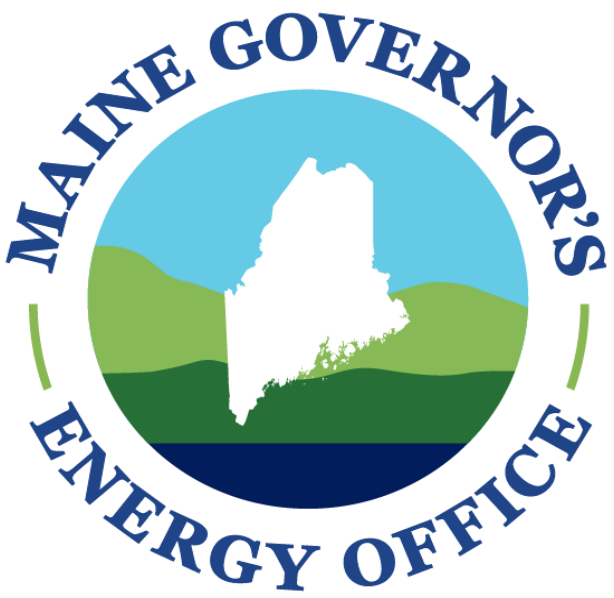


2024 ANNUAL REPORT

Submitted to the Maine Legislature's Joint Standing Committee on Energy, Utilities and Technology

January 15, 2025

www.maine.gov/energy

PURPOSE

As required by Maine Revised Statutes Title 2, §9, sub-§3C-1, the Governor's Energy Office (GEO) shall submit an annual report to the Energy, Utilities and Technologies Committee (EUT) that 'describes the activities of the office during the previous calendar year.' This report covers the requirements for calendar year 2024.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The Governor's Energy Office (GEO), established within the Executive Department and directly responsible to the Governor, is the designated energy office for the state. GEO provides policy leadership and technical assistance, develops energy programs, monitors energy markets, and reports on heating fuel and energy prices to help inform energy consumers in Maine. GEO works in partnership with state agencies, federal and local officials, industry, advocacy organizations and nonprofits, academia, and other stakeholders on solutions to meet the state's current and future energy needs and in support of new initiatives to ensure a more affordable, reliable, and cleaner energy system for Maine's people and businesses.

This past year tested Maine's resiliency but also presented new opportunities for targeted programming and investments to strengthen Maine's energy systems. Severe winter storms devasted communities both inland and along Maine's coast. These storms strained the electric grid, highlighting vulnerabilities while also demonstrating the resilience of Maine people in their response and desire to identify both near-term and long-term solutions to future challenges. At the same time, the Inflation Reduction Act (IRA) and Bipartisan Infrastructure Law (BIL) unlocked access to unprecedented levels of federal funding for energy-related programs through grant funding and new and expanded tax credits.

To date, through IRA and BIL programs, the GEO has been awarded over $215 million to be administered in coordination with partners across Maine and an additional $600 million in energy-related funding was awarded to other entities and projects across the state. GEO, in collaboration with other state agencies and public and private partners, is working to leverage this funding into programs and investments which will create jobs for Maine people and strengthen the economy; support the objectives of Maine's clean energy and climate requirements; and prioritize improvements to energy infrastructure to cost-effectively enhance reliability and performance.

In 2024, GEO's work focused on a broad range of initiatives that support an affordable, reliable, and cleaner energy future to benefit Maine's people and the economy. These initiatives have been propelled by statutory requirements and goals set by the Mills administration and the Maine Legislature. In 2024, major milestones across GEO's programming and work include, but are not limited to:

Federal Funding: Awarded or secured unprecedented levels of federal funding, including more than $215 million in energy-related federal funding to the GEO, both formula and competitive funding for a variety of projects such as energy efficiency ($72 million for heat pump and efficiency rebates), distributed generation ($62 million for low income-focused solar and storage programs), workforce development, and grid resiliency ($65 million for innovation). Further, the GEO participated in two successful regional grant applications that led to awards for

projects in Maine: a $40-$75 million heat pump accelerator award and a $147 million award to develop the world's largest multi-day energy storage facility in Lincoln, Maine.

Grid Resilience Grant Program: Launched the federally funded Maine Grid Resilience Grant Program to enhance the resilience of Maine communities while increasing clean energy workforce opportunities and aligning with ongoing electric grid modernization and state climate goals. This program awarded $6.6 million to six projects across Maine to deploy electrical grid resilience projects.

Energy Plan: Retained The Brattle Group and Evolved Energy to conduct a modeling and technical analysis to inform a pathway to achieve Maine's target of 100% clean electricity by 2040. Through this process, GEO held multiple webinars and opened public comment opportunities to inform the forthcoming Maine Energy Plan. The Energy Plan outlines actions to stabilize energy costs, enhance resiliency, reduce reliance on fossil fuels, create jobs and grow Maine's economy, and facilitate greenhouse gas reductions in alignment with the state's climate action plan, *Maine Won't Wait*.

Renewable Portfolio Standard Report: Published an evaluation of the environmental, economic, and energy-related impacts of Maine's renewable portfolio standard (RPS), including greenhouse gas emissions reduction and economic benefits. The report found that Maine's RPS has suppressed prices in the regional electricity market and saved Maine ratepayers more than $21 million annually in net electricity costs since 2011, facilitated more than $100 million in direct investment, and supported more than 1,000 jobs in Maine.

Offshore Wind Development: Secured a research lease in the Gulf of Maine from the Federal Bureau of Ocean Energy Management to develop the nation's first floating offshore wind research array. Additionally, GEO participated in the siting process for the nation's largest offshore wind commercial lease sale, which would support 6.8 GW of floating offshore wind capacity in the Gulf of Maine.

Offshore Wind Research Consortium: Led the state's Offshore Wind Research Consortium to advance priority research through active engagement with key stakeholders, ocean users, and academia to inform the responsible commercial development of offshore wind in the Gulf of Maine. This year, the Consortium supported several research projects, including the mapping of 337 nautical miles of ocean area to enhance marine policy decisions.

Energy Storage: Filed with the Maine Public Utilities Commission (PUC) a recommendation for the creation of the Maine Energy Storage Program, which would support the procurement of up to 200 MW of utility-scale energy storage in Maine. GEO also completed a Long Duration Energy Storage Study which provided a discussion of technology options and the costs and considerations for long-duration energy storage in Maine.

Transmission & Grid Planning: Collaborated on regional transmission planning and signed an MOU with 10 other Northeast states through the Northeast States Collaborative on Interregional Transmission. Engaged with the PUC to support Maine's efforts with the New England States Committee on Electricity as well as the PUC's establishment of integrated grid planning for utilities.

State Energy Security Plan: Completed the State Energy Security Plan, pursuant to federal requirements, which provides the state with a communications and coordination blueprint to address potential or actual energy emergencies caused by supply disruptions, rapid and unsustainable increases in energy prices, or other energy emergencies.

Home Heating: Conducted weekly and biweekly surveys of heating fuel prices obtained from fuel retailers statewide, updated electricity prices, and published the annual Winter Heating Guide to better prepare and inform customers on global energy market trends, the winter heating season, and opportunities for heating assistance.

Clean Transportation: Coordinated with other agencies and partners to launch the Recharge Maine Initiative, new high-speed electric vehicle charging stations, and the creation of a Medium- and Heavy-Duty Roadmap for clean transportation,

Workforce and Innovation: Invested through the Clean Energy Partnership over $4 million into 15 projects that will prepare and expand Maine's clean energy workforce, created the state's first clean energy jobs board and training website, published a detailed industry report, launched the state's first clean energy-focused accelerator, and provided new business incubator assistance as well as business growth support for energy efficiency companies.

Community Energy Redevelopment Program: Coordinated with the Maine Department of Economic and Community Development (DECD) to launch the Maine Community Energy Redevelopment Program to support locally-determined revitalization projects at industrial sites. Awarded technical assistance funds to six communities to help revitalize former mill sites, power stations, and other facilities with available or excess electrical capacity.

Other work includes participating in the Maine Climate Council and the Maine Infrastructure Rebuilding and Resilience Commission, conducting a Distribution System Operator study and an energy efficiency contractor needs assessment, and sitting on the Boards of several organizations including the Efficiency Maine Trust, the National Offshore Wind Research and Development Consortium, and the National Association of State Energy Officials.

This Annual Report further summarizes key updates and areas of focus for GEO during 2024. All completed reports as well as current information on GEO's initiatives and additional energy resources can be accessed on the GEO website: www.maine.gov/energy.

HEATING, EFFICIENCY, AND CLEAN TRANSPORTATION

Decreasing Maine's reliance on volatile fossil fuels, electrifying heating and transportation, and providing efficiency resources for energy consumers are key strategies for reducing greenhouse gas (GHG) emissions and stabilizing energy costs for Maine people and businesses. In 2024, GEO published weekly heating fuel price surveys, up-to-date electricity prices, and an updated Maine Winter Heating Guide; coordinated with Efficiency Maine and the Maine State Housing Authority (MaineHousing) to support the installation of 28,000 new heat pumps and 10,500 new heat pump water heaters; secured federal funds to supplement and create new efficiency programs; partnered with other state agencies to maintain a dashboard of accessible electric vehicle (EV) charging sites across the state; and continued to closely monitor the adoption of an updated Maine Uniform Building and Energy Code (MUBEC).

MAINE'S RESIDENTIAL HEATING LANDSCAPE

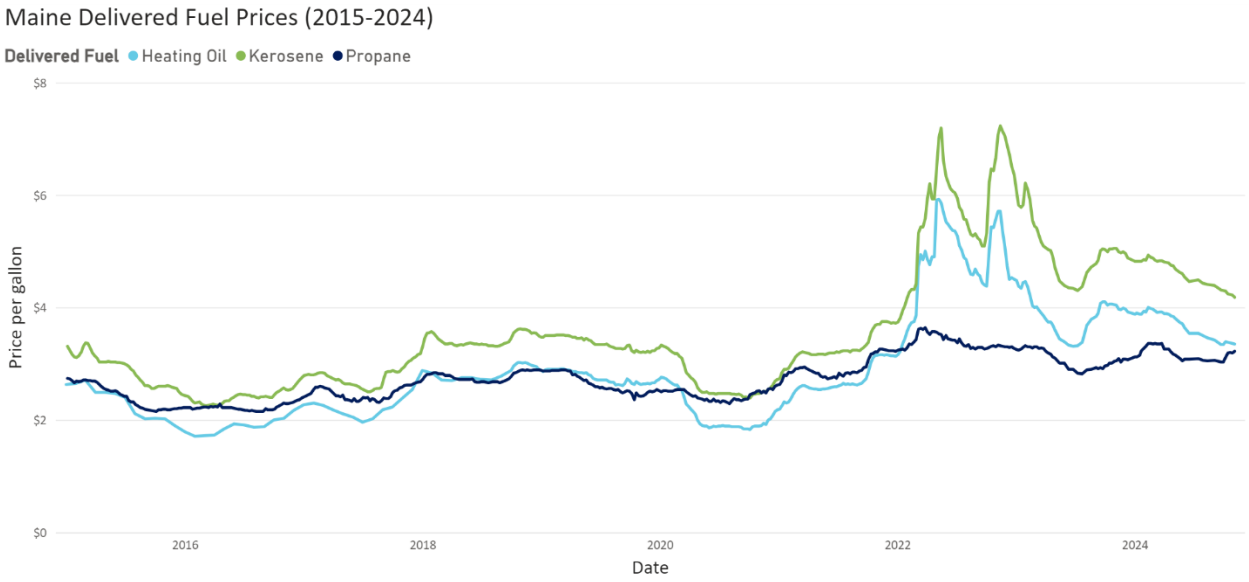
Maine has long been a national outlier for reliance on home heating oil and, as of 2022, is the most heating oil dependent state in the nation.[1] More than 52.6 percent of households use fuel oil for their primary home heating source, compared to 4 percent nationally.[2] Maine's over-reliance on imported fossil fuels for home heating results in significant emissions which contribute to climate change and public health concerns. Imported fossil fuel dependence also makes the state vulnerable to shifting global oil markets and burdens Maine households with high energy costs. More detailed information on Maine's residential heating landscape can be found in the forthcoming State Energy Plan.[3]

HEATING FUEL PRICE SURVEY AND WINTER HEATING RESOURCES

Throughout 2024, GEO conducted a weekly heating fuel price survey. This survey, performed on behalf of the U.S. Energy Information Administration (EIA), collects data from fuel retailers on average cash prices for heating oil and kerosene as well as cash/credit prices for propane. Prices through December 30, 2024 are provided in the chart below and are also published on the GEO website in an interactive dashboard format.[4] The figure below reflects the unprecedented volatility in heating oil and kerosene prices throughout 2022, largely driven by the Russian invasion of Ukraine. Prices in 2023 subsequently declined, and then stabilized in 2024, but continue to be higher than pre-2022 prices.

