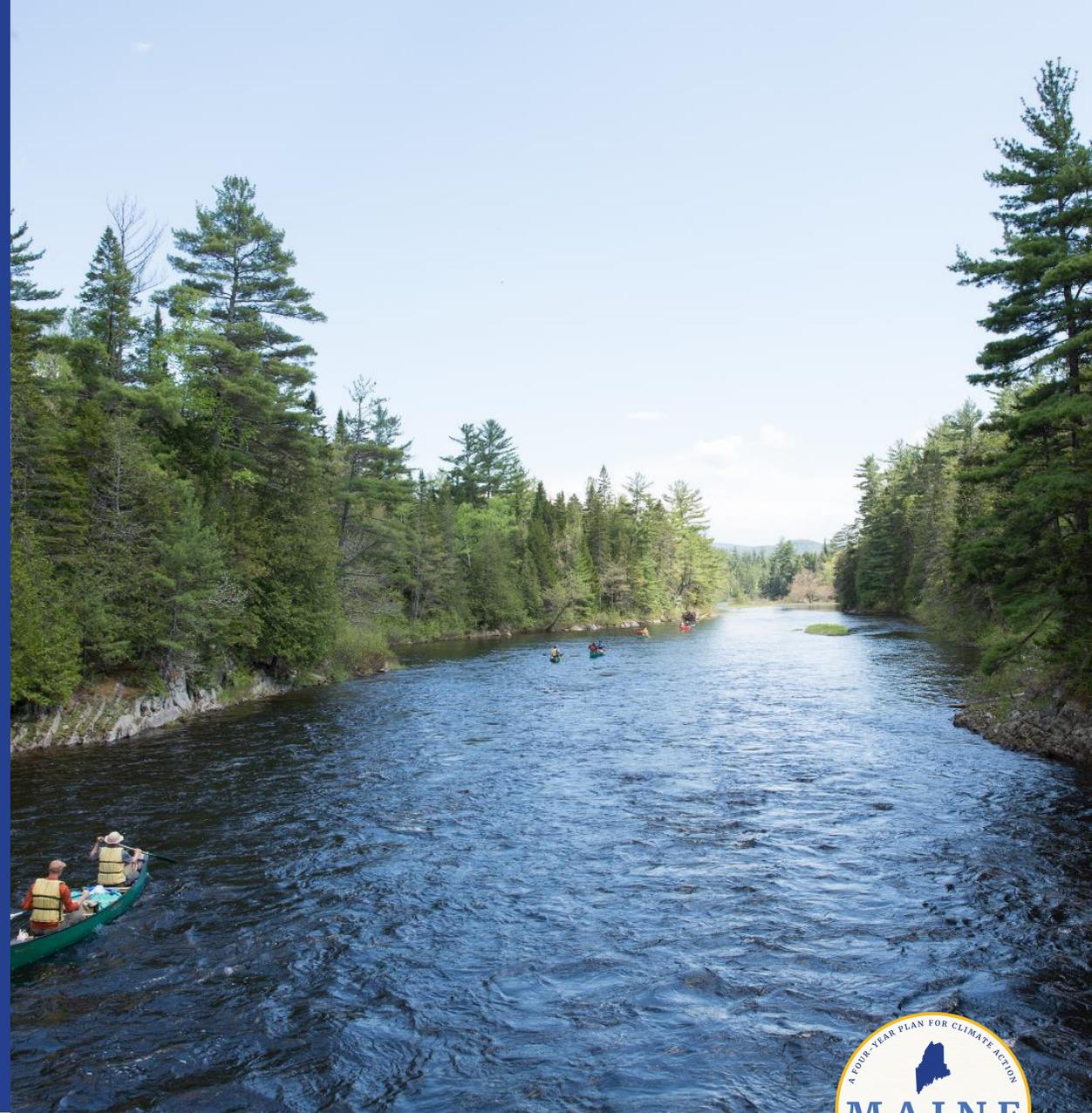
# New charges to integrate equity:

1. Consult with priority populations to make equitable recommendations
2. Review and consider **equity monitoring metrics** to track progress towards equity outcomes
3. Establish numeric goals and targets for priority **equity outcome metrics**