[1] U.S. Energy Information Agency. (2023). *State Energy Data System (SEDS).* https://www.eia.gov/state/seds/
[2] United States Census Bureau. (2024, December 12). *American Community Survey (ACS).* https://www.census.gov/programs-surveys/acs
[3] Maine Governor's Energy Office. (2024, December 16). *Draft: Maine Energy Plan*. https://www.maine.gov/energy/sites/maine.gov.energy/files/2024-12/Draft%20Maine%20Energy%20Plan%20for% 20public%20comment%20Dec%202024.pdf
[4] Maine Governor's Energy Office. (2024, December 30). *Heating Fuel Prices.* https://www.maine.gov/energy/heating-fuel-prices

Figure 1: Average cash prices for heating oil, kerosene, and propane (2012 – 2024).



As in prior years, GEO published its 2024 Winter Heating Guide,[5] which includes tips, resources, and programs to help Maine people save money, improve their home's energy efficiency, and, if needed, apply for heating assistance. Maine's winter heating season extends from October through March.

ENERGY EFFICIENCY

GEO works closely with Efficiency Maine and MaineHousing to ensure coordinated efforts for the deployment of energy efficient technologies in an equitable, economical, and efficient manner. The Director of GEO, Dan Burgess, serves on the Board of Efficiency Maine. GEO, Efficiency Maine, and MaineHousing have successfully worked together to secure significant federal funds to supplement and create new efficiency programs over the last year through collaboration on the U.S. Department of Energy's (DOE) Home Energy Rebates and Energy Improvement in Rural or Remote Areas Programs.[6]

GEO continues to closely monitor adoption of an updated Maine Uniform Building and Energy Code (MUBEC) by the Technical Building Codes and Standards Board. MUBEC is the statewide building and energy code that is comprised of codes from the International Code Council (ICC) and the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). As of the time of this report, the ICC 2021 suite of codes has been voted and approved by the Technical Building Codes and Standards Board for rulemaking and adoption. ICC 2021 is anticipated to become required by the state in early 2025. The

[5] Maine Governor's Energy Office. (2024). *Winter Heating Guide*. https://www.maine.gov/energy/winter-heating-resources
[6] Office of Governor Janet T. Mills. (2024, February 27). *Governor Mills, U.S. Department of Energy Announce $10 Million Federal Grant to Support Energy Efficiency and Workforce Investments in Rural Maine.* https://www.maine.gov/governor/mills/news/governor-mills-us-department-energy-announce-10-million-federal-grant-support-energy

Office of the State Fire Marshall is currently training building officials on the newer edition of the codes to prepare them for the transition.

Additional 2024 energy efficiency-related federal funding updates, including rebates and training, are included in later sections of this report.

BENEFICIAL ELECTRIFICATION

In June 2023, Governor Mills signed An Act to Enact the Beneficial Electrification Policy Act (P.L. 2023, Chapter 328) into law. [7] This law refines the definition of beneficial electrification to include switching end-uses and processes from fossil fuel to electric to reduce emissions and benefit utility ratepayers. As a result, Efficiency Maine is now required to consider beneficial electrification measures in its triennial plan and updates. In addition, the Maine Public Utilities Commission (PUC) is required to include such measures into the calculation of the maximum achievable cost-effective savings, to the extent that they are cost effective and reliably reduce rates, and to fund Efficiency Maine budgets for delivering these savings through electric utility procurement under Title 35-A, §10110, sub-§4-A.[8] GEO will provide a summary of these activities to advance beneficial electrification in future annual reports, as required by Title 35-A, §3805, sub-§2.[9]

CLEAN TRANSPORTATION

RECHARGE MAINE

Recharge Maine is the state's initiative to create a comprehensive EV charging network. The initiative is a partnership between GEO, the Governor's Office of Policy Innovation and the Future (GOPIF), Maine Departments of Transportation (Maine DOT) and Environmental Protection (Maine DEP), and Efficiency Maine. Recharge Maine's online dashboard[10] provides quarterly updates on the deployment of electric vehicle (EV) charging stations and the adoption of EVs, allowing stakeholders to track key trends and progress throughout the state.

In 2024, Maine was awarded $15 million to continue building its EV charging network along highways and within communities via the Bipartisan Infrastructure Law (BIL)-funded Charging and Fueling Infrastructure Discretionary Grant Program. The BIL established the National Electric Vehicle Infrastructure (NEVI) Formula Program, providing funding to states to deploy EV charging stations nationwide. Over the course of fiscal years (FY) 2022-2026, Maine will receive $18 million to expand its EV charging network on

[7] An Act to Enact the Beneficial Electrification Policy Act. P.L. 2023, Chapter 328, 131st Maine Legislature (2023). https://legislature.maine.gov/legis/bills/getPDF.asp?paper=SP0688&item=3&snum=131#:~:text=The%20commission%20shall%20advance%20through,climate%20benefits%20for%20all%20ratepayers

[8] Efficiency Maine Trust Act, 35-A MRSA § 10110 (2019). https://www.mainelegislature.org/legis/statutes/35-A/title35-Asec10110.html

[9] Efficiency Maine Trust Act, 35-A MRSA § 3805 (2019). https://www.mainelegislature.org/legis/statutes/35-A/title35-Asec3805.html

[10] Atlas Public Policy. (2024, March). *Recharge Maine Dashboard*. https://atlaspolicy.com/rechargemaine/

designated alternative fuel corridors. Each year, Recharge Maine must submit an updated NEVI Plan to be approved by the Federal Highway Association. The 2024 update was submitted in September.[11]

Recharge Maine also hosted the 'Charging Ahead: Maine's EV Landscape' webinar, led and facilitated by GEO, during National Drive Electric Week. The webinar provided an overview of Maine's ongoing efforts to expand EV charging infrastructure including updates from the Maine DOT and financial incentive updates from Efficiency Maine.

CLEAN TRANSPORTATION ROADMAP FOR MEDIUM- AND HEAVY-DUTY VEHICLES

GEO collaborated with GOPIF and Maine DOT to lead the development of a Clean Transportation Roadmap for Medium- and Heavy-Duty Vehicles (MHDV),[12] which outlines strategies and policy options necessary to decarbonize trucks and buses across the state. Currently, these vehicles contribute 27 percent of GHG emissions from Maine's transportation sector and account for 10 percent of the state's total emissions.

This roadmap aligns with *Maine Won't Wait* and complements the existing Light-Duty Clean Transportation Roadmap.[13] It provides a detailed characterization of Maine's current MHDV fleet, explores potential future zero-emission vehicle market penetration and usage patterns, and evaluates the infrastructure needs for charging and grid upgrades.

RENEWABLE ENERGY: OVERVIEW & POLICY UPDATES

Reducing the state's dependence on fossil fuels and transitioning to a more diverse portfolio of clean energy resources not only reduces the state's emissions but also supports Maine's economy by creating local job opportunities and reducing expenditures for out-of-state fossil fuels. Statutory requirements to increase the portion of Maine's electricity generated by renewable energy, as well as deployment and procurement targets, are driving investments in every county in the state. To meet the state's additional procurement goals, investments in new and upgraded transmission infrastructure will be required.

[11] Maine Department of Transportation. (2024, September). *Maine's Updated Plan for Electric Vehicle Infrastructure Deployment.* https://www.efficiencymaine.com/docs/2024-MAINE-NEVI-PLAN.pdf

[12] Maine Governor's Office of Policy, Innovation, and the Future. (2024, November). *Maine Clean Transportation Roadmap for Medium- and Heavy-Duty Vehicles.* https://www.maine.gov/energy/sites/maine.gov.energy/files/ inline-files/Maine%20Clean%20Transportation%20Roadmap%20for%20MHDV%20Full%20Roadmap%20with%20 Appendices%20Nov2024.pdf

[13] Maine Governor's Office of Policy, Innovation, and the Future. (2021, December). *Maine Clean Transportation Roadmap* https://www.maine.gov/future/sites/maine.gov.future/files/inline-files/Maine%20Clean%20 Transportation%20Roadmap.pdf

RENEWABLE PORTFOLIO STANDARD

Maine's Renewable Portfolio Standard (RPS) dictates the portion of electricity used in the state that must be sourced from renewable sources. In 2019, Governor Mills signed P.L. 2019, Chapter 477,[14] which increased Maine's RPS target to 80% by 2030 and 100% by 2050. This year, per statute, GEO conducted an evaluation to consider the impacts of Maine's renewable portfolio standard on energy prices and an assessment of benefits, including GHG emissions reduction and economic benefits. The report,[15] conducted by state-retained consultants Sustainable Energy Advantage, LLC, found that Maine's RPS has suppressed prices in the regional electricity market and saved Maine ratepayers more than $21 million annually in net electricity costs since 2011; supported more than $100 million in direct investment and approximately $900 million in operations and maintenance spending; and supported more than 1,000 jobs in Maine's clean energy sector.

MAINE ENERGY PLAN

GEO is statutorily required to biennially prepare a comprehensive State Energy Plan (Energy Plan). In February 2023, in her State of the Budget Address, Governor Mills directed GEO to align the Energy Plan with Maine's goal to achieve 100 percent clean electricity by 2040. In August 2023, GEO launched the Maine Energy Plan: Pathway to 2040 Initiative. This process sought to develop a new comprehensive, integrated energy plan; foster collaboration and engagement with key partners; grow and support Maine's economy; prioritize Maine people with high energy burdens by decreasing energy volatility; and support long-term planning efforts to secure affordable, reliable, and clean energy for the coming decades.

GEO retained The Brattle Group (Brattle) and Evolved Energy Research (EER) to conduct unprecedented hour-by-hour modeling and technical analysis to inform the planning process. Across 2023 and 2024, GEO and its consultants hosted four public webinars to present methods, draft results, and obtain feedback. In October 2024, GEO and Brattle published the technical report ("Pathways to 2040 Technical Report")[16] and received over 25 public comments, which further informed the analysis. The draft Pathways to 2040 Technical Report presents a "core pathway" – a high renewable and electrification pathway which meets Maine's energy and climate goals – as well as five alternative pathways, shaped by stakeholder feedback, which illustrate key issues and trade-offs. This analysis demonstrates that 100 percent clean energy by 2040 is achievable, beneficial, and will

[14] An Act To Reform Maine's Renewable Portfolio Standard, P.L. 2019, Chapter 477 (L.D. 1494), 129th Maine Legislature. https://legislature.maine.gov/legis/bills/bills_129th/chapters/PUBLIC477.asp

[15] Maine Governor's Energy Office. (2024, March 31). *An Assessment of Maine's Renewable Portfolio Standard.* Maine-RPS-Impacts-and-Procurement-Policy-Options-Report-Master-FINAL.pdf

[16] Maine Governor's Energy Office. (2024, November). *Draft: Maine Pathways to 2040: Analysis and Insights.* https://www.maine.gov/energy/sites/maine.gov.energy/files/2024-10/Maine%20Pathways%20Report%20Draft%20for%20Comment.pdf

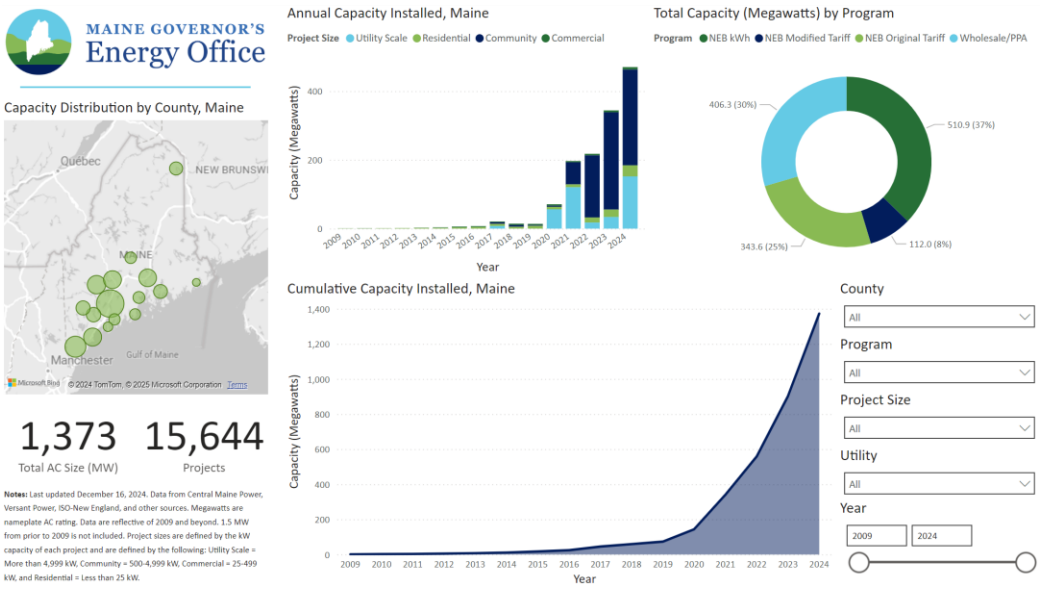
result in reduced energy costs across Maine's economy. This Technical Report informs and underpins the comprehensive Energy Plan.

On December 16, 2024, GEO released a draft Maine Energy Plan.[17] The draft Energy Plan outlines actions to stabilize energy costs, enhance resiliency, reduce reliance on fossil fuels, create jobs and grow Maine's economy, and facilitate greenhouse gas reductions in alignment with the state's climate action plan, *Maine Won't Wait*. This guiding policy document is organized into five key objectives: deliver affordable energy to Maine people and businesses, ensure Maine's energy systems are reliable and resilient in the face of growing challenges, responsibly advance clean energy, deploy efficient technologies to reduce energy costs, and expand clean energy career opportunities for Maine people and advance innovation. Each objective contains strategies and actions to support its achievement. GEO accepted public comment and feedback on the draft plan in preparation for submission to the Governor and Legislature in January 2025.

DISTRIBUTED GENERATION & SOLAR

By the end of 2024, there was nearly 1,400 megawatts (MW) of solar capacity installed in Maine, with projects in every county.[18] A breakdown of these projects by type and location can be found below and on the Maine Solar Dashboard on GEO's website.

Figure 2: Maine Solar Dashboard, as of December 16, 2024, accessible on GEO's website



GEO maintains a Maine Solar Dashboard on its website, pictured above. The dashboard reflects data from 2009 through December 16, 2024 sourced from Central Maine Power, Versant Power, ISO-New England, and other

[17] Maine Governor's Energy Office. (2024, December 16). *Draft: Maine Energy Plan*. https://www.maine.gov/energy/sites/maine.gov.energy/files/2024-12/Draft%20Maine%20Energy%20Plan%20for%20public%20comment%20Dec%202024.pdf

[18] Maine Governor's Energy Office. (2024). *Maine Solar Dashboard*. https://www.maine.gov/energy/initiatives/renewable-energy/solar-distributed-generation

sources. Megawatts are nameplate AC rating. Project sizes are defined by the kW capacity of each project and are defined by the following: Utility Scale = More than 4,999 kW, Community = 500-4,999 kW, Commercial = 25-499 kW, and Residential = Less than 25 kW.

On April 22, 2024, the U.S. Environmental Protection Agency (EPA) selected Maine's Solar for All application for a $62 million grant award to provide financial and technical assistance enabling low-income and disadvantaged households across the state to access solar and energy storage.[19] This award will also support workforce development opportunities, ensuring quality clean energy jobs for disadvantaged communities. In 2025, GEO will provide opportunities for public comment on the design of the program prior to making funds available.

ENERGY STORAGE

In 2024, GEO made progress on securing additional energy storage capacity in the state, pursuant to An Act Relating to Energy Storage and the State's Energy Goals (P.L. 2023, Chapter 374),[20] which:

1. Modifies the state goal for energy storage system development to at least 300 MW of installed capacity by the end of 2025 and at least 400 MW by the end of 2030;
2. Allows GEO to reevaluate and increase the state energy storage goal as needed;
3. Directs GEO to evaluate designs for a program to procure up to 200 MW of commercially available utility-scale energy storage that provides net benefits to the electric grid and to ratepayers;
4. Directs GEO to study long-duration energy storage, including opportunities for new and emerging long duration energy storage technologies; and
5. Requires the Maine PUC to solicit stakeholder input on whether and, if so, at what cost and under what conditions, an investor-owned transmission and distribution utility may own, have a financial interest in or otherwise control an energy storage system in Maine.

Progress on Section 1 of this legislation was made with the announcement of a $147 million U.S. DOE grant award to support a novel long-duration energy storage system in Lincoln, Maine to enhance grid resilience and optimize the delivery of renewable energy. The regional proposal, Power Up New England (Power Up), was selected through the U.S. DOE's competitive Grid Innovation Program. The award is part of a $389 million regional

[19] Office of Governor Janet T. Mills. (2024, April 22). *Governor Mills Announces $62 Million Award to Maine Through Inflation Reduction Act to Deliver Affordable. Accessible Solar Energy to Maine People.* https://www.maine.gov/governor/mills/news/governor-mills-announces-62-million-award-maine-through-inflation-reduction-act-deliver

[20] An Act to Advance Energy Storage in Maine, P.L. 2021, Chapter 298, 131st Maine Legislature. https://legislature.maine.gov/bills/getPDF.asp?paper=SP0213&item=3&snum=130

grant to New England states funded through the BIL to strengthen the regional electric grid and advance the deployment of clean energy.[21]

Related to Section 3, GEO received extensive stakeholder responses to a Request for Information (RFI) in seeking public input to evaluate and recommend designs for a program to procure up to 200 MW of commercially available utility-scale energy storage systems. On December 23, 2024, GEO submitted its program design and recommendations to the PUC.[22] The PUC will review the recommendations and determine whether the program recommended by GEO is reasonably likely to achieve the objectives of the law.

The state's 2030 goal of 400 MW of operational energy storage represents approximately 17 percent of Maine's peak demand as of 2021. In 2024, there were approximately 63 MW of grid-connected energy storage resources operating in the state.[23] Hundreds of megawatts of battery storage projects have been proposed for construction in the state and are currently in the Independent System Operator New England (ISO-New England) Interconnection Queue.

GEO also completed the Long Duration Energy Storage Study[24] as directed by Section 4; GEO's report includes:

1. A discussion of technology options for long-duration energy storage, including emerging technologies and a description of their technical operation and commercial viability that may be feasible within the state and New England between 2023 and 2040;
2. An overview of known cost and performance characteristics, as well as development considerations by technology, such as development timelines, siting requirements or safety considerations;
3. A discussion of scenarios for long-duration energy storage technologies, such as serving as peaking capacity, providing winter reliability or providing benefits through colocation with renewable resources; and
4. Consideration of whether and under what conditions the use of long-duration energy storage would be cost-effective for ratepayers in the state.

GEO submitted the Study including a set of policy considerations to the Joint Standing Committee on Energy, Utilities and Technology on February 1, 2024.

---

[21] Massachusetts Federal Funds and Infrastructure Office. (2024, August 6). *Massachusetts, New England States Selected to Receive $389 Million in Federal Funding for Transformation Transmission and Energy Storage Infrastructure.* https://www.mass.gov/news/massachusetts-new-england-states-selected-to-receive-389-million-in-federal-funding-for-transformational-transmission-and-energy-storage-infrastructure

[22] Maine Governor's Energy Office. (2024, December 23). *Maine Energy Storage Program Recommendations Submitted to the Maine Public Utilities Commission. https://www.maine.gov/energy/sites/maine.gov.energy/files/2024-12/GEO%20Energy%20Storage%20Program%20Recommendations%20Dec%2023%202024.pdf*

[23] ISO New England. (2024). *2024-2033 Capacity, Energy, Loads, and Transmission Report*. https://www.iso-ne.com/system-planning/system-plans-studies/celt/

[24] Maine Governor's Energy Office. (2024, February). *Long Duration Energy Storage Report.* https://www.maine.gov/energy/sites/maine.gov.energy/files/inline-files/LDES%20Report_Final_0.pdf

NORTHERN MAINE RENEWABLE ENERGY DEVELOPMENT

In May 2024, following the termination of the Aroostook Renewable Gateway contract in December 2023, the PUC initiated a process to inform the re-opening of its procurement for qualified transmission and generation projects pursuant to the Northern Maine Renewable Energy Development Program[25] and sought responses to a Request for Information (RFI) and Indications of Interest. Of note, the U.S. DOE announced support for a potential project through their Transmission Facilitation Program through a commitment to provide a capacity contract of $425 million for the Aroostook Renewable Project. The proposed project would construct a new substation in Haynesville, Maine and a 111-mile transmission line with a capacity of 1,200 MW to connect the new substation to the ISO-New England system at a substation in Pittsfield, Maine. GEO will continue to monitor the development of this project and others as it relates to the Northern Maine Renewable Energy Development Program and engage with the PUC and U.S. DOE as appropriate to ensure the renewable energy objectives of the state are achieved to the benefit of Maine ratepayers.