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# Equity Subcommittee Context

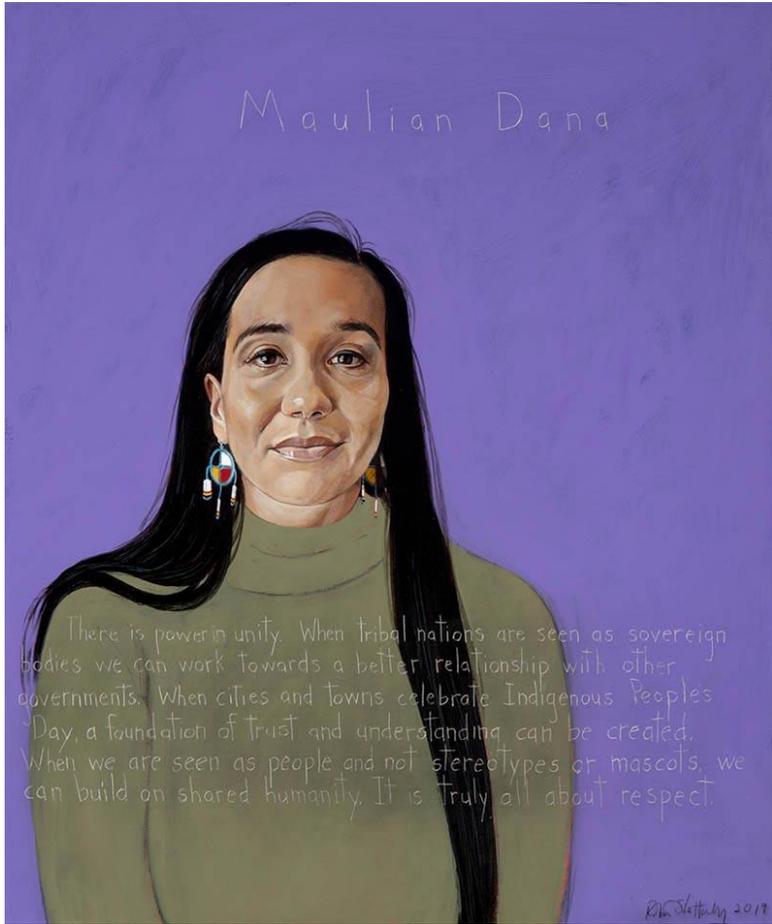
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# Equity Subcommittee Co-Chairs

**Maulian Bryant**  
Penobscot Nation Tribal Ambassador

Read more about Tribal Ambassador, human rights activist, and poet Maulian Bryant [here](#).

**Gabriela Alcalde**  
Elmina B. Sewall Foundation Executive Director

Read more about public health leader Gabriela Alcalde [here](#).



# Three charges of the Equity Subcommittee

1. Setting equity outcomes for climate actions
2. Monitoring progress towards those outcomes
3. Making recommendations to the Maine Climate Council (MCC) to ensure equitable sharing of co-benefits across Maine communities

# Procedural equity is concerned with process

Procedural equity means to ensure equitable planning and implementation.

Government, policy makers, program designers, and implementers must partner with priority populations to allow for meaningful opportunities to participate in policy development, planning, and implementation

Examples of procedural equity include:

- Offering hybrid meeting options
- Holding meetings outside of typical work hours
- Providing language translation/interpretation services
- Ensuring transportation options

# Procedural equity requires Working Groups to invite, consult, and engage with priority populations

Priority populations, as defined by the ESC, are more vulnerable to climate impacts, have limited resources or capacity to respond and adapt, and/or have intersecting marginalized identities

Priority populations are:

- Individuals and households, e.g. people with disabilities, migrant workers
- Communities and geographic areas, e.g. low-income communities, rural communities
- Businesses and industries, e.g. fishing, clean energy

# Distributive equity is concerned with outcomes for priority populations

Distributive equity means to ensure equitable distribution of co-benefits.

Distributive equity asks the question, "Who benefits from Maine's climate actions and investments?"