GEO continues to prioritize regional coordination as it relates to long-term transmission planning and renewable energy deployment. In May 2024, the Federal Energy Regulatory Commission (FERC) released Order No. 1920,[26] a rule that requires transmission providers to conduct and periodically update long-term planning for regional transmission needs over the coming decades. The rule also bolsters state regulators' participation in the long-term regional transmission planning process. On December 16, 2024, the New England states filed a letter[27] with ISO-New England requesting a solutions study to evaluate upgrades to the Maine grid to unlock Maine-based resources to meet state and regional clean energy goals. ISO-New England is expected to begin work on the study in 2025, and GEO is actively cooperating with ISO-New England on this effort.

MAINE OFFSHORE WIND INITIATIVE

Pursuant to P.L. 2023, Chapter 481, the state has set a goal to procure 3 gigawatts (GW) of offshore wind energy by 2040.[28] Through the Maine Offshore Wind Initiative (Initiative), GEO is working to develop a sustainable and responsible offshore wind industry through strategic planning, research, and coordination with state agencies and other partners from Maine, the nation, and the world. In 2024, GEO and its partners advanced the state's

[25] Northern Maine Renewable Energy Development Program, 35-A M.R.S.A. § 3210-I (2021). https://www.mainelegislature.org/legis/statutes/35-a/title35-Asec3210-I.html

[26] Federal Energy Regulatory Commission. (2024, May 13). *Fact Sheet | Building for the Future Through Electric Regional Transmission Planning and Cost Allocation.* https://www.ferc.gov/news-events/news/fact-sheet-building-future-through-electric-regional-transmission-planning-and

[27] New England States Committee on Electricity. (2024, December 13). *Transmission Needs for a Longer-term Transmission Planning RFP.* https://www.iso-ne.com/static-assets/documents/100018/a05_2024_12_18_pac_transmission_needs_for_a_longer-term_transmission_planning_rfp_final.pdf

[28] An Act Regarding the Procurement of Energy from Offshore Wind Resources. P.L. 2023, Chapter 481 (L.D. 1895), 131st Maine Legislature. https://legislature.maine.gov/bills/getPDF.asp?paper=SP0766&item=1&snum=131

Initiative by advancing research and monitoring identified by Maine stakeholders through the Maine Offshore Wind Research Consortium; securing a federal lease for the nation's first floating offshore wind research array; identifying a preferred purpose-built port for floating offshore wind; collaborating with federal and state agencies on siting and permitting processes to execute an offshore wind lease sale in the Gulf of Maine; preliminarily advancing implementation of a statutorily-directed solicitation process; and providing support to Maine companies and workers interested in the offshore wind industry. As an industry that is expected to generate more than $109 billion in private investment in the U.S. economy by 2030 and reach a market value of $1 trillion by 2040, offshore wind remains an important component of Maine's long-term climate and energy goals and to catalyze additive economic development in the state.

MAINE OFFSHORE WIND ROADMAP

In February 2023, GEO published the Maine Offshore Wind Roadmap (Roadmap). In July 2023, Governor Mills signed P.L. 2023, Chapter 481, which authorizes GEO to lead the procurement of up to 3 GW of offshore wind energy by 2040, allowing for critical port development, creating opportunity for all Maine workers and businesses in the emerging industry, and protecting critical lobster fishing areas from development. In 2024, GEO continued to work with partners and pursue federal funds to implement action items outlined in the Roadmap. All information about the Roadmap and its ongoing implementation can be accessed via the Maine Offshore Wind Initiative website.[29]

MAINE OFFSHORE WIND RESEARCH CONSORTIUM

In 2021, the Maine Offshore Wind Research Consortium (Consortium) was established to coordinate, support, and arrange for research to be conducted on floating offshore wind in the Gulf of Maine. The Consortium is led by an Advisory Board which is an assembly of experts from commercial and recreational fishing, research and academia, coastal communities, Maine-based environmental groups, the offshore wind industry, and state agencies. In 2024, the Consortium identified and funded three high-priority projects in the Advisory Board's Research Strategy, which include:

- Inventorying baseline data on socioeconomics of Maine fishing communities to help assess potential impacts of floating offshore wind in the Gulf of Maine;
- Exploring approaches to fisheries coexistence with floating offshore wind; and
- Mapping the seafloor in key areas of the Gulf of Maine, prioritizing the research array area.

The first two projects received bids through a competitive Request for Proposals (RFP) process and were awarded in early 2024. The socioeconomic baseline inventory project was awarded to Karp Strategies, in partnership with Dr. Alison Bates' lab at Colby College,

[29] Maine Offshore Wind Initiative. (2024). *Homepage*. https://www.maineoffshorewind.org/

and concluded in August 2024. ERM Consulting and Engineering, in partnership with the Gulf of Maine Research Institute, continue to conduct research on fisheries coexistence with floating offshore wind and research findings are anticipated to be available in early 2025. The seafloor mapping project is being led by the Maine Department of Marine Resource's (Maine DMR) Maine Coastal Mapping Initiative (MCMI).

A Request for Applications was opened in December 2024 to fund three additional high-priority research projects identified by the Consortium Advisory Board. The three project deliverables being sought include:

1. A baseline assessment of social, economic, and cultural impacts of floating offshore wind development on Maine's fishing industry;
2. A baseline secondary entanglement risk assessment and technology feasibility study; and
3. A baseline offshore bat monitoring assessment.

These projects are expected to be underway in early 2025. Reports and data from all Consortium-funded research projects will be made publicly available on the Consortium website and public portals, such as Maine DMR's interactive online MCMI (under development) and the Northeast Ocean Data Portal.[30]

The 2024 Annual Report of the Maine Offshore Wind Research Consortium provides additional details regarding the Consortium's work and is available on GEO's website.[31]

GULF OF MAINE FLOATING OFFSHORE WIND RESEARCH ARRAY

In 2021, the state applied to the U.S. Bureau of Ocean Energy Management (BOEM) to lease a 15.2-square-mile area nearly 30 miles offshore in the Gulf of Maine for the nation's first floating offshore wind research site in federal waters. In August 2024, Governor Mills announced that BOEM issued the research lease to the state of Maine.[32] The research array will deploy 12 or fewer wind turbines utilizing the University of Maine's (UMaine) innovative floating hull design and produce up to 144 MW of clean energy. The project will employ Maine's local construction supply chain and workforce and foster leading public benefit research on floating offshore wind interactions with Maine's marine environment, fishing industry, and shipping and navigation routes. Construction of the research array is still subject to a variety of permitting and regulatory processes, and final approval of a power purchase agreement (PPA) by the PUC. Following a final decision on the PPA, the developer, Diamond Offshore Wind, will begin environmental surveys and develop a Research

[30] Northeast Ocean Data. (n.d.). *Homepage*. https://www.northeastoceandata.org/
[31] Maine Governor's Energy Office. (2024, December 31). *Maine Offshore Wind Research Consortium 2024 Annual Report.* https://www.maine.gov/energy/sites/maine.gov.energy/files/2024-12/Maine%20Offshore%20Wind% 20Research% 20Consortium%20Fund%20Annual%20Report%202024.pdf
[32] U.S. Department of the Interior. (2024, August 19). *Interior Department Issues Offshore Wind Research Lease to State of Maine.* https://www.doi.gov/pressreleases/interior-department-issues-offshore-wind-research-lease-state-maine

Activities Plan, in coordination with GEO and other state agencies, to inform responsible planning and development of the research array.

BOEM GULF OF MAINE LEASE SALE

On March 15, 2024, BOEM announced[33] the designation of a Final Wind Energy Area (Final WEA) in the Gulf of Maine. Throughout 2024, GEO worked with partner agencies and advocated for Maine's interests by submitting public comments, sharing data, and participating in Gulf of Maine Intergovernmental Renewable Energy Task Force meetings related to the siting process and the final lease areas. Based on the feedback received through engagement and comment periods, and as advocated for by Governor Mills across 2022 and 2023, the Final WEA, about 2 million acres, represented a 43% reduction from the Draft WEA and excluded the entirety of Lobster Management Area (LMA) 1, vital fishing grounds for Maine's lobster industry.

On April 30, 2024, the U.S. Department of the Interior (DOI) announced[34] a proposed sale notice for the lease areas; the final sale notice for the lease areas in the Gulf of Maine was scheduled for October 29, 2024, and included eight lease areas off Massachusetts, New Hampshire, and Maine.

On October 29, 2024, the U.S. DOI announced the results of the OSW lease sale in the Gulf of Maine,[35] which included two provisional winners on four lease areas and over $21.9 million in winning bids. Invenergy NE Offshore Wind, LLC won one northern lease area (Lease OCS-562) at $4,892,700. Lease OCS-562 includes 97,854 developable acres and is approximately 46.2 nautical miles (nm) from Maine. Invenergy also won one southern lease area (Lease OCS-567) at $5,889,000. Avangrid Renewables, LLC won two southern lease areas - Lease OCS-564 and Lease OCS-568 - at $4,928,250 and $6,244,850, respectively.

The lease sale resulted in over $5.4 million in total bidding credits which represent binding commitments by the two companies to invest over $2.7 million in workforce training and domestic supply chain development, and an additional $2.7 million for fisheries compensatory mitigation. Furthermore, lease stipulations require that the lessees make "every reasonable effort" to enter into a project labor agreement covering the construction stage of any project for the lease areas; develop communication plans for engagement with Tribes, agencies, and fisheries; and provide semi-annual reports on engagement activities with Tribes and communities.

[33] Bureau of Ocean Energy Management. (2024, March 15). *BOEM Finalizes Wind Energy Area in the Gulf of Maine and Announces Upcoming Environmental Review of Potential Offshore Wind Leasing Activities.* https://www.boem.gov/newsroom/press-releases/boem-finalizes-wind-energy-area-gulf-maine-and-announces-upcoming

[34] U.S. Department of the Interior. (2024, April 20). *Interior Department Proposes Offshore Wind Sales in Oregon, Gulf of Maine. https://www.doi.gov/pressreleases/interior-department-proposes-offshore-wind-sales-oregon-gulf-maine*

[35] U.S. Department of the Interior. (2024, October 29). *Biden-Harris Administration Holds First Offshore Wind Lease Sale in the Gulf of Maine. https://www.doi.gov/pressreleases/biden-harris-administration-holds-first-offshore-wind-lease-sale-gulf-maine*

OFFSHORE WIND SOLICITATION

In 2024, GEO began the process of procurement as outlined in P.L. 2023, Chapter 481 to lead the procurement process of at least 3,000 MW of offshore wind installed by 2040. GEO has continued to coordinate with the PUC and other state agencies as appropriate on the development of an offshore wind solicitation that will call for proposals from offshore wind developers and deliver offshore wind energy for Maine. The solicitation will include important plans related to stakeholder engagement, fisheries protection, environmental considerations, and economic development.

On April 24, 2024, GEO issued the Maine Offshore Wind Renewable Energy and Economic Development Program Request for Information (RFI), in coordination with other state agencies, for commercial offshore wind development to solicit information that will inform future planning and structure necessary to meet the statutory requirements. The RFI sought public comment on: Solicitation Approach and Regional Coordination, Solicitation Implementation, Ports and Workforce, Transmission, and other questions of interest. Based on feedback from the RFI, GEO is working to finalize a framework for developing the first solicitation and opportunities for public input.

OFFSHORE WIND PARTNERSHIPS

In 2024, GEO worked in close partnership with several regional, national, and international organizations to inform the state's offshore wind development process and share Maine's experiences. Those partnerships include but are not limited to:

- **Federal-State Offshore Wind Implementation Partnership**
  In September 2023, Maine signed a Memorandum of Understanding[36] with four federal agencies (U.S. Departments of Interior, Commerce, Energy, and Transportation) and eight other east coast states (CT, MA, NH, RI, MD, NJ, NY, and NC) to commit to regionally coordinated domestic offshore wind supply chain development. Maine is advancing a regional partnership agreement regarding port, supply chain, and workforce development with the participating northeast states (NH, MA, CT, and RI).
- **The National Offshore Wind Research and Development Consortium**
  GEO is a board member of the National Offshore Wind Research and Development Consortium, a non-profit public-private alliance dedicated to responsible, cost-effective offshore wind energy and technology research in the U.S.
- **The Regional Wildlife Science Collaborative for Offshore Wind**
  GEO is the Maine lead entity and State Caucus member of the Regional Wildlife Science Collaborative for Offshore Wind (RWSC). RWSC is dedicated to regional

[36] The White House. (2023, September 20). *Memorandum of Understanding on East Coast Offshore Wind Supply Chain Collaboration.* https://www.whitehouse.gov/wp-content/uploads/2023/09/Federal-State-MOU-on-East-Coast-Offshore-Wind-Supply-Chain-Collaboration.pdf

planning, coordination, and collaboration on ocean wildlife research and monitoring with regards to the development of offshore wind energy. GEO participated on the RWSC State Caucus throughout 2024.

GEO continues to partner with several other entities on offshore wind, including neighboring states, international partners, and various public, private, and non-profit organizations.

TRANSMISSION & GRID PLANNING

Transmission and grid planning are important components of enhancing energy reliability and security for Maine people and businesses and introducing new, renewable sources of energy to the electric system. Modernization of current electric grid systems and infrastructure will be necessary to meet state renewable energy and climate goals through flexible demand management, integrated grid planning, utility structures, and beneficial electrification. In 2024, GEO participated in regional and national transmission planning initiatives, engaged with ISO-New England on grid operator reforms, and supported the development of various grid planning and climate vulnerability studies.

TRANSMISSION

In May 2024, Maine joined 20 other states and the Biden-Harris Administration to form the Federal State Modern Grid Deployment Initiative.[37] These states have committed to prioritizing efforts that support the adoption of modern solutions to expand grid capacity and build modern grid capabilities on both new and existing transmission and distribution lines. GEO also participated in the preparation of a U.S. DOE National Transmission Planning (NTP) Study that was released on October 4, 2024. [38] The NTP study is in support of the Building a Better Grid Initiative under the BIL and identifies high value transmission upgrades that will provide broad-scale benefits to electric customers; inform regional and interregional transmission planning processes; and identify strategies to accelerate decarbonization while maintaining system reliability. Study results will assist DOE in prioritizing funding for transmission infrastructure support.

Through a memorandum of understanding signed on July 9, 2024, Maine joined ten other Northeast states to form the Northeast States Collaborative on Interregional Transmission in a first-in-the-nation effort to explore mutually beneficial opportunities to increase the flow of electricity between three Northeast planning regions.[39] Coordinating and collaborating efforts to improve interregional electricity transmission planning can stabilize

[37] The White House. (2024, May 28). *Biden-Harris Administration Launches Federal-State Initiative to Bolster America's Power Grid.* https://www.whitehouse.gov/briefing-room/statements-releases/2024/05/28/fact-sheet-biden-harris-administration-launches-federal-state-initiative-to-bolster-americas-power-grid/

[38] U.S. Department of Energy, Grid Deployment Office. (2024). *The National Transmission Planning Study.* https://www.energy.gov/gdo/national-transmission-planning-study

[39] Maine Governor's Energy Office. (2024, July 9). *Maine Joins Electricity Transmission Agreement with Northeast States to Enhance Grid Reliability.* https://www.maine.gov/energy/press-release-maine-joins-electricity-transmission-agreement

energy costs by increasing access to affordable clean energy while bolstering grid reliability at times of high energy demand and improving resilience against extreme weather.

In other activities, GEO continues to be involved in the regional New England Power Pool (NEPOOL) process and has supported the reforms begun by ISO-NE to permit the grid operator to provide long-term proactive transmission planning to address state and regional renewable energy goals and successfully integrate clean energy resources.

GRID PLANNING

The beneficial electrification of heating and transportation will require coordinated and timely preparation in anticipation of necessary grid upgrades and system changes. In July 2024, the PUC issued an Order Outlining Electric Grid Plan Priorities for Maine's Investor-Owned Transmission and Distribution Utilities. [40] With this Order, the PUC incorporated substantial input from the public to establish priorities for Central Maine Power and Versant Power to address in their first-ever Integrated Grid Plans, as required by law. Such grid plans seek to improve grid reliability, resiliency, and affordability while helping to achieve Maine's goals for greenhouse gas reductions and climate policies. Additional related and ongoing proceedings at the PUC include the filings of the first utility Climate Change Protection Plans (PUC Docket 2023-00282) as well as a Commission-initiated inquiry into improved resilience and addressing escalating storm costs (PUC Docket 2024-00191). GEO continued to engage in these efforts in 2024.

DISTRIBUTION SYSTEM OPERATOR FEASIBILITY STUDY

Pursuant to An Act to Create a 21st-Century Electric Grid (P.L. 2023, Chapter 67),[41] "the Resolve," GEO led a study to determine whether a Distribution System Operator (DSO) could be established in Maine to achieve cost savings for customers, improved system reliability, and accelerated achievement of the state's climate goals. Pursuant to Sections 1 and 2 of the Resolve, GEO retained Strategen Consulting to conduct an initial Feasibility Report. On November 18, 2024, GEO issued a determination[42] to not pursue the formal creation of a DSO design proposal as described in Section 3 of the Resolve. GEO will submit a final report in mid-January. GEO intends to consider the information and findings contained in the initial feasibility study to inform future prioritized areas of analysis to support achievement of the broader objectives of the state related to grid planning, infrastructure, and management.

---

[40] Maine Public Utilities Commission. (2022, November 1). An Order Outlining Electric Grid Plan Priorities for Maine's Investor-Owned Transmission and Distribution Utilities, Docket No. 2022-00322. https://mpuc-cms.maine.gov/CQM.Public.WebUI/Common/ViewDoc.aspx?DocRefId=%7b3D6E8FB6-A7B0-48E5-9AEE-EA99C21736F4%7d&DocExt=pdf&DocName=%7b3D6E8FB6-A7B0-48E5-9AEE-EA99C21736F4%7d.pdf

[41] An Act to Create a 21st-Century Electric Grid. P.L. 2023, Chapter 67, 131st Maine Legislature. https://www.mainelegislature.org/legis/bills/display_ps.asp?ld=952&PID=1456&snum=131

[42] Maine Governor's Energy Office. (2024, November 18). *Distribution System Operator Feasibility Study Determination and Request for Comment.* https://www.maine.gov/energy/sites/maine.gov.energy/files/2024-11/DSO%20draft%20study%20results%20Nov%202024.pdf

CLEAN ENERGY PARTNERSHIP

GEO received $6.5 million from the Maine Jobs and Recovery Plan (MJRP) to establish the Clean Energy Partnership (CEP), which aims to advance partnerships and initiatives to grow the workforce and increase innovation in Maine's clean energy sector in support of Governor Mills' goal of 30,000 clean energy jobs in Maine by 2030. In 2024, the CEP reached over 3,500 participants and 40 businesses and community organizations; awarded millions of dollars in funding to support workforce development and innovation initiatives; and supported the establishment of a new clean energy jobs clearinghouse.

CEP LEADERSHIP AND ADVISORY GROUP

The CEP is led by GEO in partnership with GOPIF, the Maine Department of Labor (MDOL), and the Maine Department of Economic and Community Development (DECD). Other partners include the Maine Community College System, the University of Maine system, MaineHousing and Community Action Programs, private companies, labor unions, nonprofits, municipalities, and state and local chambers of commerce, among many others.

The CEP Advisory Group (Advisory Group) includes representatives from industry, labor, support organizations, training and educational institutions, and state government, and helps guide CEP program development and implementation. This work includes defining workforce needs, monitoring progress, advising adjustments, and designing future program development. In 2024, GEO continued to engage the Advisory Group formally and through targeted engagement opportunities. A list of Advisory Group members can be found on the GEO website.[43]

REPORTING ON MAINE'S CLEAN ENERGY ECONOMY

In January 2024, GEO released the 2023 Maine Clean Energy Industry Report, authored by BW Research Partnership and commissioned by GEO. The report found that Maine has surpassed 15,000 clean energy jobs; the clean energy sector contributed $2.31 billion to Maine's economy in 2022, growing over three times faster than the overall economy between 2016 and 2022; and Maine's clean energy economy is the fastest growing in New England. The report shows that Maine is on a trajectory to achieve Governor Mills' goal of 30,000 clean energy jobs in Maine by 2030.[44]

In May 2024 GEO released the Maine Energy Efficiency Contractor Needs Assessment. This report, prepared by the Building Performance Association, provided six recommendations for GEO to maximize funding opportunities to spur the state's clean energy economy and

[43] Maine Governor's Energy Office. (2024). *Clean Energy Partnership*. https://www.maine.gov/energy/initiatives/cep
[44] Maine Governor's Energy Office. (2024, May). *2023 Maine Clean Energy Industry Report.* https://www.maine.gov/energy/sites/maine.gov.energy/files/2024-05/2023%20MECEIR%20Report%20Final.pdf

reach its energy and climate goals. These recommendations were to 1) design business development and support programs; 2) amplify marketing, outreach, and education efforts; 3) collaborate with diverse stakeholders; 4) increase contractor participation in existing programs; 5) establish, enhance and promote training, certification and apprenticeship programs; and 6) encourage the adoption of diversity, equity, inclusion, and accessibility practices.[45] Through the CEP and associated programs and initiatives, GEO is working to meet these opportunities to benefit Maine's people, economy, and climate.

WORKFORCE DEVELOPMENT

The CEP provides funding to advance workforce development and training for the clean energy and energy efficiency fields. To date, the CEP has awarded $4.9 million[46,47] to qualified entities to provide technical training, develop curriculum and/or training tools, provide experiential learning, job placement services to current and potential energy efficiency and clean technology employees, and other services related to clean energy and energy efficiency workforce development and training.

In 2024, the CEP's workforce development programming reached a total of 3,504 participants, including over 1,330 who received training, credentialing, and job placement, and over 2,138 who received clean energy education and career outreach.