Distributive equity is shown through outcome metrics:

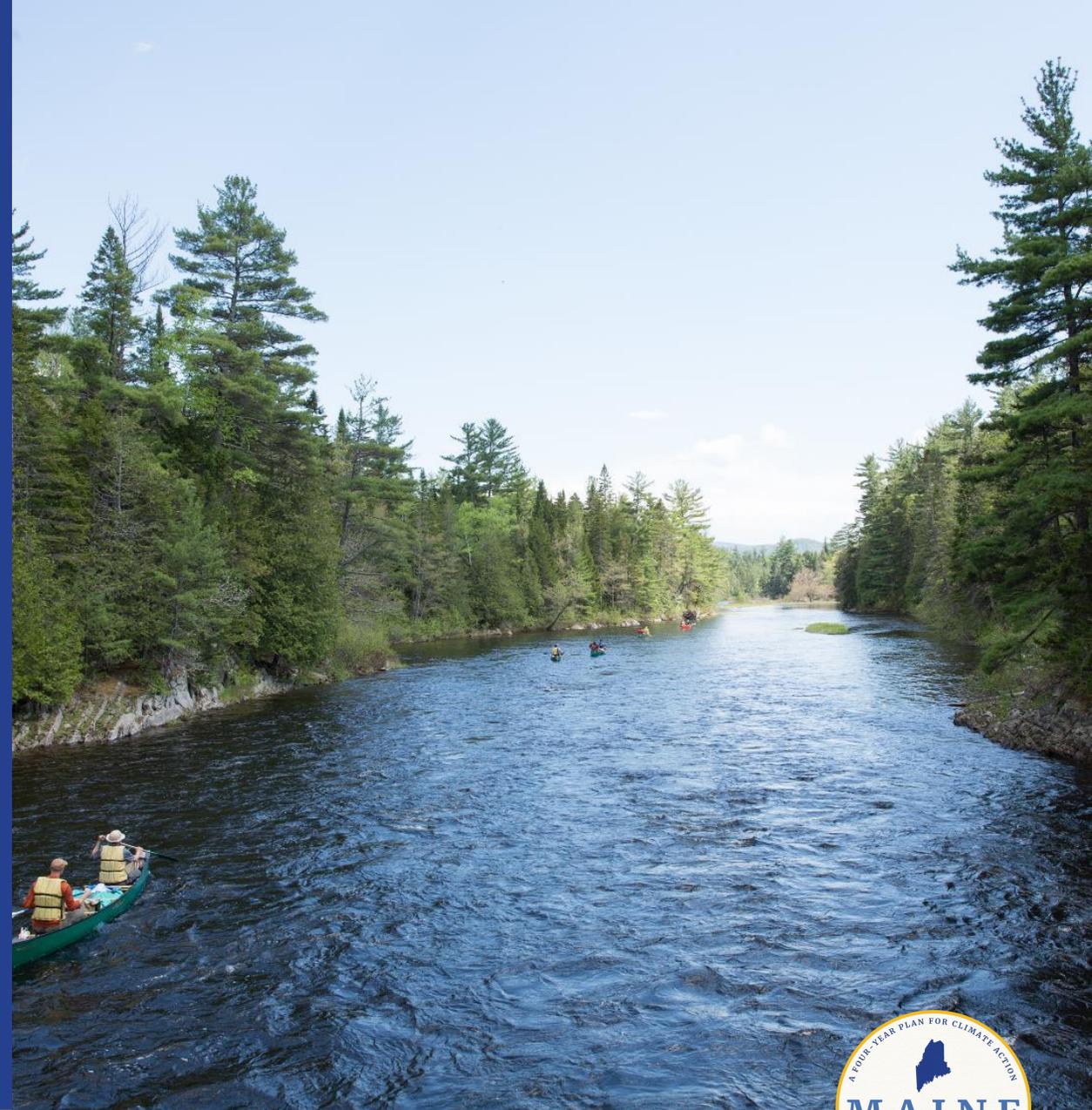
- How money is being spent
- Where programs are being implemented
- Who is participating in programs

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# Energy Equity in Maine

Two goals from the  
Subcommittee

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**Goal # 1:** Increase access to clean energy projects which reduce energy burden for vulnerable households and communities, including low- and moderate-income households, renters, and other disadvantaged communities.