In addition, 41 Maine businesses and community organizations have received economic assistance to date, and 37 new career development or job training programs have been offered. Highlights from CEP-funded workforce development program activities in 2024 are listed below:

- **Associated General Contractors of Maine** ran construction immersion pre-apprenticeship programs at Brewer High School, Biddeford Regional Center of Technology, Bath Regional Technical School, and Westbrook Regional Vocational School, South Portland High School, Tri County Technical Center – Dexter, Caribou Tech Center, Bath Regional Technical School, Gorham High School, Houlton Region 2 Tech program, and South Portland High School #2. A total of 120 students graduated from these programs, gaining exposure to 13 different construction crafts, including hydroelectric facility maintenance, HVAC, plumbing, electrical, and concrete foundations.
- **Northeast Energy Efficiency Partnerships** implemented the ReMaine internship program to provide 240-hour paid internship positions with clean energy employers for Maine students and residents. The program placed a diverse group of 13 interns

[45] Maine Governor's Energy Office. (2024, May). *Maine Energy Efficiency Contractor Needs Assessment.* https://www.maine.gov/energy/sites/maine.gov.energy/files/inline-files/BPA%20Maine%20EE%20Workforce%20Report%20Final.pdf
[46] Office of Governor Janet T. Mills. (2022, December 1). *Governor Mills Announced $5.4 Million in Climate Investments to Protect Communities and Create Jobs.* https://www.maine.gov/governor/mills/news/governor-mills-announces-54-million-climate-investments-protect-communities-and-create-jobs
[47] Maine Governor's Energy Office. (2024, July 30). *Maine Governor's Energy Office Awards $2 Million to Clean Energy Workforce Training Programs.* https://www.maine.gov/energy/news/maine-geo-announces-2-million-in-workforce-awards-2024

across a variety of clean energy professions, with 40 percent of interns identifying as female and 40 percent of interns identifying as black, indigenous, or people of color. Interns were placed in a range of positions, from weatherization and heat pump installation to engineering, administrative support, communications, and carpentry.

- **passivhausMAINE** conducted 4 builder trainings across Maine focused on advanced building techniques including air sealing, thermal bridge mitigation, and continuous insulation. PassivhausMAINE's trainings reached 57 participants, advancing their knowledge of energy efficient construction and retrofitting and bringing them up to speed on the Maine Uniform Building and Energy Code and Stretch Codes.
- **ReVision Energy** provided climate and clean energy education to over 700 K-12 students via their Tiny Climate Classroom initiative. The initiative includes rooftop solar panels, a heat pump, and battery back-up, and combines a physical learning environment with climate focused activities.
- **The University of Maine** hosted 600 students at its Windstorm Challenge, an engineering and design competition for Maine middle and high school students where they design a floating offshore wind hull and test it at the University's Advanced Structures and Composites Center.

In 2024, GEO, through the CEP, awarded an additional $2 million in federal funds[48] to establish or expand six clean energy workforce training programs to support and prepare hundreds of Maine people for careers in the state's rapidly growing clean energy sector. The six awardees are:

- **Biddeford School Department and Biddeford Adult Education** was awarded $299,690 to develop curricula, fund internships and apprenticeships, provide job application and other supports to prepare 70 individuals for careers in the clean energy and energy efficiency sectors.
- **Maine Math & Science Alliance** (Augusta) was awarded $495,368 to implement the High School Rural Energy Futures Program, a place-based learning experience that connects 500 rural high school students with clean energy and energy efficiency careers.
- **Oxford Hills and Nezinscot Adult Education** was awarded $214,191 to create a new local workforce program to provide training to 10 area adults and technical high school students to prepare them for careers in installation, maintenance, and repair of heat pumps and solar panels.
- **passivhausMAINE** (Freeport) was awarded $200,377 to expand its low-cost, 1-day energy code training program to educate up to 220 builders on Maine's Uniform Building and Energy Codes and best-practices in high-performance building in northern climates.

[48] In 2023, GEO was successful in securing an additional $2.75 million in Congressionally Directed Spending for Community Projects from Senator Angus King and Congresswoman Chellie Pingree and applied to the U.S. Department of Labor's Employment and Training Administration to access these funds.

- **Portland Adult Education** was awarded $416,179 to expand its renewable energy pre-apprenticeship program by adding heat pump and thermal-focused pre-apprenticeship and bridge programs to prepare up to 150 individuals for careers in clean energy including solar energy, heat pump technology, green construction, and home performance.
- **The University of Maine** (Orono) was awarded $374,193 to establish new graduate and undergraduate certificate programs in building science analysis and design to reach 200 students and working professionals.

INNOVATION

GEO received $2.5 million in MJRP funds to support programs that advance innovative startups in the clean energy sector (i.e. cleantech). In December 2023, GEO awarded $1.3 million in grants to three organizations[49] to create clean energy business incubator and accelerator programs in four key energy sectors including buildings and energy efficiency, renewable electric power generation, grid modernization and energy storage, and natural resource industries.

The three awardees are the Roux Institute at Northeastern University in Portland (Roux Institute), Coastal Enterprises, Inc. in Brunswick (CEI), and the Central Maine Growth Council in Waterville (CMGC).

- The Roux Institute was awarded $975,000 to work with the University of Maine, Startup Maine, and other partners to develop a clean energy incubator program supporting startup companies through mentorship and professional services, access to capital, and community events. In September 2024, the Roux Institute unveiled their new ClimateTech Incubator program. The ClimateTech Incubator launched with a cohort of 12 innovative startups and engaged 441 partners and event attendees through entrepreneurship events including Start Summits and Hackathons, networking events, and presentations.
- CEI was awarded $300,000 to develop a business advising program aimed at growing and scaling contractor businesses that deliver home weatherization and energy efficiency services in rural and low-income communities. In 2024, 23 contractors participated in the Weatherization Business Lab program over two cohorts.
- CMGC was awarded $150,000 to expand its Dirigo Labs startup accelerator and pitch contest to provide hands-on startup coaching, advisement, and research and development support for clean energy and cleantech startups. In 2024, 18 cleantech companies receiving technical assistance from Dirigo Labs including a combination

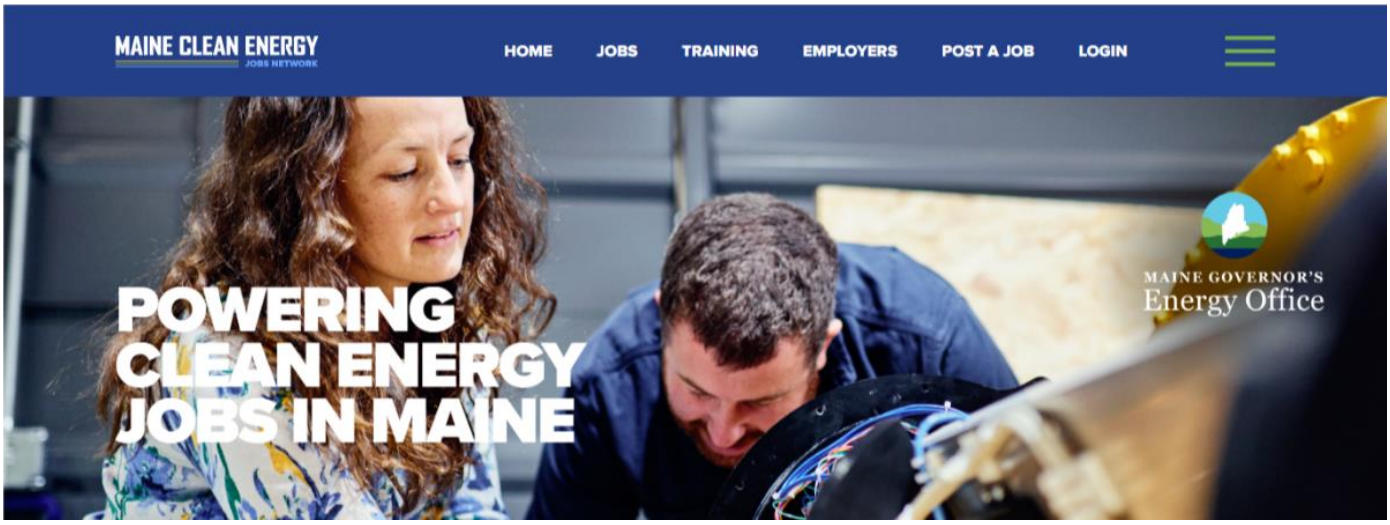
[49] Office of Governor Janet T. Mills. (2023, December 5). *Governor Mills Announces $1.3 Million in Maine Jobs & Recovery Plan Grants To Advance Innovative Clean Energy Businesses.* https://www.maine.gov/governor/mills/news/governor-mills-announces-13-million-maine-jobs-recovery-plan-grants-advance-innovative-clean

of accelerator and incubator programming, research and development support, and mentorship.

CLEAN ENERGY CLEARINGHOUSE AND JOB BOARD

With funding from MJRP, GEO launched the Maine Clean Energy Jobs Network: a new online directory that connects jobseekers to Maine-based clean energy employers and training opportunities. This site, www.mainecleanenergyjobs.com, was launched in 2024 and is a hub for workforce development for multiple industries within the sectors of clean energy generation; clean fuels; renewable fuels; energy efficiency; and clean grid & storage. Thousands of users have visited, hundreds of jobs training programs have been posted, and dozens of employers have signed up to use the site. Job seekers that use the site can opt-in to receive customized support from a Clean Energy Career Navigator through a partnership with the Maine Department of Labor's Career Centers.

Figure 3: Maine's clean energy jobs clearinghouse homepage



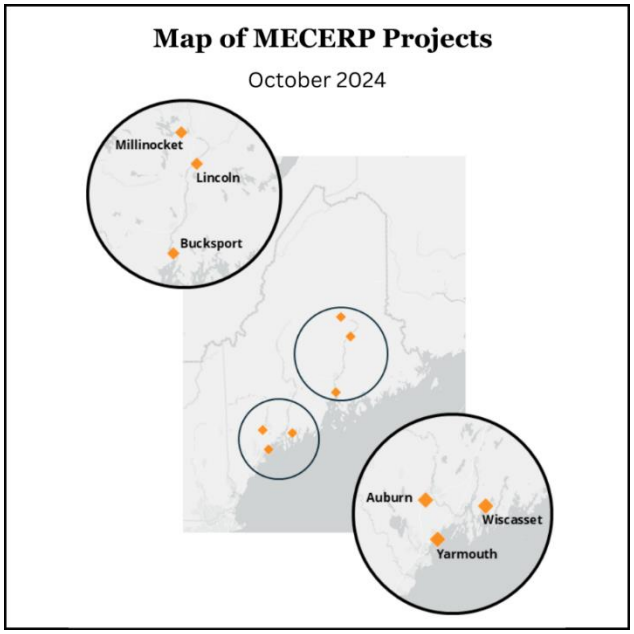
MAINE COMMUNITY ENERGY REDEVELOPMENT PROGRAM

The Maine Community Energy Redevelopment Program (MECERP) was launched in early 2024 and is funded through MJRP and administered by GEO and the Maine DECD to support locally-determined revitalization projects at industrial sites. The state, through its retained consultants, HR&A, will provide technical assistance to six communities to help revitalize former mill sites, power stations, and other facilities with available or excess electrical capacity. On October 22, 2024, the Mills Administration announced[50] the six communities selected to participate in the program were Auburn, Bucksport, Lincoln,

[50] Maine Governor's Energy Office. (2024, October 22). *Mills Administration Announced Six Community Projects Selected for Redevelopment Assistance.* https://www.maine.gov/energy/press-release-mecerp-community-projects-oct-2024

Millinocket, Wiscasset and Yarmouth. GEO may select a limited number of additional communities to participate in MECERP in the future.

Figure 4: Map of MECERP projects, as of December 2024



FEDERAL FUNDING

To achieve Maine's energy requirements and goals, GEO has successfully received significant federal funding; is actively pursuing additional funding for a broad range of energy programs; and continues to monitor new opportunities as they become available. In recent years, GEO has secured over $215 million in federal funding, in addition to more than $600 million in energy funds secured by other parties to deploy affordable, reliable, clean energy while expanding the clean energy economy and local workforce in Maine. These funds directly support GEO's established programs and enhance the affordability of clean energy initiatives across the state by decreasing the financing burden on Maine people.

In 2021, President Biden signed the federal BIL, also known as the Infrastructure Investment and Jobs Act, which allocates more than $2.4 billion to Maine for infrastructure improvements that provide climate resilience, low-income weatherization assistance, expanded EV charging, electrification of school bus fleets, electrical grid modernization, and more. In addition to the opportunities presented by the BIL, the IRA of 2022 extended federal tax credits and created additional funding pathways to support clean energy development. Awards made to GEO and Maine across the BIL and IRA are detailed below.

BIPARTISAN INFRASTRUCTURE LAW (BIL)

GRID RESILIENCE FORMULA FUNDS – SECTION 40101(d)

The Maine Grid Resilience Grant Program seeks to increase the resilience of the electric grid and Maine communities while increasing clean energy workforce opportunities and aligning with ongoing electric grid modernization and state climate goals. On July 23, 2024, Governor Mills announced $6.6 million in grant awards to six Maine utilities and technology providers to deploy electrical grid resilience projects in Maine communities. The six awardees are:

- **Calais region:** Eastern Maine Electric Cooperative will upgrade its distribution system by replacing approximately 10.6 miles of older distribution lines, adding and replacing transformers, and replacing poles and cross arms. Amount: $2,000,000.
- **Vinalhaven and North Haven:** Fox Islands Electric Cooperative will upgrade and relocate an existing submarine electrical cable that serves the island community of North Haven. Amount: $1,080,626.
- **Van Buren:** Van Buren Light and Power will replace antiquated poles, distribution lines, and switching equipment while also training apprentice line workers. Amount: $561,750.
- **Madison area:** The Madison Extreme Weather Resilience project will increase community and electric grid resilience by upgrading critical power lines, expanding vegetation maintenance, and deploying advanced monitoring devices to decrease outages, particularly those resulting from flooding. Amount: $510,633.
- **Indian Island:** In partnership with the Penobscot Nation, Sunnova will deploy distribution infrastructure and controls to interconnect two community facilities to a solar photovoltaic and battery storage system, creating a community microgrid to reduce the impact of power outages. Amount: $689,737.
- **Sebago region:** The Central Maine Power Shaw Mill project will install upgraded grid measures and switching devices to enhance reliability in Baldwin, Sebago and Standish – an area that has experienced numerous outages affecting close to 36,000 customers in the past three years. Amount: $1,628,257.

On December 17, 2024, the U.S. DOE Grid Deployment Office announced the allocation of $2,686,345 to the state of Maine for Year 4 of the Grid Resilience Grant Program. GEO is eligible for an additional $2.6 million in annual formula funds through 2026 and plans to apply for the next round of allocated funds in mid-2025.

ENERGY EFFICIENCY REVOLVING LOAN FUND CAPITALIZATION GRANT PROGRAM

The $250 million Energy Efficiency Revolving Loan Fund Capitalization Grant Program is designed to establish a revolving loan fund to invest in energy efficiency upgrades. As a part of the formula allocation, Maine will receive over $860,000. GEO and Efficiency Maine

coordinated to apply for these funds for energy audits and beneficial electrification projects in congregate living facilities. This program will be administered by Efficiency Maine.

GRID RESILENCE & GRID INNOVATION PARTNERSHIPS PROGRAMS

The U.S. DOE's Grid Deployment Office is administering the $10.5 billion Grid Resilience and Grid Innovation Partnerships (GRIP) program to improve grid resilience and enhance the power grid's ability to deliver cheaper and cleaner energy. The program includes three funding mechanisms:

1) Grid Resilience Utility and Industry Grants ($2.5 billion)
2) Smart Grid Grants ($3 billion)
3) Grid Innovation Program (GIP) ($5 billion)

GEO has engaged in several rounds of this program as a lead applicant or project partner. In August 2024, DOE announced $150 million to develop a long duration energy storage project in Lincoln, Maine through a successful regional GIP project proposal: Powerup New England.[51] In October 2024, Maine successfully received a further $65,359,234 in GRIP funding to establish the Flexible Interconnections and Resilience for Maine (FIRM) project. Through project FIRM, GEO will work with Central Maine Power and Versant Power to create a more modern and dynamic grid to increase resiliency, expand the clean energy workforce, and drive the deployment of distributed energy resources (DERs).[52]

ENERGY IMPROVEMENTS IN RURAL AREAS

In February 2024, Efficiency Maine, with support from GEO and MaineHousing, secured $10 million, with an additional $2.5M in cost matching provided by Efficiency Maine, to support the installation of high-efficiency heat pump systems in approximately 675 rural mobile and manufactured homes in Maine and expand workforce training for local installers to perform the upgrades.[53]

RESIDENTIAL ENERGY AUDITOR TRAINING

Maine received $850,000 to develop the "Maine Energy Auditor Pathways (MEAP)" program to address the growing need for residential energy auditors in Maine. Participants will gain

[51] Office of Governor Janet T. Mills. (2024, August 6). *Governor Mills, Senators Collins & King, and Congresswoman Pingree Announce Nearly $150 Million Federal Grant to Develop World's Largest Multi-Day Energy Storage Facility in Lincoln, Maine.* https://www.maine.gov/governor/mills/news/governor-mills-senators-collins-king-and-congresswoman-pingree-announce-nearly-150-million

[52] Maine Governor's Energy Office. (2024, October 18). *Maine Governor's Energy Office Announces $65 Million Federal Grant to Prepare the Electrical Grid for More Renewable Energy*. https://www.maine.gov/energy/press-releases-firm-grant-announcement-oct-2024

[53] https://www.maine.gov/governor/mills/news/governor-mills-us-department-energy-announce-10-million-federal-grant-support-energy

energy auditing competencies, achieve certification, and secure quality residential energy auditing jobs. The program is expected to launch summer 2025.

INFLATION REDUCTION ACT (IRA)

HOME ENERGY REBATE PROGRAMS

The U.S. DOE has allocated nearly $72 million to support home energy rebates for income-eligible households in Maine. The Home Energy Rebates program is made up of two distinct programs: Home Efficiency Rebates (HER) and Home Electrification and Appliance Rebates (HEAR) ($8.8B nationally). [54] The HEAR ($4.3 billion nationally; $35.7 million for Maine), officially launched in September 2024, will be administered by Efficiency Maine, and will provide rebates for whole-home heat pumps in new construction affordable multifamily housing and income-eligible single family manufactured home retrofits. The HER ($4.5 billion nationally; $35.7 million for Maine), expected early 2025, will provide rebates for multifamily retrofits with a heavy focus on low-income households. These programs are in-line with objectives outlined in the *Maine Won't Wait Action Plan* and will ensure Maine remains a leader in heat pump adoption.

ASSISTANCE FOR LATEST AND ZERO BUILDING ENERGY CODE ADOPTIONS

Maine is eligible for over $4.4 million in formula funding to support the adoption, implementation, enforcement, and compliance of building energy codes that reduce utility bills, increase efficiency, reduce greenhouse gas emissions, and make buildings more resilient to climate change-related disasters. GEO, in partnership with MOCA, will utilize these funds for the implementation, enforcement, and compliance of International Energy Conservation Code (IECC) 2021and the future adoption of either IECC 2024 or IECC 2027. Initial funds for implementation, enforcement, and compliance are expected in early 2025 with adoption funds being available likely in 2027-2028. Maine is also eligible for over $3M in formula funding to adopt a building energy code for residential and commercial buildings that meets or exceeds the zero energy provisions.

STATE-BASED HOME ENERGY EFFICIENCY CONTRACTOR GRANTS

Following the input of key stakeholders and a public comment period in January, GEO successfully applied on behalf of the state of Maine for $1.3 million in federal funding to develop a statewide contractor training grant program. The State-Based Home Energy Efficiency Contractor Training Grants program (also known as TREC) is administered by the U.S. DOE and will provide states with funds to develop and implement workforce training programs for residential efficiency and electrification projects. Funds may be utilized to

[54] Office of Governor Janet T. Mills. (2024, September 24). *Governor Mills and U.S. Energy Secretary Granholm Announce New Home Energy Rebate Program for Maine.* https://www.maine.gov/governor/mills/news/governor-mills-and-us-energy-secretary-granholm-announce-new-home-energy-rebate-program-maine

reduce the cost of training, testing, and certifying residential energy efficiency and electrification contractors. This program should begin early-to-mid 2025.

SOLAR FOR ALL – GREENHOUSE GAS REDUCTION FUND

The federal Solar for All program provides $7 billion in competitive funding administered by the EPA through the Greenhouse Gas Reduction Fund (GGRF) to spur the deployment of residential and community solar for millions of Americans. GEO was awarded $62 million through this program in spring 2024 to fund incentives for residential rooftop solar and energy storage, technical and financial assistance for cooperatively owned solar operations, and a new community solar and energy storage program. GEO expects to get final stakeholder feedback on program development in early 2025. More information on Maine's Solar for All program can be found on GEO's website.[55]

CLIMATE POLLUTION REDUCTION GRANTS

GEO was a member of a successful regional award, the New England Heat Pump Accelerator Coalition, through the Climate Pollution Reduction Grant (CPRG).[56] Maine, along with four other New England states, will receive $450 million from the Environmental Protection Agency's CPRG to rapidly increase the adoption of cold-climate air-source heat pumps (ASHPs), heat pump water heaters (HPWHs), and ground source heat pumps (GSHPs) in single-family and multifamily residential buildings across the region. Maine's share of the award is estimated to be between $45 million and $72 million.

OTHER FEDERAL FUNDING SOURCES

STATE ENERGY PROGRAM – SECTION 40109

The U.S. Department of Energy's State Energy Program (SEP)[57] is a source of funding and technical assistance for states, territories, and the District of Columbia to promote, educate, and implement efforts to enhance energy efficiency, increase the use of renewable energy, increase energy affordability, advance energy security, and related tasks. For the last few years, Maine has been eligible and applied for roughly $500,000 in annual funding. The SEP formula award is flexible in that it permits states and territories to focus on individual state level energy priorities. Section 40109 of the BIL provided an additional $500 million (nationally) to the SEP. The majority of the funding was allocated to states, U.S. Territories, and Washington, D.C. to supplement annual formula appropriations. In 2022, Maine applied for and received $3,694,530 under Section 40109. GEO will continue to utilize these funds over the next few years to support staff, policy

[55] Maine Governor's Energy Office. (2024). *Solar for All*. https://www.maine.gov/energy/initiatives/infrastructure/solar-for-all
[56] Connecticut Department of Energy & Environmental Protection. (2024, July 23). *Governor Lamont Announces Connecticut Receives Federal Grant to Accelerate Adoption of Affordable Electric Heat Pumps.* https://portal.ct.gov/deep/news-releases/news-releases---2024/gov-lamont-announces-ct-receives-fed-grant-to-accelerate-adoption-of-affordable-electric-heat-pumps
[57] U.S. Department of Energy. (n.d.). *About the State Energy Program).* https://www.energy.gov/scep/about-state-energy-program

development and projects that have previously been funded with one-time or temporary revenue sources. Staff conduct work in support of the SEP and state energy policy goals.