### Monitoring Metrics:

- Number and percentage of low-income, moderate-income households enrolled in community solar projects or benefitted by renewable energy projects
- \$ and % spent by Clean Energy Accelerator and other state- sponsored clean energy and energy efficiency financing mechanisms, by priority population

### Equity Outcome Metrics:

- Energy cost burden (\$ as % of income) among low-income households (longer-term: among renters, and in priority communities)

**Goal #2:** Ensure fair costs and benefits to disadvantaged people, communities, and industries from large-scale renewable energy and energy infrastructure projects.

### Monitoring Metrics:

- Number and percentage of state renewable energy, grid reliability or infrastructure decision processes that consider and involve disadvantaged communities

## **In future EWG meetings, we will discuss additional ESC recommendations that relate to energy including goals to:**

- Increase enrollment in energy bill assistance among income-eligible households
- Attract, prepare, and position people and businesses in disadvantaged communities for jobs and economic growth in clean energy and energy efficiency industries
- And others

# Comments, Questions, or Feedback?

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# New and continued *opportunities*

1. New goal: 100% clean energy by 2040 – comprehensive energy planning process underway
2. Ensuring Maine households and businesses have access to clean, affordable, reliable and adequate energy in the coming decades
3. Optimizing the value of grid resources as demand grows through adoption of distributed energy resources, grid planning, and demand management strategies
4. Building the workforce to support a clean energy transition

# Contact the Maine Climate Council

Please contact the Maine Climate Council via the form below.

To learn more about opportunities to provide feedback, and be notified when they are available, please sign up for the Maine Climate Council newsletter.

All fields are required.

My comments are about:

Energy Working Group

First Name:

Last Name:

Email:

Town/City:

Affiliation/company:

Job Title:

Message:

Feedback is welcome at anytime to  
EWG staff.

We also encourage use of the MCC  
feedback form which will go directly to  
the EWG and MCC staff:

[https://www.maine.gov/future/initiatives/  
climate/climate-council/contact](https://www.maine.gov/future/initiatives/climate/climate-council/contact)

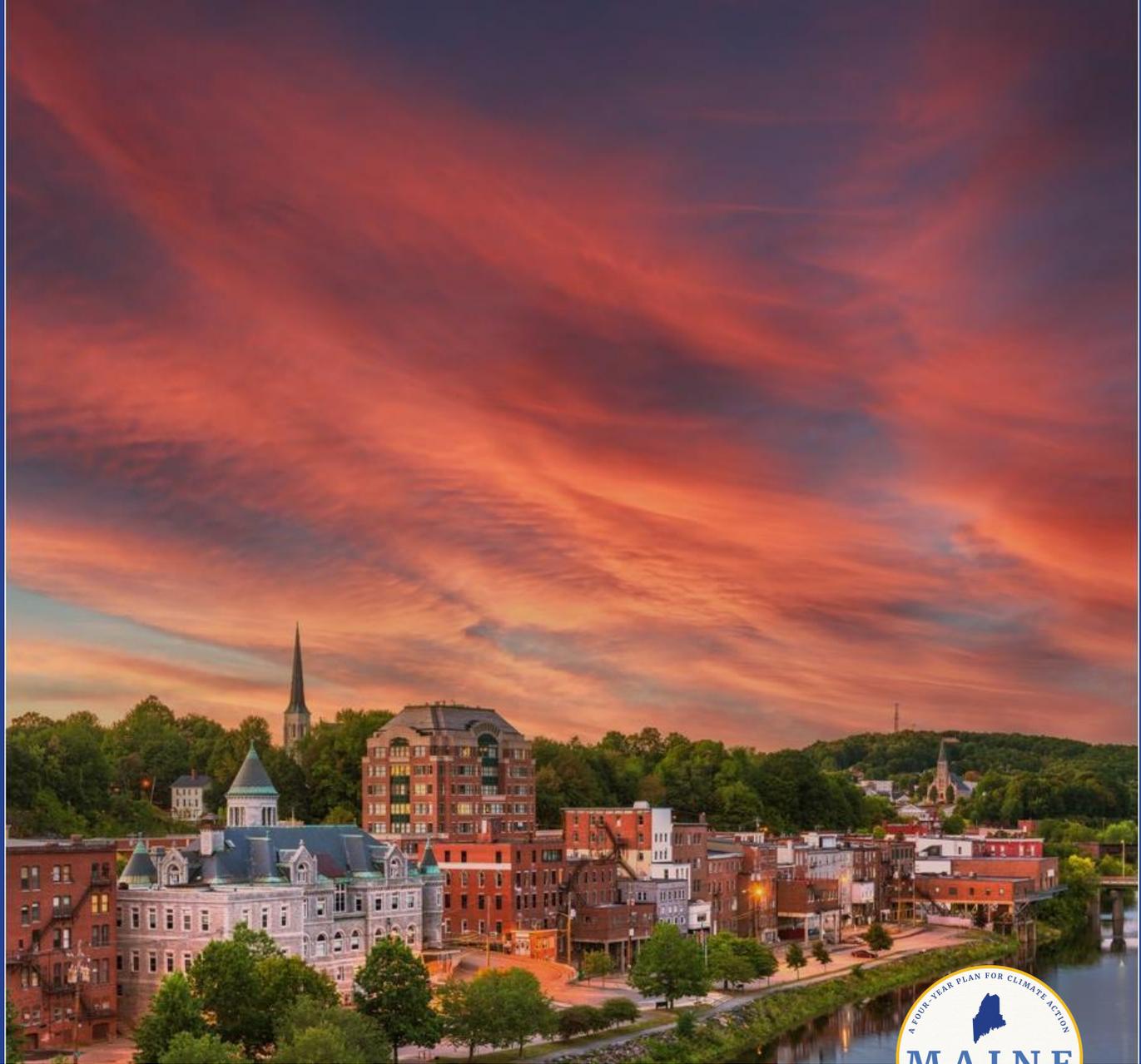
# Feedback & Questions?