MAINE CLIMATE COUNCIL

On June 26, 2019, Governor Mills and the Maine Legislature created the Maine Climate Council, an assembly of scientists, industry leaders, bipartisan local and state officials, and engaged citizens to develop a four-year plan (*Maine Won't Wait)* to address the impacts of climate change on Maine, build resiliency to climate effects, and meet state statutory targets to reduce greenhouse gas emissions. The first plan was delivered to Governor Mills on December 1, 2020, and by law, an updated plan was submitted by December 1, 2024. GEO Director Dan Burgess serves as a member of the Climate Council and as co-chair of the Energy Working Group (EWG) alongside Ken Colburn of Symbiotic Strategies, LLC. The EWG has 33 official members who contributed their time, diverse expertise and lived experiences over the course of eight meetings between September 2023 and June 2024.

The EWG evaluated the state's progress on the energy-specific goals contained in *Maine Won't Wait,* then developed new and updated recommendations to address gaps and emerging issues. The group's primary goal was to ensure all Maine people have access to affordable and reliable energy as the state transforms its energy infrastructure to achieve its clean energy targets and emissions reduction requirements in law. The EWG also convened, together with the Transportation and Buildings Working Groups, two workshops about electricity demand management.

The final set of recommendations submitted by the EWG to the Maine Climate Council included a set of actions to help Maine thoughtfully and successfully build necessary clean energy infrastructure; to increase the efficiency and reduce the cost of that infrastructure by enabling demand management and related innovation strategies; to build a clean energy workforce; and to address energy burdens for Mainers who are most vulnerable to volatile and high energy costs. The 2024 updated climate action plan can be found on the Maine Won't Wait homepage.[58]

OTHER INITIATIVES

ENGAGEMENT WITH THE NATIONAL ASSOCIATION OF STATE ENERGY OFFICIALS

The National Association of State Energy Officials (NASEO) is the only national non-profit association for governor-designated energy officials from each of the 56 U.S. states and territories. Formed by the states in 1986, NASEO facilitates peer learning among state

[58] Maine Climate Council. (2024, November). *Maine Won't Wait: A Four-Year Plan for Climate Action*. https://www.maine.gov/climateplan/sites/maine.gov.climateplan/files/2024-11/MWW_2024_Book_112124.pdf

energy officials, serves as a resource for and about State Energy Offices, and advocates for the interests of the State Energy Offices to Congress and federal agencies. GEO Director Dan Burgess serves on the Board of NASEO as one of two representatives from New England. Throughout 2024, GEO staff engaged with NASEO to monitor and learn about BIL and IRA funding opportunities as they became available and continued to coordinate with them to maximize federal funding opportunities for Maine. Staff also attended NASEO's National and Regional Annual Meetings and the National EV Charging Infrastructure Conference co-hosted by NASEO, the American Association of State Highway and Transportation Officials, and the Joint Office of Energy and Transportation in Detroit, Michigan.

STATE ENERGY SECURITY PLAN (SESP)

The BIL added a new requirement that all states and territories participating in the U.S. State Energy Program must develop plans to enhance energy security, emergency response, and resilience. GEO is responsible for developing Maine's Energy Security Plan (SESP). The SESP is used for situational awareness and provides a communications blueprint in the event of energy emergencies in addition to a description of mitigation strategies to enhance resilience of the energy sector.

The federally required format for energy security plans includes a state energy profile; identification of energy related threats and vulnerabilities; risk assessment of energy infrastructure, including cross sector interdependencies; energy security roles and responsibilities; development of an energy resiliency and hazard mitigation strategy; and regional & tribal coordination. GEO retained a consultant to assist with the risk assessment and risk mitigation sections, informed by the state's Hazard Mitigation Plan and stakeholders in the natural gas, petroleum, and electric sectors. In September 2024, GEO submitted a draft of this comprehensive energy security plan to the DOE, and in December 2024 DOE approved Maine's plan.

Maine will continually update and enhance the plan as information and state priorities change. The SESP will align with other emergency response, mitigation, and resilience plans and activities, including the Maine State Emergency Operations Plan; the state Hazard Mitigation Plan; the Maine Climate Council; the IRRC; and federal resiliency programs such as Grid Resiliency and Grid Innovation Partnership programs.

NATIONAL RENEWABLE ENERGY LABORATORIES TECHNICAL ADVISORY GROUP

The National Renewable Energy Laboratories (NREL) and DOE established the Onsite Energy Systems at Critical Facilities Technology Action Group (TAG) as a voluntary pilot opportunity for states to coordinate to develop plans for powering critical facilities during grid outages. GEO has been participating in the TAG since the initiative began in 2021, and

the work of the group continued into 2024. Through participation in the TAG process, GEO seeks to pilot the viability of REopt,[59] a resilience planning tool for facilities developed by NREL, in alignment with ongoing and emerging work in Maine, and communicate outcomes of the pilot.

ENGAGEMENT WITH THE MAINE PUBLIC UTILITIES COMMISSION

The PUC regulates electric, natural gas, telecommunications, and water utilities to ensure that Maine consumers have safe, adequate, and reliable services at rates that are just and reasonable for both consumers and utilities. GEO closely monitors PUC proceedings, and intervened, or otherwise engaged, on a number of dockets across 2024, including those related to: Central Maine Power and Versant Power rate cases and follow-on proceedings, stranded cost rate design, utility planning, economic reuse of contaminated land, net energy billing, and utility control of energy storage. A number of the dockets remain ongoing.

LEGISLATIVE INITIATIVES

GEO engages closely with members of the Maine Legislature, Legislative Committees, and other state agencies to provide technical assistance and information regarding the state's short-range and long-range energy needs and the resources to meet those needs. GEO primarily engages the Joint Standing Committee on Energy, Utilities and Technology, working to ensure the passage of policies and development of programs that advance the state's statutory climate and clean energy requirements, and ensure Maine people have access to responsible, affordable, and reliable clean energy resources into the future. During the 131st Maine Legislature, GEO provided testimony on approximately 50 bills before Legislative Committees and is has several new responsibilities pursuant to signed law.

STAKEHOLDER ENGAGEMENT & COMMUNICATIONS

GEO recognizes the importance of meaningful stakeholder engagement and is committed to equitably incorporating feedback from an increasingly large and diverse number of partners, experts, and members of the public. In 2024, GEO hosted over 20 public meetings, published 6 reports, and convened various working groups to enhance information sharing and solicit input from those impacted by, or expert on relevant policies. Examples of these activities include the Pathway to 2040 process, the Maine

[59] National Renewable Energy Laboratory. (n.d.). *REopt: Renewable Energy Integration & Optimization*. https://reopt.nrel.gov/tool

Offshore Wind Research Consortium, the CEP advisory group, and the RPS study, among many others.

In 2024, GEO undertook communication improvements to increase public awareness of energy information and office initiatives. This included the continuation of regular press releases, the publication of a monthly newsletter, updating the GEO website to improve user experience, and other tools to support engagement. GEO also launched the Maine Clean Energy Jobs Network and worked to raise awareness of clean energy careers and help Maine-based clean energy employers find qualified candidates. All state public announcements made related to energy or by the Governor's Energy Office in 2024 are listed below. All GEO announcements are also available on the GEO News & Events page.[60]

- **December 23, 2024:** Maine Governor's Energy Office Files Energy Storage and Procurement Recommendations with the Public Utilities Commission
- **October 22, 2024:** Mills Administration Announces Six Community Projects Selected for Redevelopment Assistance
- **October 18, 2024:** Maine Governor's Energy Office Announces $65 Million Federal Grant to Prepare the Electrical Grid for More Renewable Energy
- **October 16, 2024:** Governor's Energy Office Releases Updated Winter Heating Guide
- **October 4, 2024:** Governor Mills Announces Maine's Largest Yearly Drop in Heating Oil Reliance Since At Least 2010
- **October 3, 2024:** Governor Mills Applauds $425 Million Investment from Biden-Harris Administration to Advance Northern Maine Transmission Line, Strengthen Electric Grid & Embrace Clean, Affordable, Renewable Energy
- **September 18, 2024:** Governor Mills and U.S. Energy Secretary Granholm Announce New Home Energy Rebate Program for Maine
- **September 10, 2024:** Governor's Energy Office Welcomes Maine PUC Request for Proposals for New Renewable Energy Projects
- **August 19, 2024:** Governor Mills Announces Agreement on Federal Research Lease to Advance Floating Offshore Wind
- **August 6, 2024:** Governor Mills, Senators Collins & King, and Congresswoman Pingree Announce Nearly $150 Million Federal Grant to Develop World's Largest Multi-Day Energy Storage Facility in Lincoln, Maine
- **July 30, 2024:** Maine Governor's Energy Office Awards $2 Million to Clean Energy Workforce Training Programs
- **July 25, 2024:** Governor's Energy Office Statement on Integrated Grid Planning Order from Maine Public Utilities Commission
- **July 23, 2024:** Governor Mills Announces $6.6 Million in Grant Awards to Increase Electrical Grid Resilience to Extreme Storms
- **July 22, 2024:** Governor Mills Announces Maine to Receive Significant Federal Funding to Expand Heat Pumps

[60] Maine Governor's Energy Office. (n.d.). *News & Events*. https://www.maine.gov/energy/news-events

- **July 9, 2024:** Maine Joins Electricity Transmission Agreement with Northeast States to Enhance Grid Reliability
- **June 27, 2024:** Maine Among First Six States Approved for Federal Home Electrification and Appliance Rebates Program; Penobscot Nation First Tribal Applicant
- **June 12, 2024:** Governor Mills Announces Expansion of New High-Speed Electric Vehicle Chargers in 17 Locations Across Maine
- **May 28, 2024:** Federal Government Grants State of Maine's Request for Lease to Advance Floating Offshore Wind Research Array Site
- **May 22, 2024**: Maine Governor's Energy Office Launches Maine's First Clean Energy Job Board and Training Directory
- **May 8, 2024:** Governor Mills Announces Clean Energy Jobs in Maine Surpass 15,000, Contribute $2.3 Billion to State's Economy
- **April 24, 2024:** Governor Mills Promotes Maine During Keynote Address at International Offshore Wind Conference
- **April 22, 2024:** Governor Mills Announces $62 Million Award to Maine Through Inflation Reduction Act to Deliver Affordable, Accessible Solar Energy to Maine People
- **April 17, 2024:** New England States Seek Federal Funding for Significant Investments in Transmission and Energy Storage Infrastructure
- **March 15, 2024:** Governor Mills, U.S. Senators Collins & King, and Rep. Pingree Announce Federal Decision to Exclude Critical Maine Fishing Grounds from Commercial Offshore Wind Leasing
- **February 27, 2024:** Governor Mills, U.S. Department of Energy Announce $10 Million Federal Grant to Support Energy Efficiency and Workforce Investments in Rural Maine
- **February 20, 2024**: Governor Mills Announces Sears Island as Preferred Site for Port to Support Floating Offshore Wind
- **February 12, 2024:** Governor Mills Announces Nearly $6.5 Million in Maine Jobs & Recovery Grants to Upgrade Electric Grid and Support Rural Economic Development
- **February 9, 2024**: Governor Mills Announces $4.4 Million Grant to Opportunity to Increase Electrical Grid Resilience to Extreme Storms

OFFICE RESOURCES

At the end of 2024, GEO operated with a staff of twenty individuals,[61] each of whom helped meet the office's responsibilities as outlined above. These positions were funded through a combination of sources, including competitive grants, state appropriations, and leveraged federal funds. GEO also worked closely with multiple state agencies and departments across Maine government.

[61] Maine Governor's Energy Office. (n.d.). *About*. https://www.maine.gov/energy/about