**What else would be helpful for  
working group members as we  
engage in this work?**  
(i.e., background materials, speakers, etc.)

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# Next Steps and Adjournment

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# Next EWG Meeting:

*Tuesday, November 21, 10:00 AM-12:00 PM (virtual/Zoom)*

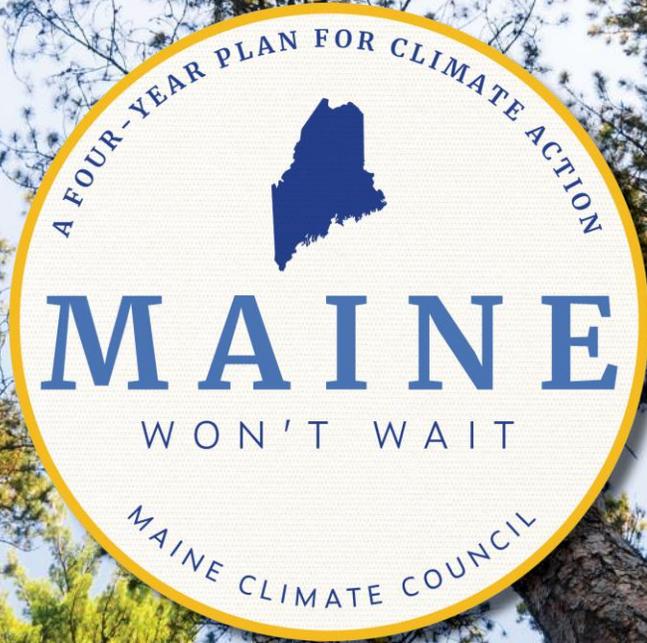
## Highly encouraged attendance:

*GEO's third public session on its Maine Energy Plan: Pathway to 2040 study.*

*Thursday, November 16, 2:00-4:00 PM*

*Registration:*

<https://cbuilding.zoom.us/meeting/register/tZwufuygrDssE9KetGlGkrBqXjB9zRLKlfUh#/registration>



A FOUR-YEAR PLAN FOR CLIMATE ACTION



**MAINE**

WON'T WAIT

MAINE CLIMATE COUNCIL